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WHY DO SMALL RELIGIOUS GROUPS HAVE MORE COMMITTED MEMBERS?

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In recent years a small but growing literature has shown that religious groups located in areas where their members are a smaller proportion of the population have more committed members. Arguments based on the religious economies model suggest that the leaders of these small religious groups face greater religious competition from larger groups, and hence they must work harder to recruit new members and increase commitment levels among current members. I argue instead that, for reasons extrapolated from Blau (1977), small-population-366 share groups have much higher rates of members leaving and new members joining. Both of these processes (leaving and joining) tend to select for more committed current members. The least committed are the most likely to leave the group and those who actually join a group tend to be the most committed from among the pool of potential joiners. Thus congregations with higher membership turnover rates have current members that are more committed. In fact, membership turnover is one of the best predictors of per member giving and attendance. Such processes can lead to higher commitment levels in low population share areas, even if religious leaders do nothing to recruit new members or raise commitment among their current members.

In recent years a small but growing literature has begun to document an important regularity in the ways that religious groups are affected by their social and religious surroundings: namely, that religious groups located in areas where their members are a smaller proportion of the population have more committed members measured by their support for the group's congregations, organizations, publications, and activities. For example, the average member of a Lutheran congregation in Alabama (where Lutherans are scarce) contributes more money and attends church more regularly than the average member of Lutheran churches in Minnesota where Lutherans are common (Olson and Sikkink 2004; Brewer, Jozefowicz, and Stonebraker 2006). As I document below, this pattern appears to hold across a broad range of religious groups, types of member support, and geographic scales. In fact, (with several important caveats) it may turn out to be one of the more general results in the sociology of religious organizations and may also have important implications for other kinds of organizations and social identities that are at least partly voluntary (as opposed to ascriptive).

Rodney Stark, Roger Finke, and others working within the religious economies model (Stark and Finke 2000, 2004) explain this pattern of results as an effect of religious "market share." Drawing on analogies of competing business firms, Stark and Finke argue that leaders of religious groups with a smaller share of the "religious market" (the total pool of religious adherents in an area) face greater "religious competition" for adherents from the larger surrounding religious groups. In order for their groups to survive, the leaders of small market share groups must work harder and more creatively to recruit new members and raise time and money contributions among current members. It is these greater efforts that raise member commitment levels in small religious groups.

In this paper I propose an alternative explanation, one that relies more on population share than market share. I use the term "population share" rather than the more common "market share" terminology because it highlights causal processes that differ from the competitive, leader and effort-based, processes highlighted in market model explanations. The two terms also have slightly different meanings. The market share of a group is the proportion of all *religious persons* (the religious market) in an area belonging to that particular religious group. The population share of a religious group is the proportion of the *population* in an area belonging to the religious group.¹

My claim is that much of the effect of population share is explained by the rates at which people switch in and out of religious groups and these rates of switching are, in turn, heavily influenced by a group's population share. All else being equal, groups with smaller population share have much higher rates of members leaving and new members joining. Both of these processes (joining and leaving) tend to select for more committed current members. The least committed are, all else being equal, the most likely to leave the group. Among the pool of persons who might join a religious group, it is the most committed of the potential joiners who are most likely to join. Though it might seem counterintuitive, denominations and congregations with higher membership turnover rates have current members that are more committed. Such processes could account for much of the population share effect even if small population share religious groups and their leaders did nothing to recruit new members or raise commitment among their current members.

PREVIOUS THEORY AND RESEARCH

Almost all the research in this area has been conducted in an attempt to test a key component of the religious economies model, the claim that the religious vitality of an area increases as the religious competition among religious groups in that same area increases (Stark and Finke 2000). Unfortunately, it is not very clear what religious competition is. Despite the centrality of religious competition in the religious economies model, the term is nowhere clearly defined. The failure to define religious competition lies at the core of many of the disputes over the usefulness of the religious economies model (Olson 2002). It is not, for example, one of the many terms defined in *Acts of Faith*, Stark and Finke's (2000) major work that systematically sums up the religious economies approach. In this work they do note (2000:218) that "unfortunately, competition is one of those concepts that is very difficult to measure, except indirectly." Thus, tests of the effects of religious competition have usually involved one of three other variables: the level of state regulation of religion (which is seen as an independent variable depressing religious competition), religious pluralism (the diversity of religious groups in an area), and religious market share, which is viewed as an inverse indicator of religious competition. As noted above, Stark and

Finke argue that because of the greater competition experienced by the smaller groups, these groups and the groups' leaders have to work harder at garnering support from current members and potential new members if the groups are going to survive. If such efforts are effective, they raise member commitment to the higher levels observed in past research. Thus "individual groups will be more energetic and generate higher levels of commitment to the degree that they have a marginal market position—lack market share" (Stark and Finke 2000:219). Indeed, a long list of research results supports the negative correlation between market share and measures of member commitment.

Stark (1992) and Stark and McCann (1993) were among the first to highlight this negative relationship. Stark and McCann found that U.S. Catholic dioceses where the number of Catholics (reported by the Catholic church) is a smaller part of the total population have higher rates of young Catholic men seeking priesthood. Stark (1992) found the same pattern in rates of seminary ordinations for whole nations (higher in nations where Catholics are a minority of the population). Likewise rates of subscription to Catholic Digest, a Catholic journal read by lay Catholics, is higher in states with lower Catholic population shares (Stark 1998). The percentage of Jews in a metropolitan area that contribute to Jewish Federation Fund drives is higher in U.S. cities where Jewish population shares are lower (Rabinowitz, Lazerwitz, and Kim 1995). Per member financial giving (total member contributions divided by total members) has been found to be higher across a broad range of denominations, conservative and liberal: (e.g.) Assemblies of God, Catholics, Church of the Nazarene, Southern Baptist, Evangelical Lutheran Church in America, Missouri Synod Lutherans, United Methodist Church, Presbyterian Church USA, United Church of Christ (Perl and Olson 2000; Stark and Finke 2004; Brewer et al. 2006). Evidence supporting this general result does not appear to depend greatly on whether the geographic areas are counties (Zaleski and Zech 1995), metropolitan areas and states (Stark and McCann 1993; Olson 1995), Catholic dioceses (Perl and Olson 2000), regions of the country (Stark and McCann 1993), or even whole nations (Stark 1992).

Although these results all² find a negative association between either population or market share and various levels of member commitment, none of this published research actually examines whether this association is due, as the religious economies model claims, to greater efforts on the part of religious groups or religious leaders in small population share areas. In fact, I find (Olson and Sikkink 2004), using data from the Church of the Nazarene on the number of ways that a congregation uses advertising (e.g., yellow pages, radio ads, etc.), the number of in-person pastoral calls made by ministers, and the number of revivals held by local congregations, that none of these variables are related to Nazarene population share. Some Nazarene pastors work harder than others and some Nazarene congregations advertise and hold more revivals, but none of these variations in effort are related to differences in Nazarene population share. Small-population-share pastors do not work any harder than other pastors.

One might fault the Nazarene results since they are based on only one denomination. However, Hill and Olson (2007), using data from the many different denominations included in the National Congregations Study (Chaves et al. 1999) and the US Congregational Life Survey (Woolever and Bruce 2004), also find that the number of outreach and recruitment programs run by congregations is not related to a congregation's population share in the local county. The U.S. Congregational Life Survey collected information on the number of hours ministers work during a typical week. Hill and Olson find that ministers of

congregations in low-market-share areas work the same average number of hours per week as ministers in their denomination located in high-market-share areas. In all of these analyses, including the Nazarene analyses, there is a clear population share effect: the per-member giving of congregations in small-population-share areas is higher than for congregations in areas of greater population share. Yet, because congregational and ministerial efforts do not vary by population share, they cannot explain why low population share congregations have higher commitment levels. What then accounts for higher member commitment levels in low population share areas?

Olson (1993) and Perl and Olson (2000) argue that minority religious groups may develop distinctive subcultures because the members come to rely on social interaction with other members and participation in group activities as the main or only source of resources valued by those with a distinctive identity. Thus Rabinowitz, Kim, and Lazerwitz (1992) and Rabinowitz, et al. (1995) argue that synagogue participation is higher for Jews who live in areas of low Jewish population share, in part because the synagogue may offer the only chance to interact with other Jews and participate in activities that reinforce Jewish identity.

Brewer et al. focus on majority, rather than minority, groups. They suggest that "people who want the benefit of a church affiliation without contributing to its mission may be drawn to the more popular denominations in their region" (2006:389) They may seek out participation in congregations more for the social acceptance and connections that they offer than because of their personal religious commitment to the faith. Thus, majority faiths tend to attract lots of low commitment members and have lower average commitment levels.

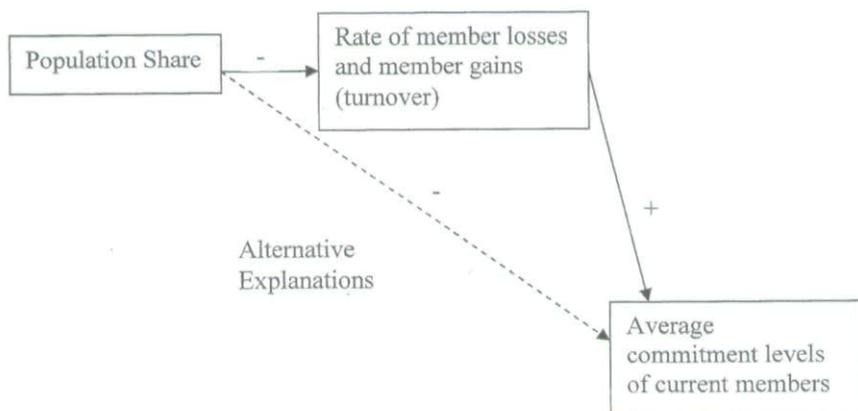
Distinctive subcultural identities among minority faiths and the attraction of low commitment members to majority faiths may well explain part of the population share effect, but in this paper I explore another explanation that has not received much attention, one that has the potential to explain a significant portion of the population share effect, minority group turnover.

MINORITY GROUP TURNOVER

The minority group turnover explanation draws on ideas from Blau (1977) concerning how the relative sizes of groups in an area affect intergroup contacts and social network formation. Though I principally apply this argument to religious groups, the social processes underlying the argument could well apply to many other types of groups and social identities in which membership and affiliation are at least partly voluntary (as opposed to entirely ascriptive).

As Figure 1 shows, the minority group turnover explanation depends on two separate hypotheses (the solid line arrows). The central claim of the first hypothesis is that the population share of a group will be inversely related to the rate at which a group gains and loses members. Groups with small population shares are likely to lose bigger percentages of their members each year, but they are also likely to gain larger percentages of new members (relative to their membership size at the start of the year). The second hypothesis asserts that higher membership turnover rates lead to higher average commitment levels among the current members of a group. The dashed line arrow in Figure 1 recognizes that other explanations may account for some of the over-all negative relationship between population share and current member commitment levels.

Figure 1
The Minority Group Turnover Explanation



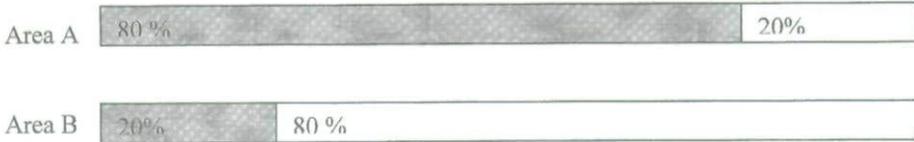
Population Share and Recruitment Rates

Turning to the first hypothesis, why would membership turnover rates be inversely related to a group's population share? In order to demonstrate, consider the two hypothetical areas in Figure 2. Suppose there is some faith that believes in the color gray. In area A, 80 percent of the population belongs to the Gray faith and thus 80 percent of the bar for area A is shaded gray. In area B, only 20 percent of the population are followers of the Gray faith

First consider *recruitment* rates. There are at least three reasons why recruitment rates will be inversely related to population share. To begin with, the population share of a group sets a mathematical limit on the rate at which new members can be recruited. Even if, over the next generation, the Grays in area A were to aggressively evangelize and convert every remaining member of the population to the Gray faith, the rate of people switching in over the next generation could be no higher than 25 percent of their starting membership ($.2/.8 = .25$) unless large numbers of non-Grays moved into the area and were also converted to the Gray faith. Contrast this to the situation of Grays in area B where their population share is only 20 percent of the population. The maximum recruitment rate for Grays in area B is four times their starting membership ($.8/.2 = 4$) or 400 percent.

Although the proportion of non-members in the population sets a theoretical upper limit on the rate of recruitment, there are sociological reasons that likely play a greater role in determining the actual rate of new member recruitment. It is well established that one of the most important reasons why people join religious groups is because they know someone who belongs to the group who recommends it and introduces them to it (Lofland and Stark 1965; Lofland 1977). Likewise, people often join a particular congregation because of a recommendation from a close friend (Hartman 1976, 1984). Marriage, one of the closest social ties, is often the cause of religious switching when the marriage partners come from different faith traditions (e.g., Newport 1978). Recruitment of new members is thus likely to be higher in groups where current members have a larger proportion of their social

Figure 2
Population Share and Switching



ties with non-members. If members only interact with current members, there will be fewer natural social pathways to introduce non-members to the group.

Blau (1977) argues that the composition of an individual's network of close social ties is heavily influenced by the relative sizes of different groups available for social interaction in the nearby geographic area. Although Blau acknowledges that social ties are not formed in purely random ways, many of his theoretical arguments are deductions based on what would happen if they were. Following Blau's logic, a random process of friendship and marriage formation would mean that an individual's set of friends would be composed of persons whose background characteristics mirror those of the surrounding community. The religious composition of persons in the social networks of Grays in areas A and B would each reflect the religious composition of their respective areas shown in figure 2. Thus Grays living in area B would have a much higher percentage (80 percent) of their friends who are not members of the Gray faith. In contrast, the Grays living in area A would have only 20 percent of their social ties with non-members. To the extent that important social ties such as friendship and intermarriage facilitate religious switching, the Grays in area B would have many more opportunities to recruit non-members to the Gray faith than would Grays in area A.

Of course, it is well established that people do not form their social ties in a purely random fashion. People tend to prefer social ties to others like themselves, a tendency known as homophily (e.g., McPherson and Smith-Lovin 1987). Because of homophily, Grays in area B will likely have more than 20 percent of their close social ties with fellow Grays and the Grays in area A could have almost all their important social ties with fellow members of the Gray faith. Yet, in spite of strong tendencies towards religious homophily (more so in some religious groups than others) studies of actual friendship ties show that, as the population share of a group increases, so does the proportion of coreligionists in members' close social networks (Blum 1985; Olson 1998; Rabinowitz, et al. 1995). For example, Jews living in areas of greater Jewish population share have a higher proportion of close friends who are Jews than do Jews living in areas where Jews are less common (Rabinowitz, et al. 1995). This has many practical consequences. For example, Davidson and Widman (2002) find that Catholics are more likely to marry Catholics when they live in areas of greater Catholic population share.

In general then, as the population share of a group decreases, the proportion of social ties with non-members will increase. To the extent that such ties to non-members are an important natural pathway for recruitment, recruitment rates will rise as population share falls. Groups with very low population share should, all else being equal, have the highest recruitment rates because many of their important social ties will be to non-members.

Finally, there is an additional mathematical reason that the recruitment rate of small population share groups would be higher. Some switching may simply be the movement of small numbers of people from one group to another for reasons unrelated to the sizes of the groups. When measuring recruitment rates as a *proportion* of the starting size of a group, a change in some *absolute number* of members will be a bigger proportion for a small group than for a large group. If a 100 member group recruits 10 new members the recruitment rate is 10 percent, but if a 1,000 member group recruits 10 new members the resulting recruitment rate is only 1 percent. In general, the recruitment of 1 new member would result in a recruitment rate of $1/\text{membership size}$, an inverse function of membership size.³ The concave upward, L-shaped, curve of the $1/\text{membership}$ relationship suggests that small changes in population share would have the greatest effects on rates of switching at the very lowest levels of population share.

Population Share and Member Losses

Is the *rate at which people leave* a group also related to a group's population share? Although there are no mathematical limits on the rate at which people leave a group (100 percent of the membership could leave any group within a single time period regardless of the group's size), measuring rates of member losses as a proportion of the starting membership size also implies that a loss of any absolute number of members will be a bigger loss for a small group than for a large group; that is, a loss of one member means a loss rate of $1/\text{membership size}$, an inverse relationship with membership size.

More importantly, it seems likely that switching out, like the process of switching in, is also facilitated by close ties to non-members (who might persuade one to join another group) and hindered by close ties to members who (may reward participation and punish non-involvement). Grays in area B are likely to have more of their social ties with non-members than Grays in area A. Although I argued above that these cross-group ties can facilitate recruitment, they may just as easily facilitate membership losses. For example, Grays in area B would be more likely to meet and marry a non-Gray who might persuade them to join a different faith or no faith at all. In contrast, Grays in area A would know fewer non-Grays and might have difficulty finding a non-Gray to marry. Moreover, Grays living in area A might face much greater social pressure to remain in the faith from the many Grays in their social networks.

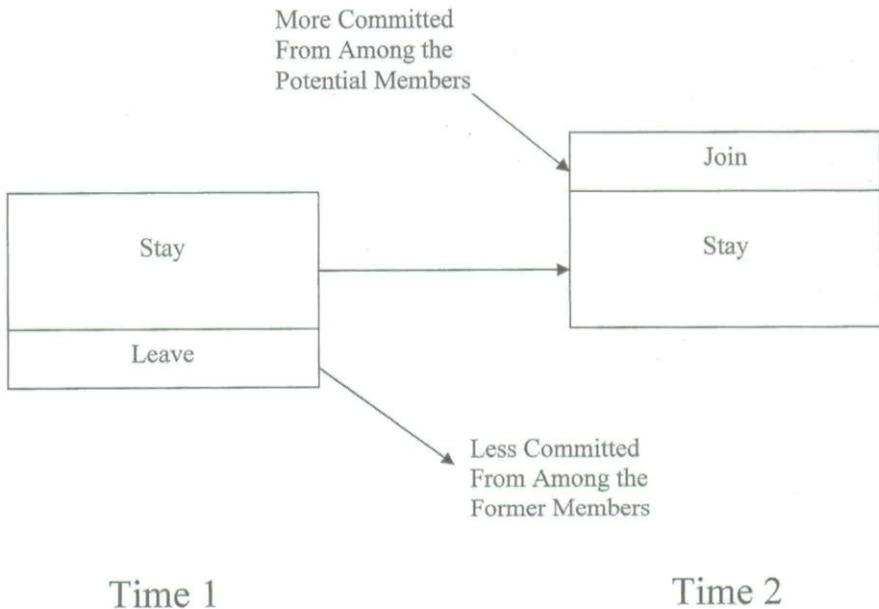
In both switching in and switching out, the population share of a group would affect the composition of members' social networks in ways that would tend to increase the rates of switching for smaller population share groups.

Membership Turnover and Average Commitment

I turn now to the *second hypothesis* in the minority turnover explanation, the downward sloping solid arrow in Figure 1. Why would higher membership turnover rates lead to higher average member commitment levels? One might think that high rates of membership turnover are indicative of low commitment. Figure 3 shows, in diagrammatic form how this initially counterintuitive relationship could work.

Suppose the two rectangles on the left side of Figure 3 represent the membership of a congregation or of any religious group at time 1. At a later time 2, some of the members from time 1 will have left the group. They are represented by the rectangle labeled "Leave" on the left side of the figure and the downward sloping arrow away from that rectangle.

Figure 3
Why Member Turnover Raises Average Commitment Levels
Among Current Members



This reflects the assumption that even though people leave a group for many different reasons (including death, geographic relocation, etc.), on average it is the less committed members who are more likely to leave. That is why the rectangle for the leavers is shown below the rectangle for the members at time 1 who stayed in the group.

An analogous process occurs when new people join a group. Again, people join a group for many different reasons (intermarriage, pressure from parents, etc.) but on average it is the more committed from among the pool of potential new members who actually end up joining. These new members are likely to be more committed to their new group than the group of person who chose not to join. Thus, the rectangle representing those who join between time 1 and time 2 is drawn above the rectangle for those people who stayed in the group from time 1 to time 2.

In figure 3, the average height of the two rectangles together at time two is higher than the average height of the two rectangles together at time one. This suggests that both the process of leaving and the process of joining act as a filter on the overall commitment levels of the current membership and act to increase the average commitment levels of members at time 2 over those at time 1. The greater the rates of member losses and member gains, the more these filtering processes can operate and the greater will be the average commitment levels of the current members at time two (limited, of course, by the commitment levels of the pool of potential recruits). This can happen even if none of the members who stay from time one to time two increase their commitment levels.

Indeed, the process does not depend on the actions of religious leaders motivated by religious competition. It is an indirect result of a group's population share and may be largely beyond leaders' control. A minister of a congregation in an area of low population share could have members with very high commitment levels even if he or she does nothing to raise commitment. Of course, nothing I have said suggests that any such efforts would be wasted. My claim is only that the pattern of higher average commitment in low population share areas does not depend on leaders' creativity or hard work.

A Caveat

Before proceeding, I must note an important limitation on the scope of these predictions. They apply primarily to the current members of religious organizations, not necessarily to lapsed members of a religious group or those in a survey of the general public who might say they loosely identify with a religious group even if they seldom attend or participate. More specifically, they apply best to persons counted as current members by religious organizations. As noted in the literature review above, almost all the findings of higher commitment in low population share areas come from data collected by religious organizations where the denominator used to calculate average commitment levels is the number of current members in the group, (e.g., per member financial giving). However, in survey data from the general public "group membership" is determined by respondents' answers to questions about their religious preference. Many of the people who say they are Baptists, for example, might well be lapsed Baptists who answer truthfully that they no longer attend or give money to any Baptist church. Indeed, in areas of low Baptist population share, the switching processes identified in the first hypothesis predicts that lapsed Baptists could make up a large proportion of the small group of people who have at some time belonged to a Baptist church. If so, survey results could well find no overall relationship between Baptist population share and the average attendance rates of persons in the area identifying as Baptist on a survey. For example, in areas of low Baptist population share the higher commitment levels of the active members of Baptist churches may well be offset by the low commitment levels of the many Baptists who have left Baptist churches but still subjectively identify as Baptists.

In fact, depending on the religious group, the definition of who gets counted as belonging to the group, and the particular measure of commitment used, the social network consequences of large market share that I outline above could lead to a positive relationship between population share and mean levels of commitment among respondents to surveys of the general public. As noted above, the Grays in area A are likely to have almost all of their important social ties with other members of the Gray faith. The combined social pressure of so many Grays in their social network might induce even Grays with very low subjective commitment levels to attend and participate in public ways more than they would if they lived in area B. One could call this the majority group conformity effect. It should be most noticeable in surveys of the general public and for measures of commitment that are subject to public observation and sanctions by others (e.g., attendance more than private prayer). Thus for example, Phillips (1998) using General Social Survey data finds higher rates of attendance among Mormons in the intermountain West, where Mormons are common, than among Mormons in other areas where Mormons are scarce, the opposite of the usual population share result.⁴

DATA SOURCES

Most of my analyses draw on data from four sources: the General Social Survey (GSS), data from annual congregational reports in three denominations, the Glenmary study of Churches and Church Membership for all U.S. counties, and U.S. county-level census data. I merge the latter two, county-level, sources with each of the first two sources to examine how population share and other contextual variables affect switching and commitment levels. For one analysis I also draw on data from the U.S. Congregational Life Survey.

The GSS is an in-person interview survey of a random sample of U.S. English speaking adults conducted every one or two years since 1972 (see Davis, Smith, and Marsden 2001 for details). I use data from the 13,454 individuals who were respondents in ten surveys done between 1982 and 1992. The GSS is not a simple random sample of all U.S. adults. Instead, NORC, the organization that conducts the surveys, does multi-stage cluster sampling in which they first randomly select a set of metropolitan areas and counties that are called primary sampling units (or PSUs). Many PSUs are multi-county metropolitan areas such as New York City and its surrounding suburbs, while others are single counties in rural areas. After NORC selects the PSU areas, they then randomly sample households and individuals within each of these areas. Using information from NORC I was able to identify the county or metropolitan area where each of the GSS respondents was living at the time of interview.

Next I obtained information on the religious composition of each of the metropolitan areas and counties that compose each of the 84 PSU areas that NORC used for the 1982 through 1992 surveys. These data come from the 1980 Glenmary Church and Church Membership study. The Glenmary researchers contacted a broad range of denominations and asked them to each report the number of their churches and church members in each of the more than 3,100 U.S. counties. In 1980, 111 denominations cooperated in the study. The Glenmary study separately reports statistics for official members in each denomination in each county. They also report figures for church adherents in each denomination. Adherents are official members plus the children of official members in denominations that do not have child membership. (See Quinn 1982 for details). I measure a denomination's population share using the number of adherents in an area divided by the total population of an area.

Because the Glenmary data are organized by county, the next task was to identify which counties are part of each primary sampling unit used in the GSS surveys. In the cases of PSUs that are multi-county metropolitan areas, I aggregated⁵ the data from all the constituent counties in the PSU to construct Glenmary data for the whole PSU. I did similar multi-county aggregations for the U.S. census data to construct PSU-level census variables. I was then able to attach to the data on each GSS respondent additional data on the religious composition and census characteristics of the area in which the GSS respondent lived.⁶

In order to determine the religious market share of a GSS respondent's religious preference, one has to be able to match the more than 130 denominational categories used in the General Social Survey with the 111 denominations in the 1980 Glenmary study. Some denominations that are counted in the GSS do not appear in the Glenmary data, and some denominations that are counted in the Glenmary data do not appear in the General Social Survey. After matching the denominations that appear in both data sets I was able to code the remaining (usually smaller) denominations into a set of common categories (e.g., Other Black Protestants) using information from other categorization schemes plus information

from the websites of some of the very small denominations. In the analyses of GSS data below I use five large categories of denominations: white evangelical Protestants, white oldline Protestants, black Protestants, the Church of Jesus Christ of Latter-Day Saints (Mormons), and Roman Catholics.⁷ I chose these groups because, in the ten years of GSS surveys used in this analysis, they each had a large number of respondents, sufficient to obtain robust statistical results.

My analyses also draw on the annual reports of individual congregations made to their denominational offices, the same data used by some denominations to print annual yearbooks of congregational statistics. In particular, I use data from 3,960 Church of Nazarene congregations for the years 1980 through 1990, 6,548 United Church of Christ (UCC) congregations from the years 1973 through 1985, and 11,617 Evangelical Lutheran Church in America (ELCA) congregations for the years 1990 through 2000. The Church of the Nazarene is a conservative white Protestant denomination with roots in Methodism and Pentecostalism. The Evangelical Lutheran Church in America is a moderately liberal majority white Protestant denomination formed from the merger of several Lutheran bodies. The United Church of Christ is a liberal white Protestant denomination with historical connections to the Congregational churches of New England.

In all three denominations each congregation reports several items of information including, for each year, the total membership, the average attendance, the total financial receipts from contributions from individuals, the numbers of persons added to membership and the numbers of persons removed from membership during the year.

Persons familiar with congregational annual reports know that they can contain problematic data. For example, a new pastor comes to a congregation and the following year a lot of members get stripped from the rolls. One cannot know for sure whether the drop in membership reflects the new minister's unpopularity or whether it is simply an administrative action to remove long-inactive members. In some years, congregations neglect to submit annual reports and so denomination officials (in some denominations) substitute figures from the previous year. In order to reduce much of this messiness, I have averaged each congregation's statistics across all of the ten or more years for which I have valid data for the congregation. This reduces the spikes and dips in the data and points to the general, longer-term pattern of results for each congregation.

Because the data on congregations indicate the U.S. county in which each congregation is located, I was able to match each congregation's data with county-level U.S. census data and the Glenmary data⁸ for all churches and religious adherents in the same county. Thus I was able to calculate the religious market share of the congregation's denomination for the county where each congregation is located.

RESULTS

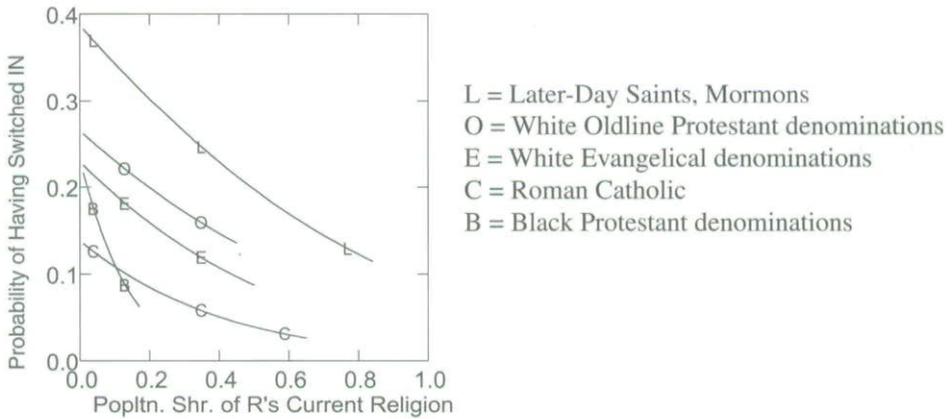
Population Share and Switching

The first hypothesis in the minority group turnover explanation asserts that rates of switching are higher when a group's population share is smaller. Figure 4 uses the GSS data to examine whether population share affects the rate at which people switch into a denomination or denominational category. GSS respondents were asked, "What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion?" A person who said that their religious preference was Protestant was then asked a series of follow up questions to identify their denominational affiliation with as much specificity as

possible. Later in the survey the respondent was separately asked, "In what religion were you raised?" Again there were follow up questions for Protestants to identify their childhood affiliation with more precision.

I coded a respondent as having made a switch if the denomination/denominational category of the religious group named in response to the first question was different from the denomination/denominational category of the group named in response to the second question. People who switched to another denomination within the same broad denominational category as the denomination in which they were raised (e.g., from one white evangelical Protestant denomination to another white evangelical Protestant denomination) were not coded as having switched.

Figure 4
Population Share and Switching In—General Social Survey



I created each of the curving downward-sloping lines in Figure 4 using logistic regression⁹ for all respondents who currently identify themselves as belonging to one of the five denominations/denominational categories shown in the figure (white evangelical Protestants, white oldline Protestants, Roman Catholics, black Protestants, and Latter-Day Saints or Mormons). The horizontal axis of Figure 4 shows the population share of the respondent's religious identity within the metropolitan area or county (PSU) where they lived at the time of the interview. The vertical axis shows the probability that respondents switched INTO their current religious identity. That is, while growing up, they were raised in a faith different from their current faith or they had no religion.

Each of the logistic regression lines show how the probability of having switched into a religious category changes with the current population share of that religious category in the geographic area where a respondent lived at the time of the interview. The right-most end of each line occurs at the maximum population share that each religious category reaches for any of the GSS PSU areas.

Taking the white evangelical Protestant group as an example, the line labeled with the letter "E" shows that in areas of the highest white evangelical population share (the right end of the line) there is slightly less than a ten percent chance (probability = .09) that any particular white evangelical Protestant switched into white evangelical Protestantism. In contrast, this same line approaches the vertical axis at approximately .23. In other words, in areas of very low white evangelical Protestant population share the percentage of current white evangelical Protestants who were raised outside of white evangelicalism is approximately two and one-half times the rate found in areas where white evangelicals are most concentrated.

Although the particular results for each of the denominational categories are interesting in their own right,¹⁰ my focus here is on the negatively sloping pattern apparent for each of the denominational types. As predicted by the first hypothesis, rates of switching into a group are highest in areas where population share is lowest. The negative-sloping pattern is quite evident in all five groups despite the fact that population mobility between the time a GSS respondent was raised and the time of the interview would probably weaken these results compared to what one might see if people lived their whole lives in one geographic area.¹¹

Figure 5
Population Share and Switching Out—General Social Survey

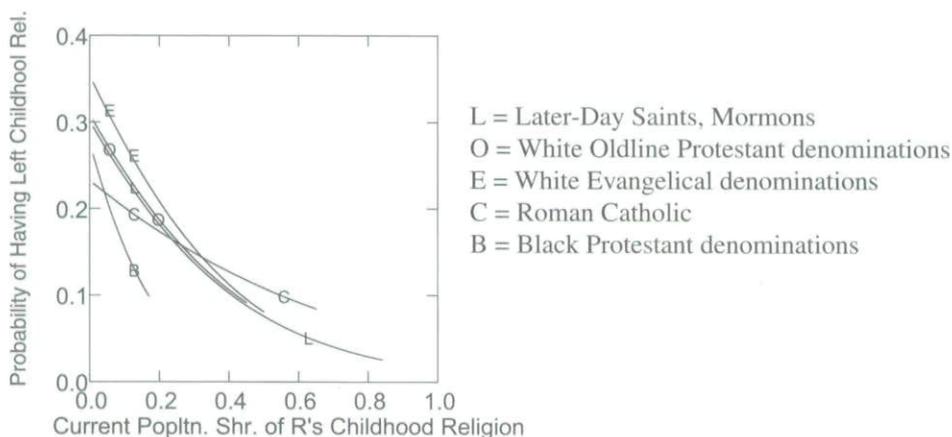


Figure 5 shows the results of similar logistic regressions predicting switching out of the religious identity in which one was raised. More specifically, it shows, for people raised in each of the five religious categories, what proportion had switched to a different religious identity by the time of the GSS interview according to the current population share of their childhood religious group in the area where they live.

The lines in Figure 5 are more bunched together than the regression lines in Figure 4, but again the negatively sloping pattern predicted by the first hypothesis is very clear and quite

dramatic. For example, the line labeled with an "L" for LDS shows that in the PSU areas of highest Mormon Population share where Mormons make up as much as 84 percent of the population only about 9 percent of the GSS respondents raised as Mormons have left Mormonism. In contrast, in the areas of lowest Mormon population share the rate at which persons raised Mormon left the LDS church is more than three times higher (29 percent).

The negatively sloping patterns in both figures match the predictions of the first hypothesis. Moreover, the general pattern appears to affect all kinds of religious groups and suggests that it is due to broad-based sociological processes and is not dependent on the particulars of a group's beliefs or practices. Indeed, such processes may well affect non-religious identities and groups in similar ways.

Although Figures 5 and 6 strongly confirm the first hypothesis, they lead one to question whether such large-scale patterns of switching would also be apparent at the level of local congregations where factors such as the popularity of a minister or a local plant closing might affect rates of joining and leaving much more than the population share of the denomination.

Table 1
Population Share and Annual Member Gains and Losses
For Congregations in Three Denominations^a

	Naz	UCC	ELCA
1. N of congregations	3960	6548	11617
2. N of counties	1978	1213	1798
3. Mean Population Share	0.011	0.026	0.101
4. Standard Deviation of Population Share	0.011	0.033	0.125
5. Correlation Ln.(Pop share) with Ln.(Gains per member)	-0.320	-0.224	-0.396
6. Correlation Ln.(Pop share) with Ln.(Losses per member)	-0.286	-0.232	-0.329
7. Correlation Ln.(Gains/member) with Ln.(losses/member)	0.521	0.631	0.345
Mean Annual Turnover ^b per member per year:			
8. in LOWEST quintile of population share.	0.1967	0.2555	0.2163
9. in HIGHEST quintile of population share	0.1388	0.1555	0.1537
10. Correlation of Ln.(Pop. Share) with Ln.(turnover per member)	-0.331	-0.249	-0.434
11. OLS St. Regression Beta for Ln.(Pop. Share) when predicting Ln.(Turnover per member) controlling for congregational and county-level demographic vars.	-0.125	-0.167	-0.230

^aAll correlations and regression Betas sig.<.001 for both OLS and multi-level regressions.

^bTurnover per mem. = (Gains + Losses)/members

Even though many factors affect the rate at which people join or leave a congregation, denominational population share turns out to be one of the best predictors. Table 1 summarizes this general pattern of results for the three denominations with one column for each denomination. Line 1 of the table indicates the number of congregations from each denomination used in the analysis. Line 2 shows the number of counties in which the congregations are located. Although I used multi-level (county and congregation) analyses to confirm the statistical significance of all the correlations and regression betas shown, Table 1 reports only Pearson's correlations and OLS regression Betas because these are more familiar to more readers and because the multi-level analyses revealed no substantive differences in results. Because of the large number of counties, all of the correlations and regression betas shown are statistically significant at the .001 level or less in both multi-level and OLS regression models.

Lines 3 and 4 of the table show the mean and standard deviation of the population share (expressed as a proportion) experienced by congregations within each denomination.¹² Nazarene congregations are dispersed across the largest number of counties and have, on average, the smallest population shares among the three denominations. ELCA congregations experience, on average, the largest population shares.

What about the relationship of population share and switching? Line 5 shows the Pearson's correlation coefficient between the natural log of population share and the natural log of gains per member per year (total members added in a year divided by the membership at the start of the year).¹³ Because both population share and rates of gains and losses (in the next row) have quite skewed distributions, I use the natural logs of all of these variables in Table 1 and in later tables. Readers familiar with the messiness of congregational report data will recognize that the negative correlations shown in the fifth row are very strong. For example, the correlation between population share and rate of gains for ELCA congregations is -.396. Line 6 of Table 1 shows analogous correlations for population share and rates of annual membership losses. As predicted by the first hypotheses, they also are strongly negative.

Because so much previous research on congregations has focused on congregational growth and decline (gains minus losses) there is a natural tendency to think that gains and losses are negatively correlated such that in growing congregations gains are high and losses are low and in declining congregations the reverse is true. Note however that rates of annual losses and rates of annual gains are *both* negatively and strongly correlated with a congregation's population share. This suggests that rates of losses and gains are actually positively correlated.

Indeed, line 7 shows that across all three denominations rates of member gains and member losses are very strongly positively correlated.¹⁴ Congregations that lose a large proportion of their membership each year tend to gain back a similar proportion of members thus cancelling out the membership losses¹⁵. Because rates of per member gains and losses are so strongly positively correlated, I decided to simplify the analyses by adding the two variables together to obtain an annual rate of "turnover" per member equal to total gains plus total losses per year divided by the number of members at the start of the year.

To get some idea of how much turnover there is and how much it varies by population share, lines 8 and 9 show the mean annual turnover per member for congregations in the lowest and highest quintiles of population share. For example, among the twenty percent of Nazarene congregations with the *lowest county population shares*, the mean turnover

rate was .1967, meaning that the sum of the members added and the members lost in a year equals approximately 20 percent of the membership of the congregation at the beginning of the year. However, among the twenty percent of Nazarene congregations with the *highest county population shares* the mean turnover rate is only .1388. The differences in turnover rate between the lowest and highest quintiles of population share are similarly large for the UCC and ELCA congregations.

Line 10 shows the overall correlations between population share and turnover rate for each of the three denominations. The magnitudes of these correlations are similar to the correlations in rows 5 and 6 showing the relationship of population share to gains and losses separately. More importantly, all of the correlations support the claim of the first hypothesis that membership gains and losses will be higher in areas of low population share.

Although the correlations in Table 1 strongly support the first hypothesis, it is possible that the correlations could be spurious due to other factors that vary with both population share and turnover rates (e.g., urbanism or congregational size).¹⁶ Thus line 11 in Table 1 shows the standardized regression Betas for population share when predicting congregational turnover rates controlling for a large number of congregational and county level variables that could also account for this relationship. The control variables used in the regressions for each denomination vary somewhat depending on the availability of data, but include the inverse (following Firebaugh and Gibbs 1985) of the number of members at the start of the year, the year the congregation was founded, region of the country, the percent of the county population that are church adherents, and the following county-level census variables: median education, median age, median family income, proportion of households headed by a married couple, population density, proportion urban, proportion white, proportion living in the same residence as five years ago, and population growth over a ten-year period. Because of space considerations I do not show regression Betas for the control variables.

One can make a meaningful comparison between the correlations in line 10 and the standardized Betas in line 11 (because correlations equal the standardized Beta in simple regression with only one independent variable). The standardized Betas in line 11 are only about half as large as the correlations in line 10. This means that a good deal of the association between population share and turnover is due to the control variables (especially population stability, the percent of the county living in the same residence as five years ago). Nevertheless, the standardized Betas for population share in line 11 are strong (for analyses of congregational report data such as these). Indeed, for all three denominations, county population share is either the strongest predictor of congregational turnover rates, or among the very strongest predictors among all the variables used in the regressions upon which the results in line 11 are based.

Summing up, both the GSS switching data and data on gains and losses from local congregations strongly support the first hypothesis.

Switching and Commitment levels

Does all this switching in and out of groups raise member commitment levels as the second hypothesis suggests? Ideally, a test of the second hypotheses should compare the commitment levels of three groups of people: those who leave a group, those who stay, and those who join a group during the same time period. Unfortunately, it is very hard to get meaningful data on the commitment levels of those who have left a group and only somewhat easier to get separate commitment level data on those who switch into a group.

Table 2 uses data from two sources to compare the commitment levels of people who do not switch religious groups with those who do. The top portion of the table uses data from the GSS and compares the frequency of church attendance and frequency of prayer for people who switched into a religious/denominational category versus those who haven't switched. I have converted the attendance categories in the GSS into approximate number of attendances per year. For example, people who say they attend once per week are coded as attending 52 times per year. In a similar manner I have converted the GSS response categories for the question on prayer frequency to numbers of time per week a person claims to pray. The results shown in Table 2 combine the results for all denominations but exclude persons who claim no religion. However, separate analyses within single denominations or denominational groupings (not shown here) yield similar results.

Table 2
Switching and Commitment Levels

	General Social Survey Respondents		N	Sig.
	Still In Childhood Denomination Did not Switch	Switched Into Current Denomination		
Attendances Per Week	26.4	31.9	9039	<.001
Pray, Times Per Week	8.2	10.5	6128	<.001

	US Congregational Life Survey (Attenders of Congregations)		N	Sig.
	In Same Congregation For "All or most of my life."	Switched into Current Congregation from Another Congregation		
Attendances Per Year	51.1	52.1	83,797	<.001
Private Devotions Per Week	3.7	4.1	85,041	<.001
Pct. of Income Given to Church	4.6	5.1	81,292	<.001

The top half of Table 2 shows that people who are still in the denomination or denominational grouping in which they were raised say that they attend religious services less often (26.4 times per year) than those who switched into their current affiliation (31.9 times per year). Likewise people who belong to their childhood denomination say that they pray, on average, 8.2 times per week compared to 10.5 times per week for those who switched into

their current denomination. Of course these self-reports are probably higher than actual attendance and prayer frequencies. Nevertheless, the results are consistent with the second hypothesis. Those who switch into a religious group tend, on average, to have higher commitment levels measured by prayer and attendance frequency.

The bottom half of Table 2 shows results from the U.S. Congregational Life Survey (USCLS). The USCLS attempts to be a random sample of U.S. congregations. The study includes 413 congregations. For all participating congregations, everyone in attendance on a particular weekend service (a total of 124,404 total attenders) filled out a four-page questionnaire. Details of the survey design can be found in Woolever and Bruce (2004). One of the questions asks respondents "Before you started coming to this congregation, were you participating in another congregation?" The results in the bottom of table 2 compares those who answered "No, I've come here for most or all of my life" (n=16,220) with those who answered "Yes, immediately prior to coming here, I was participating in another congregation" (n=69,356). In order to make for a meaningful comparison I excluded those who had never attended a congregation before or who had not been attending for several years before joining.¹⁷

As with the GSS data, I recoded the USCLS response category responses to more meaningful values, e.g., worship attendances per year, percent of income the respondent says that they donate to their congregation, and the number of times per week the respondent engages in "private devotional activities (such as prayer, meditation, reading the Bible alone)."

Because everyone who completed a USCLS questionnaire was attending a worship service when they completed the questionnaire (and thus likely to be a somewhat regular attendee), there isn't much substantive difference in the claimed annual attendance rates of those who switched into the congregation (52.1 times per year) and those who have attended the congregation most or all of their life (51.1 times per year). However, those who switched in from another congregation say they have private devotions more regularly (4.1 versus 3.7 times per week) and give a larger percentage of their income to their congregation (5.1 percent versus 4.6 percent).¹⁸ Again, the results are consistent with the second hypothesis (and statistically significant) even though the magnitude of the differences are diminished by the fact that the sample includes only the more committed congregation members who were in attendance on the day the survey was distributed.

A better test of the second hypothesis would include results from entire congregations, including both the active and inactive members to see if those who switched in are more committed. Although I know of no such surveys, the next best thing is to examine commitment levels of whole congregations and see whether congregations with higher turnover rates have higher *average* commitment levels across all members (both active and less active).

Table 3 explores whether congregations with higher membership turnover rates have higher per member financial giving (total donations divided by the number of members) and a higher percentage of the membership attending (the average attendance reported by the congregation divided by the number of members). Like Table 1, Table 3 shows results for the congregations in three denominations.

One can get a general sense of the magnitude of the differences by comparing the mean per member giving (in dollars) among the congregations in the lowest quintile of membership turnover rates (in line 3) with the comparable giving figures for congregations in the

Table 3
Membership Turnover, Financial Giving, and Attendance Rates
For Congregations in Three Denominations

	Naz	UCC	ELCA
1. N of congregations	3960	6548	11617
2. N of counties	1978	1213	1798
<u>Mean Per Member Financial Giving^b</u>			
3. in LOWEST quintile of Membership Turnover rate.	\$536.01	\$196.48	\$210.38
4. in HIGHEST quintile of Membership Turnover rate.	\$729.76	\$291.76	\$423.98
5. Corr. of Ln.(Turnover) with Ln.(\$ per member)	0.278	0.271	0.454
6. OLS St. Regression Beta for Ln.(Turnover) when predicting Ln.(\$ per member), controlling for congregational and county-level demographic vars.	0.282	0.177	0.261
<u>Average Percent of Members Attending</u>			
7. In LOWEST quintile of Membership Turnover Rate	81.44%	47.11%	30.26%
8. In HIGHEST quintile of Membership Turnover Rate	110.61%	61.99%	53.46%
9. Corr. of Ln.(Turnover) with Ln.(Avr. Pct. Attending)	0.403	0.306	0.434
10. OLS St. Regression Beta for Ln.(Turnover) when predicting Ln.(Avr. Pct. Attending), controlling for congregational and county-level demographic vars.	0.383	0.193	0.320

*All correlations and regression Betas sig.<.001 for both OLS and multi-level regressions.

^bDollar Amounts not comparable between denominations due to data from different time periods. See text.

highest quintile of membership turnover rates. The highest turnover congregations have much higher per member giving. In ELCA congregations the highest turnover quintile congregations receive more than twice as much money per member as the congregations in the lowest quintile of turnover rates (\$423.98 versus \$210.38).¹⁹

Line 5 of Table 3 shows the simple Pearson's correlation coefficient between the natural log of annual turnover rates and the natural log of per member financial giving. In all

three denominations, mean giving is higher in congregations that have higher turnover rates. Line 6 shows the standardized OLS regression coefficients for the natural log of turnover rates when predicting the natural log of per member giving while statistically controlling for a large number of congregational-level and county-level variables (the same variables used in the regressions in Table 1 above). Even though the control variables account for some of the relationship apparent in the simple correlation, higher turnover rates still appear to be strongly positively related to higher levels of financial giving. In fact, it may be that membership turnover rates are one of the best single predictors of financial giving in congregations, a factor not given much consideration in past studies of congregations.

Lines 7 through 10 show analogous results for the relationship of turnover rates with average attendance rates. Congregations with higher turnover rates also have higher attendance rates. Even in Church of the Nazarene congregations where attendance is already quite high, attendance rates in the highest turnover quintile are 30 percent higher than in the lowest turnover quintile. The simple correlations in line 9 and the standardized regression betas (with statistical controls) in line 10 give strong evidence in support of the second hypothesis. Congregations with higher membership turnover rates have higher attendance rates.

Accounting for Population Share

Although the results so far give strong support to each of the two hypotheses considered individually, it remains to be seen how well minority group turnover accounts for the overall effect of population share. Looking back at Figure 1, how much of the overall population share effect is mediated through the indirect path via membership turnover rates and

Table 4
Population Share, Financial Giving, and Attendance Rates
For Congregations in Three Denominations

	Naz	UCC	ELCA
<u>Mean Per Member Financial Giving^a</u>			
1. in LOWEST quintile of Population Share	\$671.20	\$308.29	\$225.90
2. in HIGHEST quintile of Population Share	\$591.83	\$181.86	\$108.08
<u>Average Percent of Members Attending</u>			
3. in LOWEST quintile of Population Share	97.50%	56.63%	43.55%
4. in HIGHEST quintile of Population Share	96.90%	48.22%	39.83%

^aDollar Amounts not comparable between denomination due to data from different time periods. See text.

how much remains unexplained or explained by other variables (the diagonal dashed line in figure 1)?

In order to answer this question, one must assess the overall strength of population share on current member commitment levels. Table 4 gives an approximate idea of how strong this relationship is for congregations in the three denominations I have been considering. Line 1 shows the mean per member giving of congregations in the lowest quintile of population share while line 2 shows the mean giving for congregations in the highest quintile of population shares. Although the population share of Nazarene congregations is generally less than 2 percent, even these small differences in population share appear to be related to financial giving. Thus in the lowest quintile of population share, people in Nazarene congregations give an average of \$671 per member, but in the highest quintile of population share, giving drops to \$591 per member. Among ELCA congregations, the reduction in giving between the lowest and highest quintiles is more than 50 percent.

The lower half of Table 4 shows the average attendance rates for the lowest and highest quintiles of population share. Here the direct effect of population share is less dramatic, perhaps for reasons explained by Brewer et al. (2006). In the case of Nazarene congregations there is no statistically significant effect of population share on attendance. Nazarenes appear to have pretty high attendance rates irregardless of population share. But Among UCC and ELCA congregations population share does make a small difference in attendance. For example, UCC congregations in the lowest quintile of population share have mean attendance rates of 57 percent of membership. Attendance rates in the highest quintile are about 9 percent lower at 48 percent.

How much of the overall population share effect apparent in Table 4 is accounted for by membership turnover rates? Table 5 summarizes multiple regression analyses designed to answer this question. Because of reader familiarity Table 5 shows standardized Betas from OLS regressions, but I have also noted with an asterisk all Betas that were found to be statistically significant at the .05 level in separate multilevel regressions using the same variables.

The upper half of the table shows regressions in which financial giving is the dependent variable. For each denomination there are three regression models. Model 1 includes only the natural log of population share and a control for the inverse of the membership size of each congregation, following the methods suggested by Firebaugh and Gibbs (1985) for regressions where the dependent variable is a ratio variable created by dividing by, in this case, the number of members in each congregation. Model 2 adds the same congregational and county-level control variables used in previous tables. For space reasons I do not list the Betas for all of these variables but simply indicate their inclusion in the model with "XXX." The Beta for population share in the second model indicates how strongly population share is associated with per member giving *after* statistically controlling other congregational and county-level variables that might also explain congregational giving levels.

Model 3 adds one additional variable, the natural log of the membership turnover rate for the congregation. By comparing the R-squared values in models 2 and 3 one can see how much additional variation in giving is explained by the addition of this single variable. For example, among Nazarenes, the R-squared increases from .13 to .18 between models 2 and 3 indicating that membership turnover alone explains an additional 5 percent of the variation in financial giving.

Table 5
OLS Standardized Regression Betas Predicting Financial Giving and Attendance
For Congregations in Three Denominations

Dep. Variable = Nat. Log of Per Member Giving									
	Naz			UCC			ELCA		
	1	2	3	1	2	3	1	2	3
ln(popltn. share)	-0.15*	-0.11*	-0.08*	-0.37*	-0.23*	-0.21*	-0.48*	-0.27*	-0.21*
ln(1/membership)	-0.03	-0.01	-0.10*	0.01	0.08*	0.29*	0.00	0.07*	0.03*
ln (turnover)			0.27*			0.26*			0.23*
County and Cong- level Control Vars.		XXX	XXX		XXX	XXX		XXX	XXX
R-squared	0.02	0.13	0.18	0.14	0.20	0.21	0.23	0.33	0.37
Percent Reduction in Beta for ln.(Popltn Share)			27%			9%			22%

Dep.Variable = Nat. Log of Average Percent of Members Attending									
	Naz			UCC			ELCA		
	1	2	3	1	2	3	1	2	3
ln(popltn. share)	0.01	0.00	0.05*	-0.10*	-0.04*	-0.02*	-0.19*	-0.12*	-0.05*
ln(1/membership)	0.38*	0.32*	0.18*	0.58*	0.56*	0.79*	0.46*	0.49*	0.44*
ln (turnover)			0.39*			0.30*			0.31*
County and Cong- level Control Vars.		XXX	XXX		XXX	XXX		XXX	XXX
R-squared	0.14	0.21	0.30	0.36	0.39	0.42	0.27	0.39	0.45
Percent Reduction in Beta for ln.(Popltn Share)			---			50%			58%

*=Sig<.05 confirmed with multilevel regression

More importantly, comparing the standardized Beta for population share in model 2 with the analogous figure in model 3 gives some sense for how much of the effect of population share on financial giving is accounted for, or mediated by, membership turnover rates, the indirect path through membership turnover in Figure 1. In the case of Nazarenes, the Beta

for population share goes from -0.11 to -0.08 , a reduction in magnitude of 27 percent. This is approximately the same as saying that membership turnover explains 27 percent of the effect of population share on per member giving in Nazarene congregations. For UCC congregations, membership turnover has a large standardized Beta in the third model (0.26) but the Beta for population shrinks by only 9 percent between model 2 to model 3. In ELCA congregations the reduction is 22 percent.

The lower half of Table 5 contains analogous regression models predicting the natural log of average attendance divided by membership. As noted in the discussion of Table 4, the effects of population share on attendance are weaker than for financial giving (the standardized Betas for population share are weaker in the bottom half of table 5 than in the models in the upper half). In the case of Nazarenes, there is no negative population share effect evident after controlling the inverse of membership size and other congregational and county level variables. Although the population share effect is weaker for attendance (than financial giving), adding the single membership turnover variable in model 3 accounts for half (50 percent) of this effect among UCC congregations and more than half (58 percent) among ELCA congregations.

DISCUSSION

Although membership turnover does not account for *all* of the population share effect, it accounts for a significant proportion, a proportion that varies according to the dependent variable and the religious group in question. These analyses include only three denominations and two measures of commitment. Nevertheless, the explanatory power of membership turnover is clear.

Because turnover rates do not account for the entire population share effect, it seems likely that other factors, represented by the dashed diagonal arrow in Figure 1, also play a role and may work in tandem with the minority group turnover explanation. For example, one can imagine that if the higher rates of switching in low population share areas tend to create a base of fairly highly committed current members, social interaction among these more committed members might lead to the construction of a more distinctive religious identity or, at the very least, the creation of more demanding local norms of participation. Such norms, and the sanctions that enforce them, could boost financial giving and attendance levels above the levels predicted by membership turnover rates alone. Moreover, more demanding norms for participation might function to drive away the less committed potential members in a process not unlike that described by Iannaccone (1994) for strict churches. A tendency for low-commitment members to be especially attracted to religious groups with a large population share may also play a role, as described by Brewer et al. (2006). Research by Olson and Sikkink (2004) and Hill and Olson (2007) suggest that the effects of population share are not due, as religious economies models contend, to greater efforts on the part of leaders in small-population-share areas. The efforts of such leaders are no different than those of leaders in large-population-share areas.

Although my main aim has been to explain the population share effect, an important side benefit is recognizing how important membership turnover is for understanding member commitment levels. Many previous studies of congregations have attempted to explain per member financial giving and attendance rates, but to my knowledge none have examined the role played by turnover rates. There might be a tendency for religious leaders to view rapid membership turnover as a sign of organizational weakness. Indeed, turnover does

pose problems for institutional memory and organizational stability. At the same time it probably also frees organizations from always having to do things "the way we have always done it." Moreover, for the three denominations examined here, membership turnover rates turn out to be either the strongest or among the strongest predictors of giving and attendance in the regressions shown in Table 5. Future studies of congregations and other groups need to take account of membership turnover, not just overall growth and decline. Although my analyses suggest that leaders can have little direct influence on membership turnover rates, leaders can benefit from an understanding of how population share and membership turnover rates are affecting the groups they lead.

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NOTES

¹Although there is an important theoretical difference between these two concepts, my own experience with actual empirical analyses of U.S. data finds that the two variables are usually very strongly positively correlated such that results are very similar regardless of which variable one uses.

²Below I discuss an important contrary finding, that of Phillips (1998) in which Phillips found that rates of Mormon participation were higher in areas of greater Mormon concentration.

³One could object that this last mathematical reason for a negative association of population share and recruitment rates is merely a mathematical artifact of having chosen to measure recruitment rates as a proportion of the starting membership size rather than as an absolute number of persons recruited. While true, the counter argument is that proportional changes matter more for other group processes than absolute numbers of persons. If 50 people join a 50-member group, it changes the group more than the addition of 50 people to a 500-member group.

⁴Phillips' (1998) other major finding in this same article, that rates of membership in the Priesthood of Melchizedek are highest in Utah counties where Mormon population share is greater seems consistent with a majority group conformity effect, but is based, contrary to my predictions, on per member data from the LDS church.

⁵The aggregation into PSU-level measures involved weighting the data from each contributing county by a weight proportional to the county population.

⁶It is worth noting that the counties that make up the 84 PSU areas have religious characteristics that, taken together, are quite representative of the religious contexts faced by all Americans. In separate analyses not shown here I find using data from the 1980 Glenmary Study that when one compares the percentages of adherents in particular denominations in all U.S. counties the percentages are very close to the percentages that one obtains when one only examines the counties that are included in the 84 PSUs used by the General Survey. I've also examined whether the combinations of denominations present in the PSU counties are similar to the combinations of religious groups found in all U.S. counties. Again the results for PSU counties are very similar to the results for all US counties. The random processes that NORC uses to select the PSU counties make them very representative of the religious contexts that all Americans face.

⁷These categories are similar to the RELTRAD categories used in Steensland et al. (2000) except that the white evangelical Protestant categories does not include white Pentecostal denominations (a group I coded separately) and majority white denominations that have evangelical theology but who share a tradition with an oldline Protestant denomination (for example Missouri Synod Lutherans). These separate categories were created based on an examination of overall patterns of switching and intermarriage in the GSS. For example, Missouri Synod Lutherans are more likely to switch with and intermarry with ELCA Lutherans (a more liberal, oldline, denomination) than with other white evangelicals such as Southern Baptists.

⁸I used 1980 Glenmary data to calculate county population shares for the Nazarene and the United Church of Christ congregations. I used 1990 Glenmary data to calculate county population shares for the Evangelical Church in America congregations.

⁹The dependent variable for each logistic regression is the probability that the respondent switched into their current religious affiliation. The single independent variable in each of these regressions is the population share of the respondent's denomination/denominational grouping in the GSS PSU where the respondent lived at the time of the interview. All of these regressions were statistically significant at the .05 level or lower.

¹⁰The overall height of the particular regression lines appears to be partly a function of the size of a group relative to the entire U.S. population. Smaller groups like the LDS have higher rates of in-switching while in-switching is lower for Catholics, the largest single U.S. denomination. However, the heights of the lines may also reflect the extent to which groups actively recruit members or are attractive destinations for people leaving other groups.

¹¹Forty-one percent of the GSS respondents live in the same city as when they were age 16 and about two-thirds live in the same state.

¹²These means and the standard deviations in the next row are calculated for congregations, not for counties.

¹³Note that although the rates of gains and losses used in Table 1 are annual rates, the rate for each congregation is calculated as the mean annual rate across all of the years of available data for the congregation. As noted above, this minimizes the effect of missing data from particular years and random fluctuations in particular years for reasons unrelated to the long-term characteristics of the congregation and the county context.

¹⁴In separate regressions controlling for congregation size not shown here I find that these strong correlations are not due to the sizes of the congregations.

¹⁵Thus in separate analyses I find that overall congregational growth is much more weakly and inconsistently correlated with population share across the three denominations. The correlations of population share and growth for the three denominations are Nazarene = -.120, UCC = .028, ELCA = .040.

¹⁶Although one might suspect that congregational size is lower in areas of low population share, the association is not very strong in most denominations. This is because, depending on the denomination, smallest population share is reached in urban areas where congregations also tend to be larger because of population density.

¹⁷When the previously non-involved in-switchers are included, the mean commitment levels for all people switching into the congregation are still higher than for lifetime participants.

¹⁸Controlling for age of the respondents does not change these results. Lifetime participants are, on average, slightly older (52.3 years) than people who switched from another congregation (49.3 years).

¹⁹Because the data from different denominations come from different decades (see above) and the figures have not been adjusted for inflation, and because membership is defined somewhat differently in the different denominations, the mean contribution levels for the three denominations are not strictly comparable.

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