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Religion, income inequality, and the size of the government ☆

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ABSTRACT

Recent empirical research has demonstrated that countries with higher levels of religiosity are characterized by greater income inequality. We argue that this is due to the lower level of government services demanded in more religious countries. Religion motivates individuals to engage in charitable giving and this leads them to prefer making their contributions privately and voluntarily rather than through the state. To the extent that citizen preferences are reflected in policy outcomes, religiosity results in lower levels of taxes and hence lower levels of spending on both public goods and redistribution. Since measures of income typically do not fully take into account private transfers received, this increases measured income inequality. We formalize these ideas in a general equilibrium political economy model and also show that the implications of our model are supported by cross-country data.

1. Introduction

The economic effects of religion have now been analyzed by researchers for a quite long period of time. Arguably, Weber (1905) was among the first to argue that religion plays a significant role in economic development. The development of the literature on economics of religion using modern economic techniques, however, is fairly recent.[1] Following the seminal work of Azzi and Ehrenberg (1975), economists have explored the potential interactions between religion and a variety of socio-economic variables. For example, Lehrer and Chiswick (1993) investigated religion's effects on marriages, Lehrer (1995), Lehrer (1996), and Lehrer (1999) on labor supply, fertility, and educational attainment, respectively. Barro and McLeary (2006) and McCleary and Barro (2006), on the other hand, analyzed what role religion plays in the evolution of various economic variables, and Barro and McLeary (2003a, 2003b) and Jaffe (2005) of economic development, and Huber (2005) of social policy attitudes.

More recently, research on the relationship between religion and its socio-economic correlates has demonstrated that countries with higher levels of religiosity are characterized by higher levels of income inequality (Norris and Inglehart 2004; Palani, 2008; Rees 2009). This interesting empirical finding leaves open the question of causality, however, as interactions between religiosity and income inequality potentially involve two directions of causation. On one side, a more unequal society may cause agents to feel less secure, both materially and spiritually, and this may lead them to turn to religion as a source of comfort (Norris and Inglehart, 2004; Rees, 2009). According to this view, more unequal nations would be more religious as a consequence. On the other side, religiosity may help individuals better cope with adverse life events, reducing their incentive to fight serious shortcomings such as income inequality, thereby allowing it to persist (Palani, 2008). This line of reasoning would lead us to expect more severe income inequalities in nations with higher levels of religiosity.

In this paper, we contribute to this literature in two main ways. First, we offer an alternative theoretical mechanism that links religiosity with income inequality. In our mechanism, the direction of causation runs from religiosity to income inequality. Second, we formalize this theoretical mechanism within the context of a simple general equilibrium political-economy model, thereby providing a framework that can be used in similar studies in the future. Through the lens of our theoretical model, we uncover a number of additional interesting theoretical links between religiosity and various politico-macroeconomic aggregates and subsequently provide corroborating

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[1] See Iannacone (1998) for a review of the early literature.

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empirical evidence. In what follows, we elaborate on each of these contributions.

First, unlike the abovementioned studies that focus on the role of religion in providing personal security and a coping mechanism with socio-economic hardships, our argument emphasizes religion's role in providing incentives – rewards or punishments – for charitable giving/contributions. As argued by McCleary (2007), all of the world's major religions have in their teachings a linkage between charitable actions in this life and personal condition in the afterlife, a term she coins "salvific merit". McCleary also provides evidence that variations in belief in afterlife translate into differences in incentives for charitable actions, and in particular, for charitable giving. For an economist, the concept of salvific merit suggests a theory of afterlife investment such as the one first offered by Azzi and Ehrenberg (1975), which serves as the backbone of our theoretical analysis in Section 2.

Several recent studies provide empirical support for the existence of salvific merit using data from different countries. Brooks (2003) shows that, in the US, the religious are 25% more likely than the non-religious to donate money (91% vs 66%) and that they donate $1400 more on average. He also finds that the Spaniards are 20% points less likely than the Americans to classify themselves as "religious", give less than half as much to charity, and that Spain has the highest level of charitable giving per capita in Western Europe. Using Consumer Expenditure Survey on the consumption and religious contribution patterns, Blomberg et al. (2006) show that individuals in the U.S. behave as if religious giving generates a value both as within-life consumption and an after-life investment. Tao and Yeh (2007) rank different beliefs in Taiwan by their expected afterlife consequences of charitable behavior and find that individuals with high expectations for afterlife rewards (Christians) give significantly more than individuals who believe there is little connection between charity and the afterlife (folk religionists or atheists). Thornton and Helms (2010) provide similar evidence for the U.S. concerning the relationship between charitable behavior and belief in afterlife or God. They also provide evidence that adherents of religions with low salvific merit such as Protestants and Baptists (as opposed to adherents of high salvific merit religions such as Judaism and Pentecostalism, with Catholicism in the middle of the merit scale) exhibit relatively greater sensitivity to changes in exogenous economic incentives such as tax subsidies for charitable giving. These households behave similarly to secular households because those faiths offer no particular afterlife incentive to give. The common denominator of all these examples is that salvific merit induces a tendency to give privately and voluntarily rather than through coercion by the state.

The incentives that salvific merit creates for private charitable giving constitute the first building block in our theory of the relationship between religiosity and income inequality. In particular, motivated by the above empirical evidence, we argue that this role of religion in influencing people's giving attitudes has an important politico-economic implication: Keeping all else equal, those individuals that attach a greater importance to salvific merit (e.g. Christians relative to folk religionists in Taiwan and Jews relative to Catholics and in turn to Protestants and Baptists in the U.S.) would have a greater tendency to make their financial contributions to collective goods (such as financial assistance to the poor and needy, i.e. redistribution, and/or in the provision of various types of public goods and services) privately rather than through the state. As such, when compared with secular individuals, religious individuals on average are likely to prefer private provision of collective goods over provision by the state. If policy outcomes reflect variation in citizen preferences, we can also expect countries with higher levels of religiosity to have lower levels of government taxation and spending. Put differently, we can expect the size of the government to be smaller in countries with higher levels of religiosity.

An argument similar to ours appears also in Gill and Lundsgaarde (2004), Clark and Lelkes (2004), Hungerman (2005), and Scheve and Stasavage (2006), who argue, in different ways, that religion and state *welfare* spending are substitute mechanisms for providing social insurance. The concept of salvific merit and the associated influence of religion on people's giving attitudes, however, is absent from their stories. Also, they do not claim the presence of a negative relationship between religiosity and the overall size of the government (understood as including spending on public goods and services in addition to spending on welfare), as we do in this paper. Last but not least, they do not explore the implications of religiosity for the distribution of income.

We next argue that this negative relationship between religiosity and government size is key to understanding the positive relationship between religiosity and income inequality. To see this, note that religiosity affects the distribution of income potentially in two opposing ways. On the one hand, since governments of countries with higher levels of religiosity are likely to be smaller, they will have fewer resources to devote to redistributive purposes, and this tends to harm the distribution of income (*equality-reducing effect*). On the other hand, religiosity could also work to improve the distribution of income in a country since it increases people's willingness to make voluntary donations to the poor (*equality-increasing effect*). While this latter effect of religion is sound in principle, it is unlikely to be reflected in measures of income inequality, at least not fully. This is because measures of income (on which measures of income inequality are based) typically do not fully take into account the part of income coming from donations received.[2] As a result, the equality-reducing effect of religion dominates its equality-increasing effect, thereby increasing measured income inequality.

The second main contribution of this paper is that we formalize these ideas within the context of a simple general equilibrium political-economy model along the lines of Meltzer and Richard (1981). The government collects taxes and uses the proceeds to finance a public good and redistribution from the rich to the poor. Agents are heterogeneous only in their exogenously given initial incomes. We extend this basic Meltzer–Richard setup (which is an appropriate setup for analyzing the relationship between income distribution and government size) so as to create a framework that will allow us to *simultaneously* analyze the relationships among religiously-motivated charitable giving, income distribution, and government size. Toward this end, we follow Azzi and Ehrenberg (1975) and augment the basic Meltzer–Richard setup by modeling religiosity as the intensity of satisfaction derived from making charitable contributions to collective goods. In particular, we assume that the more religious is the agent, the greater is the satisfaction he derives from making charitable contributions. In the Azzi and Ehrenberg (1975) model, as in ours, the contributions made by the agent can be viewed as a sacrifice from current consumption in return for greater consumption in the afterlife. We then show that, for a *given* tax rate (that is, for a given government size), a higher level of religiosity results in larger charitable contributions in equilibrium, thereby improving the actual – but not necessarily the measured – distribution of income due to the equality-increasing effect.

We next endogenize the tax rate in the economy. To this end, we embed this model in a previous stage where agents collectively decide on the tax rate in the economy. Differences in initial incomes translate into different preferences over the tax rate. We consider a median voter rule whereby the equilibrium tax rate is the one chosen by the agent with median income. The first result of the paper is that, under mild assumptions, a higher level of religiosity results in a lower equilibrium tax rate, that is, a smaller government. The intuition behind this result is simple. Once an optimal amount of the public good has been secured, religiosity means that agents prefer to carry out redistribution voluntarily rather than through mandatory means, as

[2] Empirical evidence provided by studies such as Cox and Raines (1985) and Gale and Scholz (1994) does indeed suggest that there is substantial underreporting of private transfers, and particularly so for transfers received. As noted by Kessler and Masson (1989, p. 148), this might be attributed to "people's tendency to admit more easily that they have given than that they have received".