# Reversing the Arrow? Economic Inequality's Effect on Religiosity

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#### Abstract

As other contributions to this volume document, there is considerable evidence that religious beliefs and practices shape stratification processes, working to maintain and perhaps even increase economic inequality. But what effect does the extent of inequality within a society have on the religiosity of the people who live there? In this chapter, I present time-series cross-sectional analyses of reported attendance at religious services in more than thirty countries over the past half century. These analyses indicate that rising levels of income inequality are soon followed by rising levels of religiosity. These results support relative power theory, which maintains that greater inequality yields more religiosity by increasing the degree to which wealthy people are attracted to religion and have the power to shape the attitudes and beliefs of those with fewer means.

Religion has long been theoretically linked to processes of stratification, and an impressive body of recent empirical research demonstrates how religious affiliation, practice, and belief are associated with economic outcomes. Given the power of religion and religiosity to explain differences across individuals in education, occupation, income, and wealth, one might easily conclude that increasing religiosity in a society should be expected to cause existing levels of economic inequality in that society not merely to persist but also to grow. There are also good reasons to think that causal influence may runs in the opposite direction, however, from economic inequality to religiosity.

The relative power theory contends that religion serves not only as a source of comfort to those who are disadvantaged, but also as a means of social control for the advantaged. As economic inequality increases, this argument goes, the wealthier members of a society will, first, be more attracted to religion and, second, be better able to spread their religious beliefs to everyone else. The result is that higher levels of religiosity follow from higher levels of inequality (see Solt, Habel, and Grant 2011). I review this theory in brief below.

First, religion becomes more attractive to the wealthy as inequality grows. This is because rising inequality creates greater potential pressure for redistribution away from the fewer and richer rich to the many and poorer poor. Rising inequality implies declining median income, and so a larger benefit to the majority from increased redistribution (Meltzer and Richard 1981). But religion is a potent tool for reducing demands for redistribution, regardless of the material benefits that such policies might bring. As Stark (1964, 702) argued, echoing Marx's (1978 [1844]) Contribution to the Critique of Hegel's Philosophy of Right, "religion not only

bids the deprived to accept their lot, but maintains that it is the just outcome of rules that are the best possible, indeed, in some instances divinely inspired." Numerous empirical studies support this point. Scheve and Stasavage (2006), for example, found in a sample of advanced democratic countries that as individuals' religiosity increases, their support for redistributive social spending declines. Similarly, in a study of individuals in the United States, Davis and Robinson (1996, 777-779) concluded that "involvement in a religious community, apart from whether this is orthodox or progressive, leads to more conservative views" on a number of issues concerning the distribution and redistribution of economic resources. Some among the wealthy may consciously adopt religious beliefs for this very reason as inequality increases. Other rich individuals, however, may grow more religious with increasing inequality only because the idea that one's circumstances on earth are in accordance with God's (or the gods') will is an ever more soothing justification as their own circumstances diverge more and more from those of the rest of society. Then, the fact that this idea discourages poorer people from challenging the social order is a welcome, if unintended, consequence that only reinforces their religious belief.

Second, as the rich grow richer, those who become more religious will have more money to spread their faith. This is just the application to religion of the broader claim that greater concentrations of income and wealth constitute greater concentrations of power, including the power to shape the attitudes and beliefs of others (see, e.g., Solt 2008). Money, after all, can be used to project one's views into the public sphere, where others can be persuaded to adopt them. With regard to religion, the most straightforward way this occurs

is through contributions to those who explicitly proclaim as their mission the spreading of faith: churches and other religious organizations. When state support is not available, religious organizations necessarily depend on a small number of large donors. This is true even when economic inequality is relatively low. The norm of making donations as a share of one's total income means that one's contributions are the product of one's income and one's religiosity, which determines the rate of giving. This means that the core of monetary support comes from the minority of members who are both devout and relatively well off (Iannaccone 1997). (This also helps explain why religious institutions only rarely fail to serve the political needs of the wealthy and instead champion the interests of the disadvantaged: in Iannaccone's (1997, 142) words, "who can affort to alienate the few families that keep the church afloat?") That the growth of total contributions to religious organizations, and the growing concentration of these contributions among wealthier donors, in the United States over recent decades (see Chaves 2004, 36-37) mirrors the upward trend in income inequality over that time is suggestive evidence on this point. The result is that more inequality allows the religious rich to more effectively spread their beliefs among the rest of their society.

The foregoing reference to religious giving in the United States should not be interpreted as suggesting that this pattern exclusively a characteristic of Christian churches. It is also readily evident, for example, among India's Hindus. Nanda (2011, xxviii) documents how, as economic liberalization is spurring the growth of economic inequality, religiosity is surging among India's nouveau riche: "the statues of popular gods are getting taller, temples are becoming grander, and the lines of well-heeled devotees outside temples and ashrams in

posh suburbs are getting longer." As India's rich have gotten richer—and more religious—more and more money has flowed into the hands of purveyors of religion. The result is a particularly vivid example of the use of religion as a tool of social control: within a few years of the upsurge in religiosity among India's rich, the country's poor became more religious as well, even those among the Scheduled Castes—those whom Hindu belief insists be segregated on the bottom of the social hierarchy without hope for advancement (Nanda 2011, xxix).

This argument regarding how inequality shapes religiosity is not without rivals. Deprivation theory has attracted much more scholarly attention. It maintains that religion provides comfort and reassurance to the economically disadvantaged and socially marginalized, both spiritually and materially. Spiritually, religious belief promises that, for whatever hardships may be present in the physical world, there is the spiritual world beyond where these burdens will be lifted; that a higher power will provide, if not in this life then in the next; that upon shuffling off this mortal coil, believers will reach a better place (see, e.g., Glock 1964). Materially, religious organizations are frequently an important source of tangible, charitable support for members in need (e.g., Gill and Lundsgaarde 2004). As higher levels of economic inequality increase both the number and need of the poorer members of a society, these unfortunate individuals should be increasingly likely to turn to religion for succor (e.g., Norris and Inglehart 2004; Ruiter and van Tubergen 2009). But as greater inequality also means that the rich are richer, more inequality should yield less religiosity among a society's affluent. In other words, according to deprivation theory, the effect of inequality on an individual's religiosity depends on where that individual's income falls within the distribution of income.

In previous work, my coauthors and I put the relative power theory and the deprivation theory to a head-to-head test (Solt, Habel, and Grant 2011). Drawing on data from the World Values Survey, we examined how income inequality affected responses of well over 200,000 individuals in 175 different country-years in 76 different countries to twelve different aspects of religiosity, from religious self-identification and the importance of religion to one's life to attendance at religious services and frequency of prayer to beliefs in God and the afterlife. A series of multilevel models revealed that, regardless of the measure of religiosity considered, higher levels of income inequality were associated with greater religiosity among people of all incomes, rich and poor alike, as predicted by the relative power theory. In fact, for many important aspects of religiosity, including belief in God, the wealthy are substantially more sensitive to the context of inequality than the poor and at extremely high levels of inequality, the wealthy actually evince higher levels of religiosity by these measures than their poorer fellow citizens (Solt, Habel, and Grant 2011). The deprivation theory was routed: not a single one of the twelve measures of religiosity examined displayed the pattern of inequality having larger effects on poorer individuals that that theory predicts.

In that article, we also examined two questions that are central to the topic of this volume: over time, do changes in inequality explain subsequent changes in religiosity? The relative power theory (as well as, for what it is worth, the now-discredited deprivation theory) would lead one to expect that they should. And does the ebb and flow of religiosity predict the trend in inequality? As I noted above, based on the evidence of religion's stratifying effects presented in other chapters in this volume and elsewhere, one could easily conclude that it

must. Using the rich data on the trend in aggregate religiosity in the United States over time provided by Grant (2008), we found that inequality has dynamic effects on religiosity but that the reverse was not true.

In the rest of this chapter, I investigate whether this latter finding—that changes in inequality are shortly followed by changes in religiosity, but not vice versa—is supported by evidence from beyond the United States. I present an original dataset on the trends over time in self-reported weekly attendance at religious service in nearly three dozen countries. After replicating this result in the United States using these new data, I find the same holds true in the country with the next-richest data on church attendance in the sample, Germany. Then I examine the entire pooled time-series cross-sectional sample, using a fixed-effects model to focus only on changes over time rather than any differences across countries. Here again, inequality predicts religiosity, but not the reverse. In the conclusion, I offer an explanation that reconciles these empirical findings with those of preceding chapters in this volume.

## Data and Method

Data on trends in religiosity comparable to those I and my coauthors previously used to examine dynamics in the United States, however, are available for few, if any, other parts of the world. Nevertheless, some data do exist that allow comparisons over time in many countries. I rely on self-reported attendance at religious services, in particularly the percentage of a country's inhabitants who reported attending religious services at least weekly. Focusing on weekly attendance has two advantages. First, it corresponds to the frequency of

attendance prescribed by the dominant religions of most societies (Ruiter and van Tubergen 2009, 873). Second, and indeed relatedly, information about weekly attendance at religious services is more readily available than for any other frequency. Still, there are known short-comings in self-reported measures of religious attendance. Like other behaviors that are seen as socially desirable, attendance at religious services is subject to substantial overreporting in surveys, perhaps by a factor as high as two in the United States (Hadaway, Marler, and Chaves 1993). For present purposes, this is less of a problem than it may appear at first glance. Overreporting, as Hadaway, Marler, and Chaves (1998, 127) point out, is typically "generated by the combination of a respondent's desire to report truthfully his or her identity as a religious, church-going person and the perception that the attendance question is really about this identity rather than about actual attendance." As I am in fact more interested in the former than the latter, this bias in the data actually makes it more suitable for my purposes rather than less.

Data on the percentage of a country's inhabitants who reported attending religious services at least weekly were collected from a number of national and cross-national surveys. Major sources include the World Values Survey, the European Values Survey, the International Social Survey Program, the Eurobarometer, and the European Social Survey. It is worth noting that these surveys offered respondents a wide variety of different answers to the question of how frequently they attended religious services. All, however, provided at least five options, and at least one of these was "weekly" or more often. Surveys whose response category indicating most frequent attendance was merely "almost weekly" or similar were

excluded. When more than one survey provided data for a particular country and year, the results were averaged. Countries were retained for analysis when these surveys provided observations for at least seven time points with no gaps that exceeded five years. Using a separate loess regression analysis for each country, missing values between the earliest and most recent observations in each country's data on church attendance were imputed ten times. (Multiple imputation is the recommended method for addressing missing data; listwise deletion, the omission from the sample of observations with missing data on any variable, although commonly employed in many subfields of sociology, is known to yield severely biased coefficient estimates (see, e.g., King et al. 2001).) Although these resulting time series are longer for some countries than others, all of the series are without gaps, and the uncertainty in the values for years that were not actually observed is captured in the variation across the ten imputations. All told, the sample includes 34 countries examined over time periods ranging in length from 13 years (Chile, Finland, and the Republic of Korea) to 45 years (the United Kingdom and United States). The median observed time period is 24 years long. The percentage of a society's inhabitants reporting themselves to be weekly attenders ranged from scarcely over 1% (e.g., in Denmark in 1992) to about 72% (in Ireland in the early 1990s). Differences over time in this variable within a country range from a low of about 1 percentage point, in Sweden, to a high of over 30 points, e.g., in Italy. The median difference is about 16 percentage points.

To test whether rising levels of economic inequality yield increases in religious attendance, as the relative power theory predicts, or vice versa, or both, I rely on data from the Standardized World Income Inequality Database (SWIID). Compared to other available datasets, the SWIID provides the most comparable statistics on income inequality for the broadest possible sample of countries and years (Solt 2009), making it particularly well suited for this study. I use the SWIID's data on the Gini index of inequality in net household income. This variable has a theoretical range of 0, all households have equal incomes after taxes and government transfers, to 100, a single household receives all of the net income. In this sample, however, it ranges from about 17 (in the lands that would later become the Slovak Republic, in the early 1990s) to around 52 (in Chile in the late 1990s). The range in the Gini index from the lowest to the highest level of income inequality within a given country over the observed time period varies in this sample from about 1 point, in New Zealand, to over 20 points, in Russia; the median range is about 6 points.

There are of course many other explanations for differences in aggregate religiosity. One of these alternate explanations is particularly important to take into consideration here: Secularization theorists have long argued that religiosity declines as societies grow richer. Although this argument has been the subject of frequent criticism, recent cross-national quantitative work has found substantial evidence in its favor. I account for this possibility by controlling for GDP per capita, in thousands of 2005 U.S. dollars, using data from the Penn World Tables (Heston, Summers, and Aten 2011). Other plausible explanations, however, focus on differences between societies rather than within them over time. For example, arguments regarding the effects of the distinctive cultural heritages provided by the historically dominant religion have some empirical support (see, e.g., Norris and Inglehart 2004,

455), but for any given country, this religious heritage is a constant. As the focus of this study is on changes in religiosity within countries over time rather than across countries, these explanations are not considered further here.

## **Analyses**

First, I replicate the analysis of religiosity over time in the United States presented in Solt, Habel, and Grant (2011), substituting in the place of the Aggregate Religiosity Index employed in that work, the reported church attendance data described above as the measure of religiosity. Next, I examine the relationship between economic inequality and religiosity over time in Germany, the country with the second-most available observed data on church attendance in this dataset. Finally, I estimate how economic inequality and religiosity affect each other over time in the full pooled time-series cross-sectional dataset.

### Economic Inequality and Church Attendance in the United States

Before turning to the evidence regarding the relationships between inequality and religiosity in other countries, it makes sense to first reexamine the U.S. case. It is far from clear that the the patterns discerned in Solt, Habel, and Grant (2011)—that increases in inequality are soon followed by increases in religiosity, but not the reverse—will still be apparent when church attendance rather than Grant's (2008) Aggregate Religiosity Index is employed as the measure of religiosity. The ARI, after all, provides researchers with an exceptionally rich source of information on the ebb and flow of religiosity in the United States, incorporating

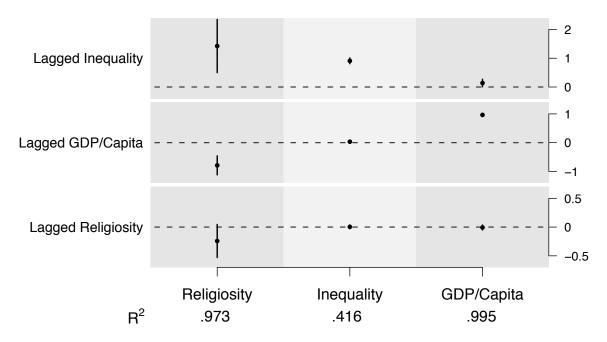
information on trends in religious belief (such feelings of closeness to God and the importance of religion to one's life), religious belonging (such as religious affiliation and church membership), and religious activity (such as the frequency of prayer). Moreover, although five of the seventeen items that were used to generate the ARI were measures of self-reported church attendance, three of these five series had correlations with the ARI of only roughly .5, indicating fairly modest relationships with the other items in the index and so relatively small contributions to shape of the index's overall trend. Does an analysis using U.S. reported church attendance alone as the measure of religiosity demonstrate the same relationships with economic inequality?

To find out, the analysis presented below follows that reported in Solt, Habel, and Grant (2011) as closely as possible. The method used is vector autoregression (VAR), which is the same technique employed in that article. VAR is ideal for the purpose of investigating the relationships between religiosity and inequality. Because it provides a test of whether previous values of each included variable predict future values of all other included variables while imposing minimal assumptions, it is broadly considered to be the preferred means of discerning the direction of causality in time series data (see, e.g., Enders 2003). Further, because it incorporates the lagged value of the dependent variable as a predictor, it is robust to omitted variable bias (see, e.g., Keele and Kelly 2006).

Besides the new measure of the dependent variable, there are two other differences between the present analysis and the study it seeks to replicate. First, rather than the U.S. Census Bureau data on income inequality employed in the earlier work, this analysis uses the SWIID data described above. The SWIID data is standardized to estimate inequality across all households rather than only across families, which is the unit of analysis of the Census Bureau data. Further, the income definition used by the Census excludes capital gains and is before taxes, while the SWIID is based on income from all sources after taxes. This definition, disposable income, captures more closely the theoretical concept of the amount of money that individuals actually receive, and so the attractiveness of religion and their ability to spread their beliefs to others. (As it turns out, using the U.S. Census data on income inequality yields substantively similar results as using the SWIID data in any event.) Second, the time period analyzed is somewhat different due to differences in data availability. The analysis of the ARI included the years from 1955 to 2005. No information on self-reported church attendance in the United States is available before 1964, however, and data through 2008 is now available. This results in a somewhat shorter time series, with just 44 years predicted instead of 50, but fewer observations only makes the statistical tests more conservative.

Figure 1 presents the results of the vector autoregression analysis of the U.S. data. Just as in typical tables of regression results, each column represents a model of one of the three variables in the VAR considered as a dependent variable: religiosity is modeled in the first column, inequality is modeled in the second column, and average incomes are modeled in the third column. Again as in tables of regression results, each row corresponds to one of the three variables (lagged one year in the VAR model) considered as an independent variable. The dots represent the point estimates, and the whiskers trace the extent of the corresponding 95% confidence intervals for these estimates (see Kastellec and Leoni 2007).

Figure 1: Explaining U.S. Religiosity, Income Inequality, and Average Incomes



The results match those of Solt, Habel, and Grant (2011) quite well. Past values of inequality are estimated to have strong positive effects on present values of religiosity: a one-point increase in the SWIID Gini index is found to increase self-reports of weekly church attendance by 1.4 percentage points, plus or minus .9 points, the following year. Past values of religiosity, however, do not have statistically (or substantively) significant effects on present values of inequality. In fact, the effect is estimated to be very nearly exactly zero in these data. And, consistent with the oft-maligned secularization theory, rising average incomes tend to depress religiosity in the next year. A one-thousand-dollar increase in per capita gross domestic product was estimated to reduce the percentage of Americans reporting themselves to be weekly churchgoers by .8±.3 points. All of these findings correspond to those reported in the earlier study.

These results lend further support to the relative power theory of religiosity, at least in the case of the United States. Further, it would appear that self-reported church attendance, whatever its weaknesses as a measure of actual religious activity, is not too noisy to serve as an indicator of religiosity for the purposes of this study. Therefore, I now turn to the question of whether the experience of the United States is typical of those elsewhere.

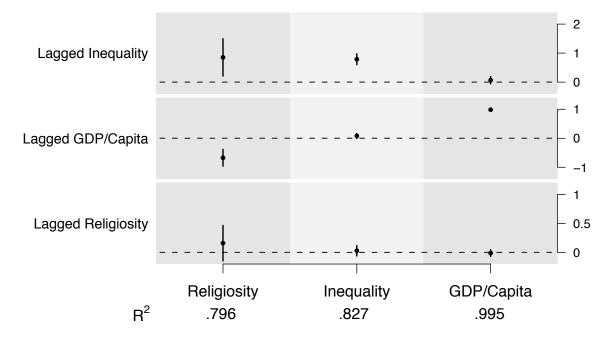
#### Economic Inequality and Church Attendance in Germany

To provide a first test of whether the relationships between religiosity and inequality found in the United States hold true in other countries, I examine the case of Germany. Although a few other countries in the dataset have longer time series, Germany has more actually observed years of data on reported church attendance than any country but the United States. The higher quality of the German data ensures a stronger test of whether inequality shapes subsequent religiosity and whether religiosity shapes subsequent inequality.

The available data on reported church attendance in Germany stretches from 1969 to 2008. In that first year, slightly more than one in four (West) Germans reported that they attended religious services at least weekly. This proportion fell fairly steadily until the late 1970s, then held fairly steady at about one in eight through the 1980s. Reunification with the east brought another steep drop, to about one in twelve, in the early 1990s, but this decline was reversed again by the latter part of the decade. The twenty-first century has witnessed a renewed decline in the percentage of Germans who claim to attend services on a weekly basis or even more frequently: in 2008, just 7% indicated that they did so.

The much lower levels of religiosity found in Germany than in the United States, typical of many European countries, as well as the differences in the pattern of change over time observed there, make the German experience an effective contrast to that of the United States. If the same causal relationships are observed in both countries, our confidence in the relative power theory of religiosity should be strengthened considerably.

Figure 2: Explaining German Religiosity, Income Inequality, and Average Incomes



The results of a VAR analysis of these trends in the German data are presented in Figure 2. As in the United States, income inequality in one year was estimated in Germany to have a strongly positive effect on religiosity the next. A one-point rise in the SWIID Gini index was found to increase the percentage of self-reported weekly religious attendance in the following year by .9 points, plus or minus .6 points. And also as in the United States,

religiosity was not estimated to influence future levels of inequality; again, the estimate was very close to zero and not statistically significant. Further, secularization theory was supported in Germany: an increase of one thousand dollars in per capita GDP was followed, on average, by a .7±.3 point drop in the percentage of Germans who reported attending religious services at least once a week. The patterns of causation indicated by the VAR analysis of the German data are substantively similar to those reported above for the United States. As predicted by the relative power theory, more economic inequality is quickly followed by more religiosity, but not vice versa, both in the United States and in Germany.

#### The Pooled Cross-National Time-Series Evidence

That the two countries for which the most data on church attendance are available both exhibit the same causal patterns does provide additional confidence, but these two countries do have more in common than merely their relatively large amounts of available data. Both countries share a Protestant heritage and both have had substantial Catholic minorities; these traits may make the United States and Germany more similar to each other than to other countries for which the available data are more sparse.

For this reason, I now turn to the full sample of countries for which substantial data on attendance at religious services over time is available. The analysis proceeds by employing a fixed-effects model to estimate effects over time in the pooled time-series cross-sectional data. Similar to the vector autoregression analyses of single time series presented above, each of the three variables—religious attendance, income inequality, and GDP per capita—is modeled as

a function of the lagged values of all three. The results will therefore indicate whether rising inequality leads to more religiosity, the reverse, or if the relationship is reciprocal, with each reinforcing the other. Fixed effects are employed to isolate the average relationships among these variables' changes over time within each individual country: again, the cross-sectional relationship has been well established in Solt, Habel, and Grant (2011), and cross-sectional evidence can shed only limited light on questions of the direction of causation in any event. Formally, for country i and time t, the three equations to be estimated are:

$$Attendance_{it} = \beta_{10} + \beta_{11}Attendance_{it-1} + \beta_{12}Inequality_{it-1} + \beta_{13}GDP/Capita_{it-1} + \alpha_1 i + e_{1it}$$

$$(1)$$

$$Inequality_{it} = \beta_{20} + \beta_{21}Attendance_{it-1} + \beta_{22}Inequality_{it-1} + \beta_{23}GDP/Capita_{it-1} + \alpha_{3}i + e_{2it}$$
(2)

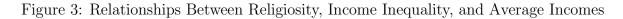
$$GDP/Capita_{it} = \beta_{30} + \beta_{31}Attendance_{it-1} + \beta_{32}Inequality_{it-1} + \beta_{33}GDP/Capita_{it-1} + \alpha_{3}i + e_{3it}$$
(3)

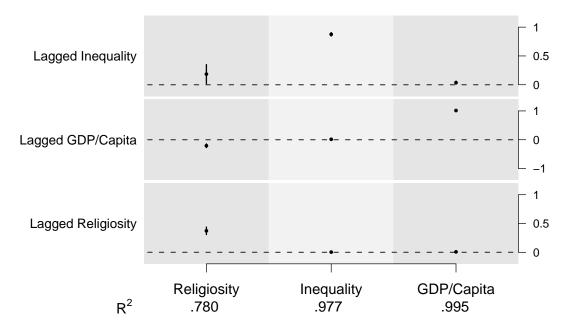
Like vector autoregression, although these specifications are quite parsimonious, they are also quite robust to potentially important omitted variables. Each model includes separate terms for each country  $\alpha_i$  that capture the effects of all time-invariant unobserved variables. Further, the inclusion of a lagged dependent variable reduces any bias due to unobserved covariates that do vary over time. The resulting coefficients  $\beta$ , therefore, estimate the effects of only differences over time within countries while minimizing the threat of omitted variable bias.

The results of the analysis of religiosity, as in the preceding graphs, appear in the first column of Figure 3. Within countries, a short-run increase in income inequality of one point on the Gini index was estimated to increase the percentage of the population reporting that they attended religious services at least weekly the following year by an average of .18±.17 points. This result is similar to, although considerably smaller than, the estimates obtained in the VAR analyses of the United States and Germany. As this result represents the average effect on the change in religiosity following a change in inequality across observations within 34 countries, it raises the question of whether the most data-rich countries may be outliers with disproportionate influence on the results. Together, the observations of the United States and Germany do constitute nearly 10% of the total observations, but additional analyses not displayed in full here confirm that removing these two countries from the sample does not affect the conclusions reached: the estimated effect of income inequality on reported religious attendance is barely changed, remaining positive and statistically significant (.17±.17 points).

Conversely, these analyses provide no evidence that increased religiosity works to increase income inequality, as seen in the second column of Figure 3. The effect of a one-point change in the percentage of people reporting themselves to be weekly church attenders was estimated to be  $.004\pm.012$  Gini points, an estimate that does not even approach statistical significance.

As was the case in the VAR analyses of both the United States and Germany, secularization theory is also supported by the results from analysis of the entire pooled cross-national sample. The estimated average decline in reported church attendance that followed a one-





thousand-dollar gain in average incomes was  $.21\pm.06$  percentage points. As with income inequality, this effect was smaller than those found in the two single-country analyses, but here too, excluding these countries from the sample did not substantively alter the results.

## Conclusions

Religion plays a substantial role in stratification processes and so works to maintain existing levels of economic inequality. This stylized fact suggests, given that higher levels of inequality would otherwise generate pressure for redistribution, that religion becomes a more valuable tool of social control for those at the top of a society's income distribution as income inequality increases. According to the relative power theory, whether wealthy individuals

adopt religion as a conscious strategy to forestall redistribution or just find the idea that their privilege is the product of divine will to be more attractive as their advantages over the rest of society grow, the rich will grow more religious at higher levels of inequality. Moreover, this circumstance also ensures that their greater resources will make the wealthy better able to spread their religious beliefs throughout society than if levels of inequality were lower. As the rich grow richer relative to everyone else, the entire society should be expected to become more religious.

In this chapter, I have presented dynamic models of religiosity, measured as self-reported weekly attendance at religious services, in the United States, Germany, and a pooled time-series of nearly three dozen countries. All of these analyses provide support for the relative power theory. Increases in income inequality in a country in one year are followed by increases in religiosity among its citizens in the next year.

The converse, however, is not the case, at least not in the United States, Germany, or the cross-national dataset examined here: increases in religiosity do not consistently exacerbate—or for that matter, reduce—income inequality the following year. So how can this latter finding be reconciled with those presented in many of the other chapters in this volume? If the religious consistently differ in economically meaningful ways from those of other faiths as well as those without religious affiliation or belief, why does increased religiosity within a country not increase economic inequality across its population?

Part of the answer surely can be found in the fact that when religiosity increases in a country due to rising inequality, it increases among people of all incomes, rich as well as

poor (see Solt, Habel, and Grant 2011). This, of course, is an important piece of evidentiary support for the relative power theory's prediction that wealthy people will be increasingly attracted by theodicean accounts that legitimate their privilege as their condition diverges ever more from that of the rest of society. But it also puts into sharp relief the fact that increased societal religiosity does not imply simply increased participation by the poor in religious organizations that, through practices of tithing that work against wealth accumulation and supernatural beliefs that discourage college attendance, cut off routes to upward mobility.

It has long been understood that individuals seek out religious experiences that tend to confirm their positions within the income distribution rather than those that might work to change these positions: the poor seek otherworldly compensation from religion, while the rich seek this-worldly legitimation (see, e.g., Stark and Glock 1968). There are limits on the extent to which economically mobile people shift between religious groups—people whose own mobility is not matched by their religious group of origin are more likely to leave religion entirely than to switch—but those who fail to 'keep up' with their fellow congregants in liberalizing organizations are more likely to choose new conservative affiliations that provide the otherworldly compensation that corresponds to their disadvantage (Sherkat and Wilson 1995). Moreover, as Jay Demerath (1965) long ago observed, within any given religious organization, those with higher status tend to seek out religious experiences characterized mainly by church-like organizational involvement while lower-status congregants' religiosity is typified by sect-like traditional beliefs and religious emotionality. This too works to reinforce

their relative positions, as the former often leads to economically beneficial social networks while the latter yields distrust of science and human-capital-enhancing institutions of higher education.

Although many would intuit that greater participation in economically stratified religious groups would necessarily increase levels of economic inequality, the foregoing discussion reveals that this is not in fact implied. Simply put, the religious options both between and within religious organizations in virtually any society are sufficient to accommodate higher levels of status-confirming religiosity among people of all incomes: becoming more religious does not ensure that high-income individuals, for example, adopt an otherworldly spiritual orientation and a concomitant disregard for material success that will condemn them to a downwardly mobile fate. There is in fact no theoretical arrow running from religiosity to inequality to be reversed. In this light, the null results of the analyses presented in this chapter should not be surprising.

Although they do not imply more economic inequality, higher levels of religiosity in combination with religious stratification do imply that inequality will be more stable, that is, that it will reproduce itself. As noted above, religiosity increases satisfaction with one's place within the income distribution. In addition to the studies I have previously cited on this point, this is also evidenced by higher levels of happiness among those who attend religious services more frequently as described by Hout and Hastings in their contribution to this volume. Religiosity reduces demand for the redistributive policies that would address economic inequality and therefore contributes to the stability of inequality in the short term,

providing a partial explanation for the empirical failure of median-voter theories that predict that, in democracies, more inequality will quickly be addressed with more redistributive public policies (for the classic statement of this theoretical approach, see Meltzer and Richard (1981); for a review of the evidence, see, e.g., Bénabou (1996)).

More religiosity in conjunction with religious stratification also contributes to the longerterm process of the reproduction of economic inequality. Given that both religious affiliations and tastes for religious experiences are powerfully (if imperfectly) transmitted intergenerationally within families, greater religiosity means that more children will inherit the economic advantages and disadvantages associated with these affiliations and tastes. Putting it another way, greater religiosity reduces socioeconomic mobility. The chapters by Pyle and Davidson and by Fitzgerald and Glass in this book both further reinforce this point. Combined with the finding of this chapter that increased economic inequality yields higher levels of religiosity, the negative relationship between religiosity and socioeconomic mobility surely helps to explain the strong negative relationship between inequality and mobility documented by, for example, Andrews and Leigh (2009).

The relationships, then, between religion and religiosity, on the one hand, and economic stratification, inequality, and mobility, on the other, are perhaps more complex then they might be thought. The results presented in this chapter demonstrate that more economic inequality regularly leads to more religiosity. And, although increases in religiosity do not yield even more economic inequality, in contexts of religious stratification, such increases provide a promising explanation for declines in intergenerational economic mobility. Further

investigation of the roles of religion and religiosity will no doubt be crucial to advancing our understanding of the maintenance of patterns of economic advantage and political power.

### References

- Andrews, Dan, and Andrew Leigh. 2009. "More Inequality, Less Social Mobility." *Applied Economics Letters* 16(15):1489–1492.
- Bénabou, Roland. 1996. Inequality and Growth. In *National Bureau of Economic Research Macro Annual*, ed. B.S. Bernanke, and J.J. Rotemberg. Cambridge: MIT Press pp. 11–74.
- Chaves, Mark. 2004. Congregations in America. Cambridge: Harvard University Press.
- Davis, Nancy J., and Robert V. Robinson. 1996. "Are the Rumors of War Exaggerated? Religious Orthodoxy and Moral Progressivism in America." *American Journal of Sociology* 102(3):756–787.
- Demerath, N. J. 1965. Social Class in American Protestantism. Chicago: Rand McNally.
- Enders, Walter. 2003. Applied Econometric Time Series. 2nd ed ed. Hoboken: Wiley.
- Gill, Anthony, and Erik Lundsgaarde. 2004. "State Welfare Spending and Religiosity: A Cross-National Analysis." *Rationality and Society* 16(4):399–436.
- Glock, Charles Y. 1964. The Role of Deprivation in the Origin and Evolution of Religious Groups. In *Religion and Social Conflict*, ed. Robert Lee, and Martin E. Marty. Oxford: Oxford University Press pp. 24–36.
- Grant, J. Tobin. 2008. "Measuring Aggregate Religiosity in the United States, 1952-2005." Sociological Spectrum 28(5):460–476.
- Hadaway, C. Kirk, Penny Long Marler, and Mark Chaves. 1993. "What the Polls Don't Show: A Closer Look at U.S. Church Attendance." *American Sociological Review* 58(6):741–752.
- Hadaway, C. Kirk, Penny Long Marler, and Mark Chaves. 1998. "Overreporting Church Attendance in America: Evidence That Demands the Same Verdict." *American Sociological Review* 63(1):122–130.
- Heston, Alan, Robert Summers, and Bettina Aten. 2011. "Penn World Table Version 7.0." Center for International Comparisons of Production, Income, and Prices, University of Pennsylvania.
- Iannaccone, Laurence R. 1997. "Skewness Explained: A Rational Choice Model of Religious Giving." *Journal for the Scientific Study of Religion* 36(2):141–157.
- Kastellec, Jonathan P., and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science." *Perspectives on Politics* 5(4):755–771.
- Keele, Luke, and Nathan J. Kelly. 2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables." *Political Analysis* 14(2):186–205.

- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. "Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation." *American Political Science Review* 95(1):49–69.
- Marx, Karl. 1978. The Eighteenth Brumaire of Louis Bonaparte. In *The Marx-Engels Reader*, ed. Robert C. Tucker. New York: W.W. Norton pp. 594–617.
- Meltzer, Allan H., and Scott F. Richard. 1981. "A Rational Theory of the Size of Government." *Journal of Political Economy* 89(5):914–927.
- Nanda, Meera. 2011. The God Market: How Globalization Is Making India More Hindu. New York: NYU Press.
- Norris, Pippa, and Ronald Inglehart. 2004. Sacred and Secular: Religion and Politics Worldwide. Cambridge: Cambridge University Press.
- Ruiter, Stijn, and Frank van Tubergen. 2009. "Religious Attendance in Cross-National Perspective: A Multilevel Analysis of 60 Countries." *American Journal of Sociology* 115(3):863–895.
- Scheve, Kenneth, and David Stasavage. 2006. "Religion and Preferences for Social Insurance." Quarterly Journal of Political Science 1:255–286.
- Sherkat, Darren E., and John Wilson. 1995. "Preferences, Constraints, and Choices in Religious Markets: An Examination of Religious Switching and Apostasy." Social Forces 73(3):993–1026.
- Solt, Frederick. 2008. "Economic Inequality and Democratic Political Engagement." American Journal of Political Science 52(1):48–60.
- Solt, Frederick. 2009. "Standardizing the World Income Inequality Database." Social Science Quarterly 90(2):231–242. SWIID Version 3.1, December 2011.
- Solt, Frederick, Philip Habel, and J. Tobin Grant. 2011. "Economic Inequality, Relative Power, and Religiosity." Social Science Quarterly 92(2):447–465.
- Stark, Rodney. 1964. "Class, Radicalism, and Religious Involvement in Great Britain." *American Sociological Review* 29(5):698–706.
- Stark, Rodney, and Charles Y. Glock. 1968. *Patterns of Religious Commitment*. Berkeley: University of California Press.

# Appendix: Included Countries and Years

Country	Years
Australia	1981–2009
Austria	1985–2008
Belgium	1973-2008
Bulgaria	1990-2009
Canada	1990-2006
Chile	1996-2008
Czech Republic	1990-2009
Denmark	1971-2009
Finland	1996-2008
France	1975-2008
Germany	1969-2008
Greece	1981-2009
Hungary	1990-2009
Ireland	1980-2009
Israel	1994-2009
Italy	1968-2009
Japan	1990-2008
Korea, Republic of	1996-2008
Latvia	1990-2009
Luxembourg	1985 - 2008
Netherlands	1970-2008
New Zealand	1991 - 2008
Norway	1990-2008
Philippines	1991 - 2008
Poland	1990-2010
Portugal	1988 – 2009
Russian Federation	1990-2009
Slovak Republic	1990-2008
Slovenia	1992-2009
Spain	1988 – 2008
Sweden	1990-2008
Switzerland	1996 – 2008
United Kingdom	1964 – 2008
United States	1964 - 2008