

Welfare Spending and Religious Participation: Evidence from the United States

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Introduction

Let me level with you. Due to many other obligations, I had to write this paper pretty quick. It is written in a conversational style, because that helps me write fast. Eventually, it will be more formal.

Awhile back, I wrote a little ditty on the role of government welfare spending and religious participation. It was inspired by Uruguay of all places. You see, in previous studies I found that countries that had lots of religious freedom – i.e., a lack of governmental regulation on churches – had lots of religious pluralism and participation. This was pretty congruent with what scholars like Rod Stark, Roger Finke and Larry Iannaccone have been saying. However, Uruguay was weird. That charming little nation had lots of religious liberty, but lo and behold, religious activity was pretty anemic. In fact, Uruguay has one of the highest atheist rates in the Christian world and looks pretty much like your typical European nation in terms of attendance. I traveled down to Uruguay to check things out. Perhaps there are secret regulations on religious organizations that nobody is telling me about. Nope. Religious minorities are pretty happy with the level of regulation they face. Nothing too onerous.

Well, as I was walking along the riverfront promenade Montevideo, I thought to myself that this nation really looks like a European nation. Ah ha! It hit me. What do Uruguay and Europe tend to have in common? A pretty extensive welfare system. You are probably saying, “No way, it is a Latin American country.” But it is true. On a per capita basis (and adjusted for purchasing power parity), Uruguay has about the same amount of welfare as Switzerland. So, I thought hard as to whether there might be a link between social welfare spending and religious attendance (or lack thereof). I drafted up a deductive theory that I present below. I was a bit reluctant to test it because I figured it was just too tenuous of a link to actually hold empirically. But then I was granted a research assistant. His name was Erik Lundsgaarde. He really wasn't too interested in religion, but he was getting paid to be my RA. I figured I'd send him to gather some data and we could run it. If the empirical analysis bombed, oh well. I didn't waste my time scrounging for data and typing it into a computer. Plus, Erik got paid. When I was prepared to show him how sometimes good theories don't pan out in the real world, lo and behold, something magical happened. The empirical results confirmed the hypothesis and were pretty damn strong. There wasn't even any major collinearity problem, which I had expected, with our other variables (that included urbanization, a religious liberty index, televisions per capita, literacy, blah blah). So, since Erik did a good job, we decided to write a paper together. And just as in Genesis, Tony and Erik begat Gill & Lundsgaarde (2004).

Okay. The data we used were only cross-sectional and the theory predicts a lagged time effect. We admit that was a problem, but the initial results were enough to be taken seriously. Plus, data availability on a consistent basis was pretty crappy, particularly for our Latin American cases. I mean, when you are running 4,000% inflation in the 1980s, it is pretty hard to get a decent measure on anything. So what to do? Well, how about the US? There is some data availability there and we might be able to get a good look at

time series data. (Tim Jones was my RA for this project.) Great! Well, to date we have attendance data for 2000 and welfare spending per capita at 5 year intervals dating back to 1970, about the time the so-called Great Society was sorting itself out. We're still trying to improve the data set, but we can get a good look at things as they stand.

So, below is our first cut at the data based on the theory developed in Gill & Lundsgaarde (2004). I present the abbreviated version of the theory first, basically citing what we wrote in Gill & Lundsgaarde (2004). This will save some time. We add a couple new control variables to the mix, which I will discuss and then (drum roll please), the results. Once again, I'm happy with the initial findings but we have more to do.

Here is the obligatory thesis statement that I force my students to write. Social welfare spending is negatively associated with religious attendance given that state-sponsored welfare spending substitutes for the goods that religious organizations used to provide to members to engage their participation.

Theory

The following is quoted almost verbatim from Gill & Lundsgaarde 2004.

Because we seek to extend the work previously done within the economics of religion, our theory begins with many of the definitions and assumptions common to this school of thought (cf. Stark and Finke 2000).

Def. 1. **Religious goods** are the fundamental answers to the deep philosophic questions surrounding life that have as their basis some appeal to a supernatural force.

Def. 2: A **religious firms** (or churches) are organizations that produce and distribute religious goods.

Axiom 1: Religious goods are credence goods in that the quality of the good cannot be judged until some future point in time, after the initial purchase.

Axiom 2: Religious goods are difficult to price because they are both credence goods (and hence depend upon the reputation of the seller) and are ideational in nature, meaning they are difficult to control the distribution of once they become known.

Religious organizations, at their very core, produce and distribute answers to the philosophic questions of life. Not surprisingly, it is rather hard for religious firms to control the distribution of these ideational goods and collect revenue that helps to pay for the institutions and personnel that produce them. (Consider the intellectual property rights debate surrounding the easy dissemination of music and software via the Internet today.) There would be a strong incentive to free ride when such goods can be easily obtained simply by conversing with others. Moreover, since the quality of these goods cannot be readily determined, it is not surprising to find consumers to be skeptical and only willing to contribute to their provision if they are given some assurance that those philosophic answers are credible.

This leads us to the following propositions:

Prop. 1: Religious producers have a strong incentive to invest in the trustworthiness and credibility of their personnel and institutions.

Prop. 1a: Religious firms will offer a variety of tangible services designed to build trust among the community of potential followers, encourage participation in the organization and capture revenue.

To demonstrate that religious firms can be trusted to provide credible answers to life's tough questions, clergy possess an incentive to engage in behaviors that build trust on a smaller scale. It is not uncommon for clergy to take vows of poverty or engage in other costly activities (e.g., itinerant preaching) to signal that they are sincere in their beliefs and are not just selling "snake oil" (Stark 1996, pp. 163-89). Moreover, building and maintaining trust among a population often impels religious producers to coordinate welfare activities that benefit the community – e.g., charity for the poor, assistance for individuals who experience personal disasters, elder care, medical assistance, orphanages and education. This is not to claim that religious leaders and organizations perform these activities selfishly for personal or institutional benefit. Rather, this observation merely points out that such activities have beneficial side effects at ensuring individuals that they are dealing with an institution that can be trusted.¹ Historically, most major religious denominations have played a large role in providing for community welfare and many of the fastest growing denominations today (e.g., Mormons, Jehovah's Witnesses) are quite active in offering these services.²

From the individual's perspective, the role played by churches in welfare provision can play a significant role in encouraging a person to join and remain active in a religious organization.

Prop. 2: To the extent that the community and individual welfare services offer tangible benefits to religious consumers and alleviate any concerns they have about the quality of the spiritual goods provided religious participation will increase.

Conversely, if churches offer fewer such services, we expect religious participation to decline.

This proposition does not imply that individuals join churches simply to obtain material benefits. There are many individuals who would pay dearly for spiritual answers to life's mysteries regardless of whether a church provided material welfare. However, there are also many individuals who are reluctant pay large sums (or participate extensively) for religious goods unless there is some reassurance that the goods are credible or that they are attached with other more tangible goods that can be consumed more immediately. For many centuries, the Vatican realized this variation in willingness to pay for spiritual goods. This is why Catholic priests kept the payment of indulgences secret during the Middle Ages; secrecy allowed priests to identify each individual's price elasticity for salvation and price the indulgences accordingly (Ekelund, et al, 1996).

Axiom 3a: Religious consumers will differ in their willingness to purchase religious goods and engage in religious activity based upon the degree of welfare a religious firm provides.

¹ This is not much different than why banks in the days before FDIC and FSLIC built lavish headquarters and branches. The sunk costs of those buildings signaled to potential clientele that the bank would be around for a long time and hence would be a safe place to store one's savings.

² Also consider Iannaccone's (1994) argument that these denominations are strong because the strict requirements they place on members helps them solve collective action problems thereby enhancing the utility of all participants – i.e., it's better when everybody chips in. These two issues are related since the provision of community welfare creates a strong incentive to participate in the religious organization and if all participate then the welfare net is that much stronger.

We could conceive of religious participation as a series of concentric circles each representing the different price elasticities of various consumers. At the center we would find hardcore consumers willing to pay any price for religious goods regardless of whether the church provides tangible welfare incentives. As we move away from this core, though, the price people are willing to pay for religious goods is more contingent upon the ability of the clergy to provide credible assurances about the quality of those spiritual goods and/or the ability to deliver tangible welfare benefits. These outer rings of individual religious consumers will become important as we move on to discuss the role of state provision of welfare. To the extent that a secular government can provide these welfare goods to individual consumers at a lower cost,³ religious participation (i.e., the time cost of purchasing religious goods) will decrease among those with more elastic preferences for spiritual goods.

Over the past century, secular states have become increasingly involved in the provision of welfare benefits. Prior to the 1900s, states largely relied upon land taxes and import/export duties as a way of financing government operations since they were the easiest revenue streams to capture. As modern technology enhanced the ability of states to monitor economic activity more closely, politicians were able to expand the sources from which to tax (namely to income and sales taxes). This increased the amount of revenue flowing into government coffers and correspondingly expanded the ability to deliver goods and services to the population. Although churches had been providing for the welfare of local communities for a long period of time, politicians often saw the provision of these goods and services as useful means of obtaining political support as people tend to support politicians that deliver patronage. Throughout the 20th century secular politicians began providing the welfare services that were once the domain of religious institutions.

Although both states and religious firms were providing welfare to citizens during the 20th century, the state gained a significant advantage early on in the amount of welfare it could deliver to citizens. This advantage was (and still is) based on the different manner in which resources were (are) extracted from the population.

Axiom 4a: The state relies implicitly, if not explicitly, on coercive means (e.g., threat of imprisonment) of revenue collection.⁴

Axiom 4b: Churches (largely) rely on voluntary means of revenue collection.⁵

Any organization that relies upon voluntary contributions for revenue will face a more difficult collective action problem to solve than one that collects revenue under the threat of coercion, *ceteris paribus*.⁶ Thus,

³ This is not to say that governments are more efficient at providing welfare services, relative to churches. Rather, most governmental welfare services are paid for by compulsory taxation. If an individual already paid for said welfare services (or receive them without having to pay taxes) they may have little incentive to pay a church voluntarily – with money (tithing) or time (participation) – for duplicate services.

⁴ We do acknowledge that many citizens consent to paying taxes without the threat of coercion. The relatively low level of cheating relative to the level of monitoring bears witness to this.

⁵ As with axiom 4b, this assumption is not perfectly accurate. Many small church communities may have strong social norms regarding tithing that may result in social ostracism if violated. This could be construed as coercion.

⁶ It may be the case that some small communities that have strict norms of conduct may be able to achieve higher compliance rates than states, though such groups are usually the exception not the rule.

Prop. 3: The state will have a comparative advantage relative to churches in the delivery of the absolute amount of social welfare services provided to a population. Since the state can provide a greater amount of welfare to citizens, and since it can also compel citizens to pay for such services, it follows by way of Axiom 4 that the state can indirectly affect the level of church participation based upon its provision of welfare.

Prop. 4: As the provision of state welfare (and taxation for that welfare) increases, people with more elastic preferences for religious goods based upon the receipt of religious welfare will tend to decrease their voluntary donations to religious firms (financial cost) and level of participation (time cost).

Since the decisions of many individuals over time can manifest themselves on a larger scale, proposition 4 leads us a direct empirical prediction that can be measured at a higher (societal) level of analysis.

Central Hypothesis: The level of religious participation in society should vary inversely with the per capita⁷ level of social welfare provided by the state.

This will be the claim that we directly test below. However, before moving forward with the empirical tests, it is first necessary to examine two qualifications to the model presented above. These qualifications are not meant to modify the central prediction in any way, but rather are presented to account for some interesting situations involving the tradeoff between state-provided and religious-provided welfare.

First, while the state began taking over as the central institution for providing welfare, it often used religious organizations as a means of delivering these services at the local level.⁸ This was a well-known policy of Scandinavian states (Gustafsson 1990). In essence, religious institutions became embedded into the welfare bureaucracy of society. One could plausibly hypothesize that this would not affect a church's ability to recruit and retain members. Being on the frontline of welfare provision should encourage people to associate welfare with the church, and by way of Axiom 3a should increase (or at a minimum *not decrease*) religious participation. However, this interpretation ignores a critical set of incentives for the clergy and welfare recipients.

Prop. 5a: To the extent that funding to provide welfare comes from the state and is not voluntarily acquired from parishioners, the clergy have little incentive to encourage greater religious participation on the part of the populace. Clergy are more beholden on the good graces of government bureaucrats for their livelihood.⁹

Prop. 5b: To the extent that the recipients of welfare services are aware that the church is delivering welfare from state tax revenue, and that the receipt of these goods is not contingent upon religious participation, certain individuals with high price elasticities for religious goods will not seek to participate (by way of Axiom 3a).¹⁰

Second, it has been noted that some European states (e.g., Britain, the Netherlands, Norway, Germany), include churches as recipients of state welfare spending. Here tax revenue is specifically set aside to pay for the operating costs of the state churches and

⁷ As our analysis rests upon the assumption of methodological individualism, using per capita welfare expenditure data is a more valid method of assessing the impact of welfare on individual religious practice.

⁸ This is essentially what is happening with President George W. Bush's Faith Based Initiative.

⁹ This is particularly true in many European states (e.g., Norway, Britain) where the state pays the salary of clergy directly.

¹⁰ Remember, church attendance and other forms of participation are equivalent to time costs for religious goods.

other denominations (Monsma and Soper 1997). Standard economic logic dictates that any good subsidized by the government will be consumed in greater quantities. Hence, if the government is subsidizing the institutions that provide for religious goods, we should see increased religious participation. This reasoning ignores two important points. First, those taxes are sunk costs for taxpayers. They cannot get them back. To the extent that religious participation still entails significant time commitments (costs), there is no guarantee that religious participation would increase since the government cannot subsidize the time cost (voluntary participation) of parishioners. Second, and more importantly, since government funds (from coerced taxes) are going to pay for salaries and institutional maintenance, there is not a strong incentive to seek voluntary contributions from parishioners. And since the vigor of the clergy is an important element in convincing potential believers that the credence goods being offered are worthwhile, an unmotivated clergy is unlikely to inspire an increase in religious participation or belief (cf. Smith [1776] 1981, p. 789). That being the case, it is not likely that state subsidized churches will exhibit any greater tendency towards increased parishioner involvement. That said, we now turn our attention to testing our primary assertion that increased welfare spending will decrease religious participation.

Empirical Analysis

Some New Variables.

In the previous version of this paper (Gill & Lundsgaarde 2004) we tossed in a few control variables such as a religious liberty index, level of urbanization, literacy rate, a (non-Herfindahl index) measure of religious pluralism,¹¹ and televisions per capita. We also had a Catholic control variable in there. In this study, we did things a little bit different. Since the level of religious liberty is assumed reasonably constant across states (which may not necessarily be a good assumption when you start looking at land use policies as applied to churches as I am doing now), we didn't create a measure for it. We haven't gotten around to creating a measure of pluralism yet either. Be patient and ye shall be rewarded. Televisions per capita? Well, damn near everyone has about 5 TVs in their household in the US, so that didn't seem like a relevant variable. So here is what we have instead.

Immigrants (1995 – 2000) as a percentage of 2000 population. It is reasoned that immigrants are torn from their communities and often find it difficult fitting in to new communities. This isn't exactly churchy-behavior. Plus, wanderers are a self-selected group that usually don't hand with the churchy crowd. Immigrants are less likely to go to church. And by immigrants, don't just think foreigners. If a 5th generation North Carolinian WASP moves from Raleigh to Missoula, Montana, they are considered an

¹¹ Funny and true story. One of our reviewers noted that we did not use the Herfindahl index as a measure of pluralism and then proceeded to go on for a long paragraph why the Herfindahl index was bad and that we shouldn't have used it. But we didn't! Where's the disconnect there? This wasn't nearly as bad as the person who said our paper was disqualified for publication because we used the word Great Britain and United Kingdom interchangeably. For shame! In this paper we shall endeavor not to use La-La Land as a synonym for California.

immigrant. We figured this was an important variable when we looked at a scatterplot and saw all these western and northwestern states – the new frontier – in a concentrated pocket of the graph. See Figure 1. When the Western states with high in-migration are excluded (Figure 2), you do see a strong relationship ($r = -0.44$ significant at the .01 level).

Bachelor Degrees 2000. This is the percentage of the population that holds a bachelor's degree or greater. It gives us a rough estimate of how well educated the population is. Granted, some of these folks might have attended USC, but we still count them as educated. Kidding! Just kidding!! We figure that going through college makes you less likely to participate in religion since all my colleagues think religious is silly. (By the way, I reject that view.)

Hispanic Population 2000. The percentage of the population that is Hispanic/Latino/a. This demographic group not only is more Catholic on average, and Catholics tend to go to church more, but they also seem to attend Mass more regularly than non-Hispanic Catholics. So we tossed them into the analysis. We expect a positive correlation. Why not use Catholic percentage on a state-by-state basis? Because we haven't gathered that data yet. As I tell my four year old son, patience is a virtue. Please, try to be virtuous when dealing with us.

African American Population 2000. The percentage of the population that is African American. Since African Americans have different church-going patterns than whites, we thought we'd put this in too. Plus the data were available. Again, a positive correlation is expected.

Our big variables were welfare spending per capita measured at 5 year intervals. Since the theory presented above predicts a time lag effect, we wanted to measure that. Our dependent variable was state-by-state attendance figures from the 2000 National Election Study for the 48 contiguous states. Samples sized varied, but all were above at least 60 individuals surveyed. We are also testing our data when we combine some of the states to get a larger sample size and improve reliability estimates, but we will save that for another day. We would like time series data on the dependent variable, but like I said above, I've been busy.

The Regression Results.

Here are our regression results in a table.¹² You should be able to interpret these results yourself unless you skipped a statistics class in graduate school.

¹² I just realized that I am using the first person plural in this paper even though I'm the only one writing it. I probably bounced back and forth between first person singular and plural. I guess this just shows the many sides of my personality!

Table 1: OLS Regression Results
 Dependent Variable = Percentage Attending Church Weekly + (year 2000)

Variable	I	II	III	IV	V	VI
Immigration 1995-2000	-.318**	-.385**	-.384**	-.415**	-.381**	-.226
Bachelor's Degree 2000	-.264**	-.198	-.214	-.194	-.133	-.301**
Hispanic 2000	-.153	-.163	-.162	-.161	-.145	-.106
African-American 2000	.272**	.224*	.223*	.234*	.252**	.283**
Welfare Per Capita 1995	-.301**					
Welfare Per Capita 1990		-.391**				
Welfare Per Capita 1985			-.367**			
Welfare Per Capita 1980				-.427**		
Welfare Per Capita 1975					-.445***	
Welfare Per Capita 1970						-.157
N	48	48	48	48	48	48
Adj. R ²	.332	.352	.337	.369	.380	.286
F	5.661***	6.101***	5.786***	6.506***	6.759***	4.759***
Durbin-Watson	1.955	1.944	2.004	2.034	2.055	1.879

Standardize beta coefficients presented.

* p < 0.10, ** p < 0.05, *** p < 0.01

As one can see from the table, welfare spending per capita is statistically significant in the direction presented for all models except VI. The effect does tend to get bigger as one retreats in time, again with the exception being model VI. In the last model, we used welfare spending per capita from 1970. This was a year wherein the Great Society was still sorting itself out at the state level and it is not surprising that welfare spending did not have an effect.

Given that the coefficients are presented as standardized betas, one can see welfare spending typically has one of the biggest effects of all variables included. It has less of an effect in 1995, a few years after many states started to enact welfare reforms. The effect is also smaller than immigration in 1985 for reasons currently unbeknownst to me, and which may be due to only random chance dumb luck error. I leave it up to the reader to look at the other significant and insignificant variables and weave interesting interpretations of their own.

Figure 1

Attendance 2000 vs. Welfare Per Capita 1985

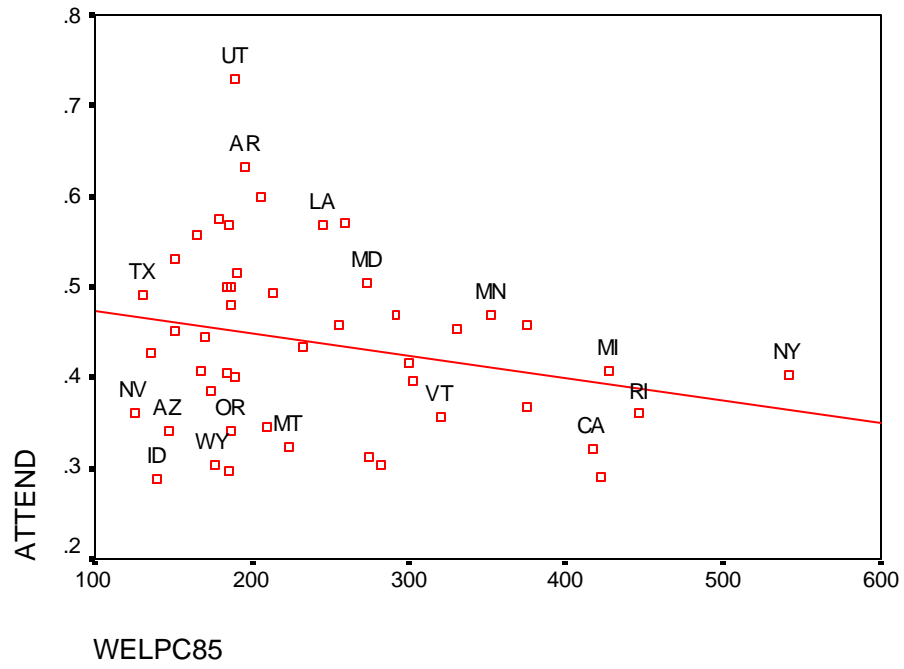
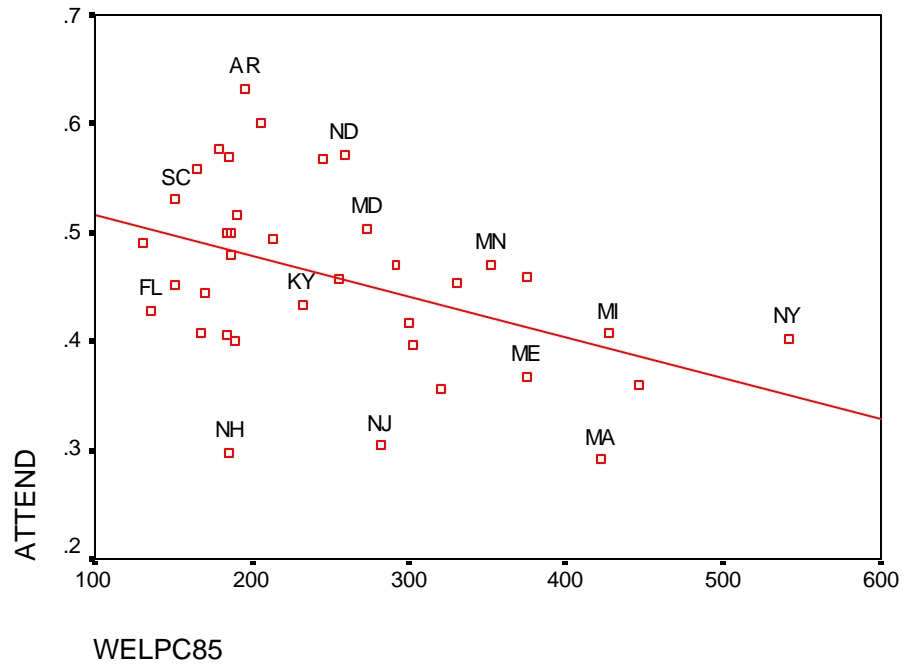


Figure 2

Welfare vs. Religious Attendance (No West)



Conclusion.

We're right.

At first cut, welfare spending (on a per capita basis) does seem to affect religious attendance in the way our theory predicted. That we have various measures of welfare spending going back in time lends credence to our claim that this is a generational effect. Nonetheless, we would like to construct a more rigorous time series analysis with time series attendance data. The obvious critique here is that I'm not looking at the relative drop in attendance over the past 30 years and/or it could be that more welfare spending is necessary where church provision of such services is weak. I consider that to be a weak argument as politicians don't usually think that way – if they can take over welfare provision, they will do it, regardless of what churches do. There are also probably some other variables I need to include in this analysis, including measures of poverty, Catholic population, Mormon population, amount of cheese consumed on a per capita basis during the month of August, etc. I'm open for suggestions.

References

Gill, Anthony & Erik Lundsgaarde. 2004. "State Welfare Spending and Religiosity: A Cross-National Analysis." *Rationality and Society* 16 (4): 399-436.