# Piety and Redistributive Preferences in the Muslim World

Political Research Quarterly 64(3) 491–505
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#### **Abstract**

This article tests two competing theories of the relationship between piety and redistributive preferences in the Muslim world. The first, drawn from the new political economy of religion, holds that more pious individuals of any faith should oppose redistributive economic policies. The second, drawn from Islamic scripture, holds that pious Muslims should favor more redistributive economic policies. Employing survey data from twenty-five countries, the authors find that there is no clear relationship between piety and redistributive preferences among Muslims. The authors find that more pious Muslims are less likely to favor government efforts to eliminate income inequality, but they find only inconsistent evidence that more pious Muslims support governments taking responsibility for the well-being of the poor. The findings offer little evidence to suggest that either scriptural or organizational factors unique to Islam create distinct economic policy preferences.

#### **Keywords**

Islam, redistribution, preferences, religion and politics

A new literature on the economics of religion argues that more religious individuals are less likely to support government redistribution. In some accounts, religious participation offers social insurance against negative income shocks (Chen 2008; Chen and Lind 2005). Alternatively, religious belief may offer psychic insurance against adverse life events (Scheve and Stasavage 2006). Motivating these studies are several casual observations about religion and political economy: Christian Democratic parties in Europe tend to advocate conservative economic policies, the Republican Party in the United States courts both religious and economic conservatives, and religious conservatives frequently support conservative economic policies.

The theory and evidence in these studies, though, come primarily from Christians in advanced industrial democracies. Scholars of the Muslim world have proposed very different perspectives of the relationship between religion and redistributive preferences. Studies have documented how mass Muslim organizations capitalize on economic grievances to stress redistribution and economic reform. These arguments focus on two pathways: Islam's scriptural injunction that Muslims must pay a tax (*zakat*) that helps the poor and unfortunate, and Islamic social organizations' role in mobilizing the poor and providing a substitute for state welfare. Islamic scriptural injunctions that mandate redistribution, and the apparently wide appeal of Islamic organizations as welfare organizations,

suggest that the new political economy of religion's predictions about the link between piety and redistributive preferences may not apply to Muslim societies. Rather, they suggest that as a consequence of both scriptural and organizational influences unique to the Muslim world, more pious Muslims are likely to demand redistributive state intervention in the economy (see, e.g., Davis and Robinson 2006).

We use survey data—in concert with qualitative insights from countries as diverse as Algeria, Egypt, Turkey, and Indonesia—to test these two competing arguments against one another. We find little evidence that piety has a systematic impact on redistributive preferences among Muslims. We do find that higher levels of religiosity correspond to lower support for government efforts to minimize income inequality, but we also find that they have no effect on beliefs that governments should take responsibility for the poor. Across countries, we find variation in the extent to which piety is associated with redistributive preferences. These findings provide little

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evidence to suggest that either scriptural or organizational factors unique to Islam create distinct economic policy preferences among pious Muslims, demonstrating that arguments derived from Christians in advanced industrial economies are largely appropriate in the Muslim world. While our focus is exploring religiosity and redistributive preferences among Muslims rather than on comparing Muslims to non-Muslims, our results suggest that pious Muslims do not have distinctly different economic policy views than non-Muslims.

Our findings contribute to a growing body of comparative politics research that employs cross-national survey data to test the microfoundations of political economic theories. Prominent contributions include explorations of trade policy (Scheve and Slaughter 2001), embedded liberalism (Hays, Ehrlich, and Peinhardt 2005), and government spending (Rehm 2009). Individual-level studies of religion and political economy have largely focused on how political and economic development influence religiosity or religious choice, or whether being a member of a particular religion influences beliefs such as interpersonal trust or thrift (see McCleary and Barro [2006] for a recent survey). Yet we identify a large literature that argues that piety among Muslims affects specific economic policy preferences. Utilizing survey data from more than twentyfour thousand respondents, from Morocco to Indonesia, we determine that there is little evidence to support these claims. Our findings point to broad parallels between pious Muslims and pious Christians.

We begin by reviewing the theoretical arguments linking religiosity to redistributive preferences, illustrating these arguments with a critical reading of the case study evidence that links Islamism to redistribution. We then describe our empirical strategy: attuned to concerns about construct validity when measuring abstract concepts such as piety, we measure piety as a broad combination of religious beliefs, the indicators of which we treat as imperfect measures of an unobserved variable. Existing measures of piety both unnecessarily restrict the empirical content of religion and severely truncate the availability of individual data from the World Values Survey (WVS). Our empirical strategy accordingly takes into account both diverse ways in which piety may be manifested among Muslim survey respondents and the wide diversity among Muslim countries. We then present and discuss our results and conclude by describing how our evidence informs the growing literatures on political Islam and the microfoundations of political economy.

#### Islam and Redistribution

The new social scientific literature on Islam focuses on macro-level outcomes such as the relationship between Islam and regime type (Huntington 1993; Fish 2002; Said 2001) and the development of Islamic economics (El-Gamal 2006; Henry and Wilson 2004; Kuran 2004). In this literature, individual preferences are largely assumed, not interrogated, with little attention to how religious belief may shape individual preferences over the government's role in the economy. Similar to popular Christian perspectives of the Bible, many Muslims believe that the Qur'an regulates a believer's lifestyle across economic, social, political, and familial issues, and many interpret its dictates quite literally (Marty and Appleby 1992, 138). All three Abrahamic faiths highlight the responsibility of the wealthy to help the poor, which could translate into discrete social and economic policy preferences (Naqvi 2002; see also Wilson 1997). Consequently, in the Muslim world as in the Christian world, piety may play a significant role in explaining individuals' views about the appropriate role of government in a modern economy.

Two bodies of literature make competing predictions about how piety will affect Muslims' economic policy preferences. The first we term the new political economy of religion. The mechanism linking economic policy preferences to piety is religion's role as a kind of insurance. One stream of scholarship (i.e., Chen and Lind 2005) maintains that religious participation acts as a substitute for government redistribution through the informal risksharing mechanisms that arise from communal religious worship. Individuals invest in religious participation, often through charitable giving, and this investment corresponds to the compensation level they can expect when adverse situations arise, such as sudden unemployment or other negative income shocks. Dehejia, DeLeire, and Luttmer (2007) show membership in religious congregations dampens income shocks across U.S. households. Hungerman (2005) demonstrates a substitution effect between charitable contributions from the U.S. Presbyterian Church and state welfare spending. At the individual level, studies find that more religious individuals have less favorable attitudes toward redistribution than nonreligious persons (Guiso, Sapienza, and Zingales 2003; Scheve and Stasavage 2006). Other research reveals government welfare crowds out church participation and charitable provision (Gruber and Hungerman 2007; Gill and Lundsgaarde 2004) by religious individuals and even private philanthropic organizations. Accordingly, religious individuals have less need to rely on the state to mitigate income inequalities or protect the poor since membership within religious institutions can effectively substitute for welfare.

In other studies, religious *belief* is a form of psychological insurance against adversity, ensuring one's rightful place in the hereafter. Both social welfare policies and religious devotion are attractive in part because

they are reassuring and comforting to individuals facing hardship. Individuals for whom religious practice provides a modicum of comfort and reassurance therefore have less of a need for government-sponsored social welfare policies than the nonreligious (Scheve and Stasavage 2006). A. Clark and Lelkes (2005) show that membership in religious organizations diminishes the effect of unemployment on members' happiness relative to nonmembers in Europe. Dehejia, DeLeire, and Luttmer (2007) document a similar phenomenon in the United States.

Furthermore, religious individuals who put a premium on individualism and hard work might prefer that the government refrain from income redistribution to avoid rewarding errant unbelievers. Calvinists, for example, attribute success to individual effort with the hope of reward in the hereafter. Consequently, believers might prefer low levels of social insurance in the interest of increasing their standing before God and preventing the disassociation of work and reward (Bénabou and Tirole 2006; Barro and McCleary 2003; Iannaccone 1990; Azzi and Ehrenberg 1975). Accordingly, individuals who believe that a higher power will provide for them in a time of need are less likely to favor public policies that accomplish the same function. They are also unlikely to favor policies that effectively reward the "undeserving." I

These theories offer a simple explanation for why, in countries such as the United States, more religious individuals tend to prefer less of a government role in providing social insurance. These theories would also explain why, despite the fact that Christian theology emphasizes concern for the poorest and neediest members of society, more religious individuals tend to vote for parties such as the Republican Party (in the United States), the Christian Democratic Union (in Germany), and Christian Democracy (in Italy), whose platforms are seen as less friendly to the poor than their competitors (see Chen and Lind 2005).

Importantly, this research is based overwhelmingly on data from Christians in the developed world, and there are three reasons why these findings may not hold elsewhere. The first two reasons lie in the economic and political contexts of advanced economies and are not of direct interest to this article. First, advanced welfare states may dampen individual concerns over redistributive policies. Insofar as welfare and social protections prevent individuals in advanced economies from experiencing the hardship faced by the poorest citizens in developing economies, the issues of income redistribution and concern for the poor may just not be particularly salient among the most pious citizens of advanced economies. Second, redistributive policies carry the taint of "communism" in many countries, and this association with an avowedly antireligious political ideology may

make devoutly religious individuals unlikely to support parties that advocate in favor of redistributive policies.<sup>2</sup>

The third reason why this association between piety and redistributive preferences may not hold in the Muslim world proceeds from Islam itself. A competing perspective on the relationship between piety and redistributive economic policy preferences focuses on Islamic scripture and the experiences of Muslim countries, suggesting that higher levels of piety among Muslims will lead to increasing support for redistribution due to the very nature of Islam. *Zakat* does not just represent charity but an attempt at the restoration of a just society (Wilson 1997, cited in Naqvi 2002). We label this the *Islamic redistribution* thesis. If this thesis is true, then the findings underlying the new political religion are more limited than previously recognized, which would challenge the generality of this work.

Two mechanisms link piety to increased demands for government intervention in the economy: Islam's scriptural injunction for Muslim governments to help the poor through *zakat* and the role of Islamic social organizations in anti-incumbent political movements in the developing world. We elucidate these two roles below.

# Zakat or Charitable Giving

Islamic scripture possesses clear directives on economic matters, mandating that the broader community of believers (ummat al-mu'minin) must take responsibility for the poor. Alms-giving of this sort is one of the five pillars of Islam, with the most basic form of zakat (known as zakat al-Fitr) made obligatory for all Muslims. Several hadith collected by Al-Bukhari Al-Salih report the Prophet Muhammad as saying, "Allah has made it obligatory for them to pay zakat from their property; it is to be taken from the wealthy among them and given to the poor" (Al-Bukhari n.d., 2:24:537). Further *hadith* by Al-Bukhari have the narrator Anas specifying the existence of zakat collectors appointed by Abu Bakr As-Siddig, one of the Prophet's closest companions and the first of the Rashidun or righteously guided caliphs (Al-Bukhari n.d., 2:24:528, 2:24:530-31, 2:24:533-35). This implies the collection of zakat was under the jurisdiction of the caliph from the beginning of Islam and adds further credence to the idea that an official entity collecting zakat is condoned by the religion.

When Abu Bakr; sent me to (collect the Zakat from) Bahrein, he wrote to me the following:— (In the name of Allah, the Beneficent, the Merciful). These are the orders for compulsory charity (Zakat) which Allah's Apostle had made obligatory for every Muslim, and which Allah had ordered His

Apostle to observe: Whoever amongst the Muslims is asked to pay Zakat accordingly, he should pay it (to the Zakat collector) and whoever is asked more than that (what is specified in this script) he should not pay it . . . (Al-Bukhari n.d., 2:24:534)

The narrator Abu Humaid Al-Sa'idi also illustrates the semiofficial nature of *zakat*:

Allah's Apostle (p.b.u.h) appointed a man called Ibn Al-Lutbiya, from the tribe of Al-Asd to collect Zakat from Bani Sulaim. When he returned, (after collecting the Zakat) the Prophet checked the account with him. (Al-Bukhari n.d., 2:24:576)

The Qur'an itself emphasizes the involvement of a state apparatus in alms collection:

Alms are for the poor and the needy, and those employed to administer (the funds); for those whose hearts have been (recently) reconciled (to truth); for those in bondage and in debt; and for the wayfarer: (Thus it is) ordained by Allah, and Allah is full of Knowledge and Wisdom. (Qur'an 9:60)

The association of zakat with state intervention originates from Islamic history and the precedent set during Muhammad's time in Medina (AD 622), when under his jurisdiction zakat became obligatory and was collected and distributed through state institutions (al-Sheikh 1995, 366-67, as cited in Davis and Robinson 2006, 172). The system originally required wealthy Muslims donate 2.5 percent of their net worth to charitable causes, although disputes exist about how to calculate zakat in a modern economy (Kuran 2004, 38-54). Today, there are government-run zakat systems in Yemen, Saudi Arabia, Malaysia, Libya, Pakistan, and the Sudan. Each has its own criteria for collection and disbursement. Regimes in each have linked zakat institutions to their fidelity to Islamic principles in government—the very fact that such regimes try to increase their popular legitimacy by telling their citizens that redistributive taxes are consistent with Islam suggests that pious Muslims may view government-run redistributive schemes as desirable.

Despite the scriptural bases for *zakat*, in practice *zakat* systems have yielded few concrete benefits. Kuran (2004, 19-28) illustrates how ineffective most of these systems have been at reducing poverty, attributing this largely to widespread tax evasion, low rates of collection, and loopholes for the well connected. Furthermore, in practice *zakat* is often associated with political corruption, tainting the appeal of state-managed tithing.<sup>3</sup> Consequently, while scriptural injunctions to pay *zakat* might lead pious

Muslims to sympathize with *communitarian* policies, it is not certain that they support a *state* role in such policies. Mohammad (1990) claims most Muslims prefer allocating donations to private charities of their own choosing. Scott (1987) describes the *zakat*-evasion tactics of the peasantry in Kedah, Malaysia, and their preference for voluntary instead of centralized *zakat*, with locals calling the latter *zakat raja* or "the ruler's *zakat*." Abdullah (1991, 62) documents the difficulties the Department of Religious Affairs in Indonesia had collecting *zakat*, with potential donors (*muzakki*) "still not convinced their *zakat* would be properly distributed, if *zakat* [were] entrusted to the *amil* [official collectors]."

Zakat also forms one of the pillars of "Islamic economics," whose recent rise is viewed by many in the Muslim world as a plausible third way between economic liberalism and socialism. Kuran (2004) argues that any sense of communitarian economic ethics within the modern Muslim community is more a byproduct of the rise of Islamic economics as an anti-Western revivalist ideology than it is a natural consequence of Islamic theology. Alongside requiring the state to collect and distribute zakat, Islamic economics proscribes interest-based lending (riba), requires the state to look after the poor and foster social justice, and demands that all economic decisions be considered through the lens of Islamic law and Islamic practices (Esposito and Burgat 2003; Fuller 2003). The motivations of the man who coined the term "Islamic economics," the Pakistani economist Sayyid Abul Ala Maududi, were to reclaim Islamic identity within the sphere of economic activity in a bid to stifle the encroachment of Western thought. While the appeal of Islamic economics may be its defense of a kind of Islamic "civilizationalism" rather than religiosity per se, Islam may nevertheless shape the views of the world's most pious Muslims in favor of redistributive economic policies.

## Mobilization and the Political Economy of Islam

Islamic social organizations are known for distributing much-needed public services, income, and employment opportunities where governments do not. Their mass appeal appears to depend in part on their ability to provide such services. While providing public goods does not itself indicate a preference for income redistribution, many of these organizations have openly called for a more equitable distribution of wealth. Jamaat-e-Islami in Pakistan has pressured secular governments to increase their commitments towards redistribution, and under Zia ul-Haq used government ministries to provide a wide range of basic services and to impose obligatory *zakat* (Haqqani 2005, 135-41). In Indonesia, the Prosperous Justice Party, an Islamic party, campaigns for a "clean,

caring, and professional" government, combining a platform of economic redistribution and stewardship of government enterprises with a promise to combat corruption (Liddle and Mujani 2005). Mishal and Sela (2000) elaborate on the role of the Palestinian Hamas as a welfare provider in the Palestinian Authority, highlighting the importance of services in winning support for Islamist movements. Shadid (2001) discusses Hezbollah's similar strategy in Lebanon: Hezbollah spearheaded a network of services that soon overshadowed those of the Lebanese state. For the moderate Islamists, interested in promoting social change through the ballot box, service provision aids in electing and keeping Islamists in office.

The role of Islamic organizations in targeting the poor for redistribution and empowerment extends far beyond formal political parties. J. Clark (2003) finds that Islamic nongovernmental organizations in Egypt, Jordan, and Yemen effectively provide employment for jobless professionals. Singerman (1996), Wickham (2002), and Walsh (2003) demonstrate how private Islamic organizations develop creative and effective strategies to accomplish communal resource allocation and decision making in urban Cairo. Benthall and Bellion-Jourdan (2003) examine the Red Crescent Movement in Jordan and the Islamic Charitable Association in Algeria as examples of effective social service providers rivaling their respective states.

Many of these Islamist organizations engage in informal redistribution, which may indicate that they are performing a function demanded by religious Muslims facing unresponsive regimes. Yet we should be careful not to assume, just because they are redistributive Islamic parties, that their redistributive policies are a function of their Islamic ideologies. Their redistributive ideologies might simply be campaign promises designed to win popular support, not deeply held principles derived from Islam. In fact, the few Islamic parties that have successfully risen to power have kept their populist economics, if not their populist rhetoric, in check. In Indonesia, Malaysia, and Pakistan, the most clearly Islamic parties remain in opposition; in Turkey, the Justice and Development Party identifies as a center-right political party whose economic platform emphasizes privatization and EU accession rather than redistribution or economic statism (Öniş 2006). Nasr (2005) argues that non-Arab Islamic political parties do not offer redistributive policies because of tight private sector integration with the global economy. This, he argues, induces these parties to share the moderate views of business-oriented parties elsewhere in the developing world. In countries like Turkey and Malaysia, Islamic political parties often seem decidedly middle-class, so their interests may lie with economic liberalization, not populist redistribution (see Nasr 2005; J. Clark 2003).

Turkey's Justice and Development Party demonstrates that Islamic political parties may in fact directly oppose coarse income redistribution. The party's political platform targets Turkey's growing religious bourgeoisie for support (Keyman and Koyuncu 2005), much as its more radical predecessors did (Öniş 2006). Likewise, in recent years the United Malays National Organisation in Malaysia has promoted a more conspicuously Islamic agenda. Yet while this turn toward Islam was accompanied by a continued rhetorical emphasis on developmentalism and economic populism, its policies remain on the whole liberal (Nasr 2005). Consequently, while Islamic organizations and parties may incorporate notions of income redistribution within their platforms, it is not clear that they actually adopt such policies once in power.

Finally, Islamic movements are by no means uniform in nature. Among these associations, moderate and fundamentalist Islamists exhibit stark differences in their redistributive goals (Esposito and Burgat 2003; Sivan 2003). Some moderate Islamic groups such as those in Turkey, Malaysia, and Indonesia have gradually aligned with liberal economic policies because of their educated middle-class and cosmopolitan demographic. In liberal conceptions of Islam, modernity and the Islamic faith are reconcilable. Radical Islam, though, frequently appeals to members of the newly urbanized lower and lower-middle classes, who feel alienated from the current political system as a whole. Egypt provides compelling evidence of this. Economic liberalization originally strengthened the moderate arm of the Muslim Brotherhood in Egypt and Jordan, yet it also provided fundamentalists with ample opportunity to recruit in neighborhoods that fared poorly under the new policies (Ates 2005; Fuller 2003; Denouex 2002). If these Islamic organizations are channeling the economic and class-based discontents of their members, religion is not the factor driving redistributive policies.

We are aware of only one study that has attempted to test the link between piety and economic policy preferences in the Muslim world. Using data from seven countries, Davis and Robinson (2006) find support for a broad conception of the Islamic redistribution thesis. Yet their research suffers from several problems. They adopt a peculiar definition of piety, measuring it as a single concept: Muslims' expressed support for the implementation of Islamic law (shari'a) in their country. On its face, this is an odd choice. Not all pious Muslims support shari'a; nor are supporters of shari'a equally pious (or pious at all) in the traditional sense of the word. In Nigeria, Bratton (2003) finds that piety is associated with *lower* levels of commitment to shari'a law. In fact, 63 percent of secular Nigerians supported the implementation of local religious legal systems (i.e., shari'a) in the northern states, while 52 percent of highly observant Muslims supported a secular legal apparatus across Nigeria (Bratton 2003, 500). While this finding may not be generalizable across the Muslim world, it certainly impugns the construct validity of equating support for *shari'a* with piety. There are other examples: Iran's government amended the Iranian Constitution in 1989 to empower the government to disregard *shari'a* provisions that were deemed inimical to "the greater good"—suggesting that in Iran, religiosity is linked to allegiance to the Islamic state and not *shari'a* law (Hassan 2000, 219).

There is another problem with Davis and Robinson's (2006) use of *shari'a* to measure piety: they drop from their analysis nearly a dozen countries in which the *shari'a* question was not asked. This means that well over half of all Muslim respondents in their sample are ignored. These data coverage and measurement issues have a dramatic impact on their findings.

# **Data and Research Design**

To investigate the link between piety and economic policy preferences, we use data from the fourth wave of the WVS (European and World Values Surveys 2006). This wave of the WVS contains data from twenty-five countries with Muslim majorities or large and concentrated Muslim minorities, with a total of more than twenty-four thousand respondents. We define as Muslims all respondents who gave their religion as "Muslim," "Sunni," or "Shiite" in response to WVS question F025 or who gave their ethnic group as "Muslim" in response to WVS question X051. We chose our sample of countries by selecting all countries where at least 3 percent of the population identified itself as Muslim according to this definition, and then excluding Belgium because its Muslim population is composed primarily of recent immigrants. Our sample accordingly includes all Muslim respondents from Albania, Bangladesh, Bosnia-Herzegovina, Bulgaria, Egypt, India, Indonesia, Iran, Iraq, Israel, Jordan, Kyrgyzstan, Macedonia, Morocco, Nigeria, Pakistan, the Philippines, Russia, Saudi Arabia, Serbia and Montenegro, Singapore, South Africa, Tanzania, Turkey, and Uganda.<sup>4</sup>

Our independent variable of interest is *PIETY*. As we detail below, we cannot directly observe this variable, but we can measure its correlates through a number of different survey questions. To measure our dependent variable, we searched the WVS for items that dealt with individuals' views on redistributive economic policy preferences. We chose three survey questions for which responses are widely available and that tap into individual preferences over government economic policies: *INEQUALITY*, *WELLBEING*, and *ENTERPRISE*.

Our key dependent variable is *INEQUALITY* (WVS question E035), which measures the degree to which respondents support government efforts to mitigate income inequality. The question asks respondents to rate the degree to which they support one of two opposing views: that income inequality is necessary to provide economic incentives to individuals, or that the government should actively intervene to mitigate income inequality. This is our preferred dependent variable, as it most closely taps individual preferences for or against redistribution.

The second dependent variable measures the degree to which respondents support the view that governments should be responsible for individuals' personal well-being versus the view that individuals should themselves be responsible for their own well-being (WELLBEING; WVS question E037). This variable is another way to tap individual preferences over government policies, although it forces respondents to choose between individual responsibility and government responsibility for the poor.

The third and final dependent variable measures the degree to which respondents support state enterprise ownership versus private ownership of large enterprises (ENTERPRISE; WVS question E036). This variable does not measure preferences for redistribution and, accordingly, is not suitable for testing whether piety is associated with higher or lower support for redistributive economic policies. However, we include it for two reasons. First, it has been used in other research (e.g., Davis and Robinson 2006) on individual preferences over government economic policies, and including it allows us to compare our results to the existing literature. Second, it gives some insight into individual preferences over government economic policies in general that will help to contextualize the results from *INEQUALITY* and WELLBEING.

For all three dependent variables, responses range from 1 to 10, and we recode these so that 10 reflects the most support for government intervention and 1 the least.

# Hypotheses

Our hypotheses derived from the new political economy of religion holds that more religious individuals are less likely to support government intervention for redistributive purposes. We summarize these as follows:

Hypothesis 1A: More pious individuals will be less likely to support government efforts to mitigate income inequality.

Hypothesis 1B: More pious individuals will be less likely to support the view that governments

should be responsible for individuals' personal well-being.

Against these arguments, the main hypotheses from the Islamic redistribution thesis predict the exact opposite.

*Hypothesis 2A:* More pious individuals will be more likely to support government efforts to mitigate income inequality.

Hypothesis 2B: More pious individuals will be more likely to support the view that governments should be responsible for individuals' personal well-being.

We also reproduce two hypotheses from David and Robinson (2006). They distinguish from the general Islamic redistribution thesis a strictly textual argument that Muslims should only be more likely to support policies that they can link directly to textual statements in holy scriptures. Accordingly, since the Qur'an and Hadith make no mention of state enterprise ownership, more religious Muslims should support redistribution but not state ownership.

Hypothesis 3: More pious individuals will be more likely to support government efforts to mitigate income inequality and more likely to support the view that governments should be responsible for individuals' personal well-being, but levels of piety will be unrelated to support for government enterprise ownership.

Their second hypothesis, which they dub *Moral Cosmology*, holds that because all Muslims are members of an intergenerational community, a Muslim government will be the most faithful steward of that community's economic interests. Accordingly, this hypothesis holds that Muslims should jointly favor all types of government intervention in the economy.

Hypothesis 4: More pious individuals will be more likely to support government efforts to mitigate income inequality, more likely to support the view that governments should be responsible for individuals' personal well-being, and more likely to support government enterprise ownership.

## **Methods**

Our research strategy recognizes that measuring piety is difficult. Individuals who consider themselves equally pious may vary in their professed beliefs and behaviors (see Blaydes and Linzer 2008). For instance, some Muslims consider women's wearing of the veil to be required of

all pious Muslims, while others believe that covering one's face is a personal choice without a scriptural basis. Likewise, some Muslims may pray privately outside of the mosque because their employment situation makes frequent mosque attendance difficult, while other Muslims may attend their local mosque so frequently that they do not frequently pray outside of the mosque. Since piety may have different meanings for different individuals, we are suspicious of any attempt to capture it with a single survey question. So we instead work with the maintained hypothesis that a number of behaviors and preferences are likely to measure imperfectly the unobservable concept of piety. We also face a problem of inconsistent data collection. Few variables of interest are available for all countries, and still fewer are available for all respondents. Our methods must surmount the obstacle of ascertaining how multiple imperfect indicators reflect an unobserved concept, while simultaneously using as much available data as possible to prevent missing data from influencing our findings.

We confront these challenges using structural equation modeling (SEM) in LISREL (Jöreskog and Sörbom 2005). SEM offers two benefits over competing approaches. First, SEM allows us to represent completely the uncertainty in our estimates. As indices are created with error, when used as independent variables they produce biased coefficients and standard errors in any regression-based model. SEM does not face this problem. Moreover, the full information maximum likelihood (FIML) estimation method available in LISREL allows estimates of the unobserved independent variable to include observations with missing data (Arbuckle 1996). This increases our coverage to the thousands of observations whose values are not fully observed. The final estimates and standard errors that we report reflect all sources of uncertainty in our model, allowing the uncertainty associated with both the estimation of the unobserved variable and the incompleteness of the data to propagate directly to our parameter estimates.

The second benefit to our SEM approach lies in the construct validity of our key independent variable. Because we recognize multiple imperfect measures of piety, we are not beholden to any one definition of piety, nor are we restricted to analyzing a subset of countries whose respondents may not truly reflect the diversity of the Muslim world. Our model assumes that *PIETY* is a continuous unidimensional latent variable whose values across individuals are unknown. We choose ten indicators with reasonably good coverage across individuals as potential measures of *PIETY*, and we include their precise wording in Table 1.

A criticism of these ten indicators is that some indicate cultural traditionalism, not religiosity.<sup>5</sup> In the analysis below, we replicate our findings using a "restricted" definition focusing exclusively on religious belief and

Table 1. Indicators of Religiosity

World Values Survey (WVS) code	Variable name	Question text	Values	Percentage missing	Restricted definition?
a006	RELIGION IS IMPORTANT	Please say, for each of the following, how important it is in your life. Religion	I (not at all) to 4 (very important)	1.02	Yes
a040	CHILDREN'S RELIGION IMPORTANT	Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five. Religious faith	0 (not mentioned), I (mentioned)	0.02	Yes
f028	FREQUENCY OF MOSQUE ATTENDANCE	Apart from weddings, funerals, and christenings, about how often do you attend religious services these days?	I (never) to 8 (more than once a week)	1.08	Yes
f034	RELIGIOUS PERSON	Independently of whether you go to church or not, would you say you are?	I (a convinced atheist), 2 (not a religious person), 3 (a religious person)	7.40	Yes
f066	FREQUENCY OF PRAYER	How often do you pray to God outside of religious services?	I (never) to 7 (every day)	49.66	Yes
d067	VEIL	In your opinion, how important are each of the following traits in a woman? Wearing a veil in public places	I (not important at all) to 5 (very important)	28.79	No
d070	WOMAN'S RELIGION IMPORTANT	In your opinion, how important are each of the following traits in a woman? Being religious	I (not important at all) to 5 (very important)	23.25	No
d076	MULTIPLE WIVES ACCEPTABLE	It is acceptable for a man to have more than one wife	I (strongly disagree) to 5 (strongly agree)	24.08	No
d077	WIFE MUST OBEY	A wife must always obey her husband	I (strongly disagree) to 5 (strongly agree)	23.45	No
fIII	IMPLEMENT ONLY SHARIA	How much do you agree or disagree with each of the following statement: We should implement only the laws of the shari'a	I (strongly disagree) to 5 (strongly agree)	53.76	No

We recode all variables so that increasing values reflect increasing levels of religiosity. "Restricted definition" indicates that the variable is included in the restricted definition of piety (see text).

practice. Table 1 indicates which indicators meet this restricted definition.

We include a standard set of individual-level demographic and economic control variables to evaluate the impact of piety versus other individual-level determinants of preferences over government intervention in the economy. These capture economic status (income [INCOME], employment status [EMPLOYED]) as well as demographic characteristics (gender [MALE], age [AGE], self-reported social class [CLASS], education [EDUCATION], and number of children [CHIL-DREN]). We assume that each of these control variables (as well as each dependent variable) is measured without error.

We model the relationship between piety and redistributive preferences in two ways, labeled model 1 and model 2 below and borrowing notation from the SEM literature. See Bollen (1989) for further information on latent variables and SEM.

$$\begin{split} \mathbf{y} &= \Gamma(\textit{PIETY} + \mathbf{x}) + \varsigma & \text{Model I} \\ \textit{PIETY} &= \Lambda_{\textit{PIETY}} \xi + \delta \\ \mathbf{y} &= \mathbf{B} \times \textit{PIETY} + \Gamma_{\mathbf{y}} \mathbf{x} + \varsigma & \text{Model 2} \\ \textit{PIETY} &= \Lambda_{\textit{PIETY}} \eta + \Gamma_{\textit{PIETY}} \mathbf{x} + \epsilon \end{split}$$

In both models,  $\mathbf{x}$  are control variables (listed above),  $\mathbf{y} = (INEQUALITY, WELLBEING, ENTERPRISE)$ , and  $\varsigma$ 

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Table 2. Factor Loadings and Socioeconomic Correlates of PIETY

Indicator	Model I	Model 2	Model 3	Model 4
Panel A: Factor loadings				
RELIGION IS IMPORTANT	1.00	1.00	1.00	1.00
CHILDREN'S RELIGION IMPORTANT	 0.62***	 0.62***	 0.65***	0.65***
	(0.09)	(0.09)	(80.0)	(80.0)
FREQUENCY OF MOSQUE ATTENDANCE	ÌI.85 <sup>*</sup> ***	Ì.85 <sup>′***</sup>	2.15***	2.15 <sup>***</sup>
	(0.49)	(0.49)	(0.42)	(0.42)
RELIGIOUS PERSON	0.36***	`0.36 <sup>′***</sup>	0.41***	0.41 <sup>***</sup>
	(0.06)	(0.06)	(0.06)	(0.06)
FREQUENCY OF PRAYER	2.19***	2.19***	2.54***	2.54***
·	(0.49)	(0.49)	(0.50)	(0.50)
VEIL	`2.29 <sup>*</sup> ***	`2.29 <sup>*</sup> ***		
	(0.33)	(0.33)		
WOMAN'S RELIGION IMPORTANT	Ì.55***	Ì.55***	_	_
	(0.33)	(0.33)		
MULTIPLE WIVES ACCEPTABLE	0.32*	0.32*	_	_
	(0.21)	(0.21)		
WIFE MUST OBEY	0.87***	0.87***	_	_
	(0.15)	(0.15)		
IMPLEMENT ONLY SHARIA	1.36***	1.36***	_	_
	(0.26)	(0.26)		
Panel B: Socioeconomic correlates	(** *)	(** *)		
MALE	_	-0.04***	_	-0.02
		(0.02)		(0.02)
AGE	_	>-0.01***	_	>-0.01***
		(<0.01)		(<0.01)
CHILDREN	_	0.04***	_	0.03***
		(0.01)		(0.01)
EDUCATION	_	-0.03***	_	-0.03***
		(0.01)		(0.01)
CLASS	_	-0.01	_	>-0.01
52.00		(0.02)		(0.02)
INCOME	_	0.02*	_	0.01
		(0.01)		(0.01)
EMPLOYED	_	-0.01	_	<0.01)
2 20125		(0.02)		(0.02)
		(0.02)		(0.02)

Cells contain factor loadings and standard errors in parentheses.

is the equation error. In model 1,  $\xi$  are our indicators of *PIETY*, and  $\delta$  is the error associated with the measurement of each indicator. In model 2, by contrast,  $\eta$  are indicators of *PIETY*, and  $\varepsilon$  is the error associated with each. The strength of the relationship between each indicator and the unobserved latent variable is captured through its factor loading,  $\Lambda_{PIETY}$  in both model 1 and model 2. Models 1 and 2 differ in their treatment of *PIETY*. In model 1, *PIETY* is an independent variable, and the effects of other independent variables  $\mathbf{x}$  operate independently of it. In model 2, however, we allow *PIETY* to serve as both a dependent variable affected by socioeconomic factors *and* as an independent variable affecting economic policy preferences. This is because, as Chen (2008) and others note, piety itself may also be

shaped by the same economic and social conditions that also affect economic policy preferences.

A final note concerns the nested structure of the data. We are not directly interested in national-level determinants of preferences for redistribution, but we recognize that responses are likely to be correlated by country. We therefore allow for such within-country correlation by specifying that survey responses are clustered according to countries. We also investigate country-level differences in economic policy preferences below.

## **Results**

Table 2 shows the factor loadings (panel A) and socioeconomic correlates (panel B) of *PIETY*. Models 1 and 2 are

<sup>\*</sup>p < .1. \*\*p < .05. \*\*\*p < .01. One-tailed tests.

Table 3. Estimation Results

	Model I				Model 2					
Independent variables	INEQUALITY	WELLBEING	ENTERPRISE	INEQUALITY	WELLBEING	ENTERPRISE	PIETY			
PIETY	-1.34**	<0.01	1.04***	-I.34**	<0.01	1.04***	_			
	(0.61)	(0.21)	(0.28)	(0.61)	(0.21)	(0.28)				
MALE	_0.05 <sup>°</sup>	`0.17 <sup>′</sup>	0.41 <sup>***</sup>	_0.05 <sup>°</sup>	0.17	0.41 <sup>***</sup>	-0.04**			
	(80.0)	(0.14)	(0.07)	(80.0)	(0.14)	(0.07)	(0.02)			
AGE	<0.01	<0.01	-0.01	<0.01	< 0.01	-0.01	>-0.01***			
	(0.01)	(<0.01)	(<0.00)	(0.01)	(<0.01)	(0.00)	(<0.01)			
CHILDREN	<0.01	0.01	` 0.09 <sup>́</sup> ***	<0.01 <sup>^</sup>	0.01	0.09***	0.04 <sup>****</sup>			
	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)	(0.01)			
EDUCATION	_0.06 <sup>°</sup>	_0.09 <sup>*</sup> **	_0.04 <sup>^</sup>	_0.06 <sup>°</sup>	_0.09 <sup>*</sup> **	_0.04 <sup>°</sup>	_0.03 <sup>*</sup> **			
	(0.06)	(0.04)	(0.05)	(0.06)	(0.04)	(0.05)	(0.01)			
CLASS	0.06	-0.25***	–0.15 <sup>′</sup> **	0.06	-0.25 <sup>*</sup> ***	–0.15 <sup>′</sup> **	_0.0 l´			
	(0.06)	(0.04)	(0.07)	(0.06)	(0.04)	(0.07)	(0.02)			
INCOME	–0.26 <sup>*</sup> **	_0.07 <sup>*</sup> **	_0.0 l´	–0.26 <sup>*</sup> ∗∗	-0.07 <sup>*</sup> **	_0.0 I <sup>^</sup>	0.02			
	(80.0)	(0.03)	(0.05)	(80.0)	(0.03)	(0.05)	(0.01)			
<b>EMPLOYED</b>	_0.11 <sup>°</sup>	0.04	_0.07 <sup>^</sup>	_0.11 <sup>°</sup>	0.04	_0.07 <sup>^</sup>	_0.0 l´			
	(0.11)	(0.10)	(0.10)	(0.11)	(0.10)	(0.10)	(0.02)			
		Model 3			Mod	el 4				
PIETY		-0.01	0.89***		-0.01	0.89***	_			
	(0.58)	(0.22)	(0.28)	(0.58)	(0.22)	(0.28)				
MALE	_0.02 <sup>^</sup>	`0.17 <sup>′</sup>	0.39 <sup>*</sup> ***	-0.02	0.17 <sup>°</sup>	0.39***	-0.02			
	(80.0)	(0.14)	(80.0)	(80.0)	(0.14)	(80.0)	(0.02)			
AGE	<0.01	<0.01	-0.01*	<0.01	< 0.01	-0.01*	>01*			
	(0.01)	(<0.01)	(0.01)	(0.01)	(<0.01)	(0.01)	(<0.01)			
CHILDREN	-0.0 l	0.01	0.10***	-0.01	0.01	0.10***	0.03***			
	(0.05)	(0.03)	(0.03)	(0.05)	(0.03)	(0.03)	(0.01)			
EDUCATION	-0.05	-0.09 <sup>***</sup>	-0.05	-0.05	-0.09**	-0.05	-0.03***			
	(0.06)	(0.04)	(0.05)	(0.06)	(0.04)	(0.05)	(0.01)			
CLASS	`0.07 <sup>´</sup>	–0.25 <sup>*</sup> ***	–0.16 <sup>*</sup> **	0.07	_0.25 <sup>*</sup> ***	–0.16 <sup>*</sup> **	>01			
	(0.06)	(0.04)	(0.07)	(0.06)	(0.04)	(0.07)	(0.02)			
INCOME	_0.27 <sup>*</sup> **	_0.07**	<0.01	_0.27 <sup>*</sup> **	_0.07 <sup>*</sup> **	<0.01	0.01			
	(0.09)	(0.03)	(0.05)	(0.09)	(0.03)	(0.05)	(0.01)			
<b>EMPLOYED</b>	_0.10 <sup>′</sup>	0.04	_0.08 <sup>°</sup>	_0.10 <sup>°</sup>	0.04	_0.08 <sup>°</sup>	<0.01			
	(0.12)	(0.10)	(0.10)	(0.12)	(0.10)	(0.10)	(0.02)			

Cells contain parameter estimates and standard errors in parentheses.

as described above, employing all ten indicators of piety. Models 3 and 4 are identical but employ only the restricted set of indicators of piety. As is standard, to identify the model we constrain the loading for one indicator to be 1 (we choose the first variable, *RELIGION IS IMPORTANT*, arbitrarily).

The results in panel A indicate that in models 1 and 2 all variables except for one load positively and significantly onto an underlying dimension of piety at p < .001 in one-tailed tests. *MULTIPLE WIVES ACCEPTABLE*, which measures the extent to which individuals support husbands' taking more than one wife, is notably more weakly associated with the latent variable but is still

associated at p < .1 in a one-tailed test. When employing the restricted definition of piety (models 3 and 4), all variables load positively and are significant at p < .001 in one-tailed tests.

Table 3 presents the results of the structural model. Note first that the parameter estimates for model 1 and model 2, and for model 3 and model 4, are nearly identical: at two decimal places, they are exactly the same for every variable.

The results more closely support the new political economy of religion than its competitors. The dependent variable *INEQUALITY* presents the strictest test of the new political economy of religion against the Islamic redistribution

<sup>\*</sup>p < .1.\*\*p < .05.\*\*\*p < .01.Two-tailed tests.

thesis, and results favor the former (hypothesis 1A). Among Muslims, higher levels of piety are associated with lower support for government efforts to eliminate income inequality. The evidence from all four models thus indicates that piety among Muslims operates precisely in the same way as it does among Christians in the developed world, challenging the Islamic redistribution thesis that characteristics unique to Islam lead more pious Muslims to favor government income redistribution.

When we turn to the dependent variables WELL-BEING and ENTERPRISE, though, the picture is less clear. We find, for instance, that in contradiction to the Islamic redistribution thesis (hypothesis 2B), there is no link between religiosity and preferences for government protection of the poor. Yet we do not find support for the new political economy of religion (hypothesis 2A)—increased religiosity does not correspond to lower support for government protection of the poor. We note, however, that the evidence overwhelmingly contradicts the specific claims of hypothesis 3 (more religious Muslims favor redistribution and government responsibility for the poor, but not enterprise ownership) and hypothesis 4 (more religious Muslims favor all three).

The results for *ENTERPRISE* are interesting, for we find a positive relationship between piety and preferences for state enterprise ownership. Nowhere in the Qur'an or the Hadith does there appear any mention of state enterprise ownership, and recall that our inclusion of this question reflects our desires (1) to test as widely as possible the links between religiosity and economic policy preferences and (2) to provide tests that match the existing literature. One possible interpretation of this finding—one that would be consistent with the results from the other models—is that rather than piety leading to economic statism, in the Muslim world secularism is associated with promarket ideologies. A second explanation may stem from the increasing penetration of public jobs by sympathizers of Islamic groups such as the Muslim Brotherhood. The results from *INEQUALITY*, then, would confirm the argument that secular individuals do not perceive themselves to benefit from religious insurance against adverse life events, while ENTERPRISE reflects that these same secular individuals also believe state enterprises to be inefficient.

We offer three robustness checks. First, we ensure that our sampling method does not drive our findings. We obtain substantively identical findings from analyses that expand the sample to include (1) all Muslims from every country in all four waves, (2) all Muslim respondents from every country in the fourth wave, and (3) the approximately twenty-five hundred respondents from Morocco and Algeria whose religion and ethnic identity were not recorded in the WVS. Second, we follow

standard practice and created a simple index of *PIETY* as the first principal component of our ten indicators. We then estimated a series of regressions corresponding to model 1 above, using this index as an independent variable and ignoring measurement error. Third, we estimate all models as multivariate regressions of redistributive preferences on the components of *PIETY* and the socioeconomic controls, ignoring both measurement error and missing data. These results are available as Supplemental Materials at http://prq.sagepub.com/supplemental/.

Confident that our findings are driven not by our definition of piety, nor our sample of Muslims, nor our SEM approach, in Table 4 we break up the analysis by country. This will reveal where there are systematic country-level differences in the links between religiosity and preferences for government intervention in the economy—and will ensure that no outlier countries drive the findings. As some questions are not asked in particular countries, countries vary in the indicators used to construct the latent measure of religiosity. Due to high levels of withincountry colinearity among respondents' religious beliefs, some observed indicators of piety were dropped to achieve convergence for Indonesia and Jordan. The second model cannot be estimated for Bulgaria or Nigeria, as question E036 was not asked in these countries. Due to a very small sample size, we cannot estimate models for Israel. In presenting these results, we only focus on the estimates associated with the latent variable PIETY in model 1. Full results for other parameters and models are available upon request.

These results indicate that while there is considerable cross-national variation in the impact of religiosity on preferences for government intervention in the economy, our findings hold up quite well. In Bangladesh, Bulgaria, Egypt, Kyrgyzstan, Nigeria, and Turkey, we find that more religious Muslims are less likely to support government efforts to eliminate income inequality; we find estimates have the same sign but are statistically insignificant in India, Iraq, Jordan, Russia, Saudi Arabia, Singapore, South Africa Tanzania, and Uganda. Only in Albania, Indonesia, Morocco, and Pakistan are the findings statistically significant with different signs. Also, most country-level estimates of the effect of religiosity on government responsibility for the poor are insignificant, as before. In Bangladesh, Indonesia, Morocco, Pakistan, and Russia, religiosity is associated with preferences for more government redistribution; while in Bosnia and Herzegovina, the Philippines, Turkey, and Uganda, it is associated with lower preferences for government protection of the poor. Turning to the finding that religiosity is associated with increased support for government ownership of enterprises, we find consistent and statistically significant results in Bangladesh, Iran, Iraq, Kyrgyzstan,

Country	INEQUALITY	WELLBEING	ENTERPRISE	Country	INEQUALITY	WELLBEING	ENTERPRISE
ALBANIA	0.33**	0.18	0.12	MOROCCO	2.97*	8.43***	9.62***
	(0.14)	(0.16)	(0.14)		(1.56)	(2.07)	(2.22)
BANGLADESH	_2.13 <sup>*</sup> ***	`5.20 <sup>*</sup> ***	6.27****	NIGERIA	_8.81 <sup>*</sup> **	<u>-4</u> .77	
	(0.67)	(0.87)	(0.89)		(3.87)	(3.29)	
BOSNIA AND HERZEGOVINA	0.28	_0.63 <sup>*</sup> ***	–0.2 I	PAKISTAN	0.72***	0.49 <sup>***</sup>	0.32**
	(0.18)	(0.20)	(0.18)		(0.17)	(0.13)	(0.15)
BULGARIA	−Ì.26 <sup>*</sup> **	0.62		PHILIPPINES	Ì.12	_8.24 <sup>*</sup> **	`5.34 <sup>*</sup> **
	(0.52)	(0.54)			(0.95)	(3.98)	(2.58)
EGYPT	-4.22****	_Ì.70 <sup>′</sup>	-4.17***	RUSSIA	_Ì.72 <sup>´</sup>	3.44**	Ì.20
	(1.09)	(1.33)	(1.43)		(1.43)	(1.57)	(1.04)
INDIA	_l.85 <sup>°</sup>	−Ì.74 <sup>′</sup>	_3.97 <sup>*</sup> **	SAUDI ARABIA	_l.02 <sup>°</sup>	_0.53 <sup>°</sup>	2.08***
	(1.40)	(1.42)	(1.61)		(0.72)	(0.80)	(0.79)
INDONESIA	0.90***	1.76***	-0.26	SERBIA AND	0.08	-0.09	-0.52
				MONTENEGRO			
	(0.21)	(0.32)	(0.23)		(0.50)	(0.39)	(0.40)
IRAN	0.14	-0.24	0.82***	SINGAPORE	-1.40	-1.55	-0.29
	(0.17)	(0.19)	(0.19)		(1.19)	(1.29)	(1.20)
IRAQ	-0.35	0.76	2.42***	SOUTH AFRICA	-3.00	-1.48	-0.80
	(0.56)	(0.51)	(0.48)		(2.13)	(2.01)	(1.97)
JORDAN	-0.58	-0.34	1.24	TANZANIA	-2.33	-1.54	-0.79
	(1.34)	(1.41)	(1.52)		(1.80)	(1.40)	(1.72)
KYRGYZSTAN	<b>−0.65</b> **	0.13	0.86***	TURKEY	-0.68***	-0.60***	-0.28*
	(0.30)	(0.32)	(0.32)		(0.17)	(0.17)	(0.16)
MACEDONIA	1.46	-0.4 I	0.43	UGANDA	-1.44	−2.11**	0.24
	(0.89)	(0.96)	(0.93)		(1.10)	(1.02)	(0.97)
MAJORITY	-2.12***	0.11	1.20***	MAJORITY MUSLIM	-I.00**	-0.30	0.26
MUSLIM ONLY				ONLY, FIXED EFFECTS			
	(0.77)	(0.35)	(0.40)		(0.47)	(0.43)	(0.33)

Cells contain parameter estimates and standard errors in parentheses. \*p < .1. \*\*p < .05. \*\*\*p < .01.Two-tailed tests.

Morocco, Pakistan, the Philippines, and Saudi Arabia; in Albania, Jordan, Macedonia, Russia, and Uganda, estimates have the same sign but are statistically insignificant. Only Egypt, India, and Turkey produce statistically significant estimates with different signs.

These results, while encouraging, suggest that the overall pattern found in the combined cross-sectional analysis contains a few important counterexamples. In plots of estimated coefficients by country against level of democracy, economic development, and corruption we find no consistent patterns that explain this variation (results are available in the Supplemental Materials online at http://prq.sagepub.com/supplemental/). But casual inspection of these results suggests that Muslims in countries where they do not form a majority display different preferences—estimates for these countries appear less likely to be statistically distinguishable from zero. Accordingly, the final row in Table 4 also contains two additional models. These drop the respondents from

Albania, Bosnia and Herzegovina, Bulgaria, Macedonia, India, Israel, Nigeria, the Philippines, Russia, Serbia and Montenegro, Singapore, South Africa, Tanzania, and Uganda. Note that even excluding all of the Muslim respondents from these countries does not unduly shrink our sample size, which remains quite large, at 20,028. The first model in this last row is identical to model 1 and shows consistent results with earlier cross-national results. The second model, however, adds dummy variables for every country aside from Turkey.<sup>6</sup> Here, we see that individual support for state enterprise ownership is no longer positively associated with piety, once country-level differences have been taken into account. However, the established relationship between piety and decreased support for government efforts to eliminate income inequality remains.

The overall pattern is therefore clear. Cross-nationally, we find support for the new political economy of religion and very little support for the Islamic redistribution thesis

in any of its variants. While there is important crossnational variation in these results, the overall finding that piety is associated with decreasing support for government efforts to eliminate income inequality is not driven by the inclusion of a few outlier countries.

#### **Discussion and Conclusion**

Two new literatures offer competing predictions about how piety translates to economic policy preferences in the Muslim world, but few scholars have explored whether the presumed association between piety and redistributive preferences holds up at the individual level. Yet it is at the level of individual beliefs that these literatures claim that this effect should hold. Our contribution is to use survey data to provide firm microfoundations for these theoretical literatures. Our findings show, first and foremost, that across a broad sample of countries, there is no systematic evidence that more pious Muslims favor more redistributive economic policies. In fact, our findings are consistent with results from Christian-majority countries, where piety is associated with lower support for redistributive economic policies. We also find substantial crossnational variation in the relationship between piety and economic policy preferences in the Muslim world. Together, these findings reject a simplistic vision of Islam as a religion that creates distinct economic policy preferences among its most pious adherents.

This article has not explicitly compared Muslims to non-Muslims, but its findings are suggestive. Scholars have documented the differences and similarities in the attitudes of the West and the Muslim world across topics such as gender (Inglehart and Norris 2004) and democracy (Hofmann 2004). Our evidence is largely consistent with the evidence drawn from Christian-majority countries, which shows that piety is associated with lower levels of support for redistributive welfare policies in advanced industrial democracies. By uncovering patterns that are consistent with findings from the Western world, our findings suggest that Islam does not engender unique economic preferences among its faithful.

Our results point to a number of areas of further research, for the mechanism that links piety to redistributive economic preferences may be different for Muslims than for Christians. While arguments drawn from the political economy of religion maintain that the religion is a type of social or psychological insurance, in the Muslim world opposition to redistributive policies may be a pragmatic response to the secular state's failed—or biased, or corrupt—economic policies (Khoury 1983). We have noted that in countries such as Egypt, the most successful redistributive programs appear to be those run by private religious organizations. In countries where a variety of

Islamic organizations experience government harassment, religious Muslims are wary of allowing the state further control over their income, even in the name of zakat. Country-level analysis showed that more pious Muslims in Bangladesh, Bulgaria, Egypt, Kyrgyzstan, Nigeria, and Turkey are less likely to support government efforts to eliminate income inequality. Most of these countries have Muslim-majority populations and have been notoriously heavy-handed with Islamic movements. Consequently, religiosity may be associated with mistrust of how the state intervenes in the economy rather than the belief that religion provides insurance. This explanation might sit at odds with the finding that religious Muslims are more likely to favor state enterprise ownership. Nonetheless, the underlying mechanism driving the association between religion and economic preferences may be different in the Muslim world, despite similarity of their expressed preferences.

To conclude, we find little evidence that piety generates a higher demand for redistributive economic policies in the Muslim world. Rather, the new political economy of religion provides a compelling framework to analyze economic preferences among Muslims, one largely consistent with results from Christian-majority countries. Our cross-national approach is the first to confront the wide variation in economic preferences across the Muslim world while recognizing that piety is a complex concept. The link between piety and economic policy preferences in the Muslim world is complex. We can, however, confidently reject the hypothesis that scriptural or organizational factors unique to Islam engender pious Muslims across the world to favor redistributive economic policies.

#### **Authors' Note**

The replication files and raw data used in this article are available from the corresponding author's academic Web site at http://courses.cit.cornell.edu/tp253/research.html.

#### **Declaration of Conflicting Interest**

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

#### **Funding**

The authors received the following financial support for the research and/or authorship of this article: Smith Richardson Foundation, Inc.

#### **Notes**

 Economic preferences across Christian denominations do not appear to be uniform. Arruñada (2004) finds Protestants prefer *religious production* or good works, in contrast with Catholics who prefer redistributive activities and charitycollection and allocation.

- Witness, for example, the use of "socialism" in the 2008 U.S. presidential election campaign to attack the economic policies of Democratic Party candidates.
- Kuran (2004, 19-28) and Novossyolov (1993) maintain that obligatory *zakat* mainly benefits those with political connections, not the poor or needy. Voluntary *zakat* contributions likewise benefit those with the necessary economic connections.
- In the fourth wave, no respondents from Algeria and approximately half of the respondents from Morocco were asked their religion or ethnic identity.
- We thank an anonymous reviewer for alerting us to this possibility.
- 6. We cannot run models with country dummies for a larger sample of countries because of the pattern of missing data, which is perfectly correlated by country (due to the fact that a number of questions were not asked in all countries).

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