

## **Islam and Redistribution: A Test of Competing Theories\***

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# Islam and Redistribution: A Test of Competing Theories

## *Abstract*

This paper tests two competing theories of the relationship between religious piety and redistributive preferences in the Muslim world. The first, drawn from Islamist political movements and Islamic scripture, holds that more pious Muslims should favor more redistributive economic policies. The second, drawn from the new political economy of religion and social insurance, holds that more pious individuals of any faith should oppose redistributive economic policies. Employing survey data from twenty-two countries, we find that there is no clear relationship between piety and redistributive preferences among Muslims. Consistent with the new political economy of religion, we show that more pious Muslims are less likely to favor government efforts to eliminate income inequality, but we also find that they are more likely to favor state enterprise ownership. The findings offer little evidence to suggest that either scriptural or organizational factors unique to Islam create distinct economic policy preferences in pious Muslims.

## **1. Introduction**

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 2006b). Motivating these studies are several casual observations about religion and political economy in advanced industrial democracies: 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 more frequently support conservative economic policy positions.

The theory and evidence in these studies, though, come overwhelmingly from Christians in the developed world. Scholars of the Muslim world have proposed very different perspectives of the relationship between religion and redistributive preferences. Dozens of studies have

documented how mass Muslim organizations capitalize on popular economic grievances to stress redistribution, income equalization, and economic reform. These arguments focus on two pathways: Islam's scriptural injunction that Muslims must contribute to redistributive tax schemes (*zakat*) to help the poor and unfortunate, and the role that Islamic social organizations play in galvanizing anti-incumbent support and providing a substitute for the state welfare apparatus where it exists. Islamic scriptural injunctions that mandate redistribution, and the apparently wide appeal of Islamic organizations as welfare organizations, each suggest that predictions about the link between piety and redistributive preferences drawn from recent work on the political economy of religion 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).

This paper uses individual-level survey data from the Muslim world—in concert with qualitative insights from countries as diverse as Algeria, Egypt, Iran, Turkey, Pakistan, 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 among Muslims, higher levels of religiosity correspond to lower levels of support for government efforts to minimize income inequality, but we also find that they have no effect on individuals' belief that governments should take responsibility for the poor. Only in the realm of state enterprise ownership—which measures economic statism rather than individual preferences over redistributive government policy—do we find that higher levels of religiosity are associated with increased demands for government intervention in the economy. Within individual countries, we find great variation in the extent to which piety is associated with redistributive

preferences. These findings provide little evidence to suggest that either scriptural or organizational factors unique to Islam create distinct economic policy preferences among the world's most pious Muslims, demonstrating that arguments derived from the political economy of religion in advanced industrial (Christian) economies are largely appropriate in the Muslim world. While our focus is exploring the effect of religiosity on 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 research in comparative politics that employs cross-national individual-level data to test the microfoundations of political economic theories. Prominent contributions in this literature include explorations of trade policy preferences (Scheve and Slaughter 2001), embedded liberalism (Hays et al. 2005), and government spending (Rehm 2009; Iversen and Soskice 2001). Individual-level studies of religion and political economy have largely focused on how political and economic development influences religiosity or religious choice (McCleary and Barro 2006b), or whether being a member of a particular religion influences beliefs such as interpersonal trust or thrift (see McCleary and Barro 2006a for a recent survey). Yet we identify below a large qualitative literature that argues that *piety among Muslims* affects specific economic policy preferences. Such arguments about the unique role that Islam plays in shaping Muslims' policy preferences are normally expressed at the national or regional level. Utilizing survey data from over twenty-four thousand respondents, from Morocco to Indonesia, we determine that there is little evidence to support these claims. Indeed, our findings point to broad parallels between pious Muslims and pious Christians in their views of economic policy.

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 redistributive demands in the developing world. We then describe our empirical strategy, distinguishing it from the small body of existing research on Islam and economic preferences. Attuned to concerns about construct validity when using survey responses to measure abstract concepts such as piety, we measure piety as a broad combination of beliefs related to religion, the indicators of which we treat as imperfect measures of an unobserved variable. The most common alternative measure of piety among Muslims—which uses the single of support for *shari'a* law—both unnecessarily restricts the empirical content of religion and severely truncates the availability of individual data from World Values Survey. Our empirical strategy accordingly takes into account both diverse ways in which piety may be manifested among Muslim survey respondents, and 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.

## **2. Islam and Redistribution**

The new social scientific literature on Islam focuses on macro-level outcomes such as the relationship between Islam and regime type (Hofmann 2004; Fish 2002; Said 2001; Huntington 1993; Lewis 1990) 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. In particular, scholars have largely ignored topics at the intersection of Islamic economics and politics, devoting scant attention to how religious beliefs 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 Muslims 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.

We can identify two bodies of literature that make competing predictions about how piety will affect Muslims' economic policy preferences. The first body of literature we term the *new political economy of religion*, which is largely grounded in the experience of Western societies. The mechanism linking economic policy preferences to religious piety is religion's ability to serve as a form of instrumental and psychological insurance to adherents. Several recent studies argue that more religious individuals are less likely to support government redistribution, and tend to rely on faith as a source of comfort in the face of adversity (Chen and Lind 2007, 2005; Scheve and Stasavage 2006a, b; Hungerman 2005; Gill and Lundsgaarde 2004). A particular stream of scholarship (i.e. Chen and Lind 2005) maintains that religious *participation* acts as a substitute for government redistribution through the informal risk-sharing 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 et al. (2007) show membership in religious congregations dampens income shocks across 5000 households in the U.S. Hungerman (2005) demonstrates a substitution effect between charitable contributions from the U.S. Presbyterian Church and state welfare spending. At the individual level, studies found that more religious individuals have less favorable attitudes

toward redistribution than non-religious persons, even exhibiting more tolerance for social inequality (Guiso et al. 2003; Alesina et al. 2001). Scheve and Stasavage (2006b) confirm that support for social spending is lower among religious individuals in a global sample. Other research reveals government welfare crowds out church participation and charitable provision (Gruber and Hungerman 2007; Gill and Lundsgaarde 2004) both by religious individuals and even private philanthropic organizations.<sup>1</sup>This ultimately manifests itself in a lowered preference by religious individuals for government welfare provision since the church and state are in competition with one another to provide social insurance as well as to capture the “hearts and minds” of the destitute. 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. Furthermore, believers may even perceive the state’s activity as unfairly crowding out an integral component of *religious production* (Iannaccone 1998): charitable activity.

In other studies (Dehejia et al. 2007; Scheve and Stasavage 2006b), religious *belief acts* as a form of psychological insurance against adversity, as well as a form of psychological assurance of one’s rightful place in the hereafter. Both social welfare policies and religious devotion are attractive at least in part because they are reassuring and comforting to individuals facing hardship. In this sense, religion and welfare are again potential substitutes and even competitors. 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 non-religious. Clark and Lelkes (2005) show that membership in religious organizations

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<sup>1</sup> See Huber and Stanig (2009) for a discussion of the alliance dynamics of the philanthropic rich and the religious poor.

diminishes the effect of unemployment on members' happiness relative to non-members in Europe. Dehejia et al. (2007) document a similar phenomenon in the US context. Furthermore, following the logic of Max Weber's "Protestant Ethic" thesis, religious individuals who put a premium on individualism and hard work might prefer the government refrain from income redistribution to avoid rewarding errant unbelievers. Certain religious denominations (Calvinism, etc.) encourage their followers to 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 in the afterlife and preventing the disassociation of work and reward (Bénabou and Tirole 2005; 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".<sup>2</sup>

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<sup>2</sup> Importantly, economic preferences across Christian denominations have not always been uniform. Studies have shown religious Catholics and Protestants exhibit different preferences for redistribution, an argument originally inspired by Max Weber. Arruñada (2004) cites Blum and Dudley (2001) and Becker (1981) to illustrate the different practices of altruism between the denominations. He finds Protestants prefer *religious production* or good works, in contrast with Catholics who prefer redistributive activities and charity-collection and allocation. Even among believers of the same denomination we encounter differing economic preferences across countries. Scandinavian countries host Protestants, yet the religious display opposing values on issues such as income redistribution and welfare provision relative to American Protestants (see Keersebergen and Manow 2007).

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), parties whose platforms are seen as less friendly to the poor than their competitors (see Chen and Lind 2005).<sup>3</sup>

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 of these reasons are rooted in the economic and political contexts surrounding piety and redistribution in advanced economies, and are not of direct interest to this paper. First, for citizens of the developed world, advanced welfare states may dampen individual concerns over redistributive policies. Insofar as welfare and social protections prevent individuals in developed nations from experiencing the extreme deprivation and hardship faced by the poorest citizens in the developing world, the issues of income redistribution and concern for the poor may just not be particularly salient among the most pious citizens of the developed world. Second, formal redistributive policies carry the taint of “communism” in many Western countries, and this association with an avowedly anti-religious political ideology may therefore make devoutly

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<sup>3</sup> Iannaccone (1998), however, argues that American religiosity is primarily concerned with theological, moral, and social issues which are independent of economic attitudes. He cites a number of authors demonstrating religious Americans tend to be less conservative than the mainstream when it comes specifically to the topic of aid to the poor or income redistribution (see e.g. Pyle 1993).

religious individuals unlikely to support parties that advocate in favor of redistributive policies.<sup>4</sup> Both of these contextual factors would suggest that in developing countries, more pious individuals—both Muslims and non-Muslims—are less likely to support redistributive policies.

The third reason why the association between piety and redistributive preferences may not hold in the Muslim world proceeds not from the economic and political contexts surrounding piety and redistribution in advanced Christian-majority countries, but from Islam itself. This 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 the Islamic redistribution thesis is true, then the findings underlying the new political religion are more limited than previously recognized. As none of the theoretical work in the new political economy of religion is explicitly limited to Christianity, this would comprise a significant challenge to the assumed generality of their theories.

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 state-run charitable giving (*zakat*), and the role of Islamic social organizations in anti-incumbent political movements in the developing world. We elucidate these two roles below.

### 2.1. *Zakat or Charitable Giving*

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<sup>4</sup> Witness, for example, the use of “socialism” in the 2008 US presidential election campaign to attack the redistributive economic policies of Barack Obama and other Democratic Party candidates.

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 in the form of a redistribution system called *zakat*. 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, 2:24:537). Further hadith by Al-Bukhari have the narrator Anas specifying the existence of *zakat* collectors appointed by Abu Bakr As-Siddiq, one of the Prophet's closest companions and the first of the *Rashidun* or righteously guided Caliphs (Al-Bukhari, 2:24:528, 2:24:530-31, 2:24:533-535). 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, 2:24:534)

The narrator Abu Humaid Al-Sa'idi also illustrates the organized and semi-official nature of collecting *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, 2:24:576)."

Another hadith narrated by Hadrat Baredah reports Muhammad stating, "The nation that withholds *zakat*, Allah afflicts famine on them." The Qur'an itself emphasizes the involvement of a state apparatus in alms collection in the following excerpt:

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 (622 AD), when under his jurisdiction *zakat* became obligatory and was largely collected and distributed through quasi-state institutions (al-Sheikh 1995:366-367 as cited in David and Robinson 2006:172). The system originally required wealthy Muslims donate 2.5 percent of their net worth to charitable causes ranging from poor relief to the emancipation of slaves, although today disputes exist about how to calculate *zakat* in a modern economy (Kuran 1995; 2004). The association of *zakat* with the state persists today. Six countries have formally established government-run *zakat* systems: the Yemen Arab Republic, Saudi Arabia, Malaysia, Libya, Pakistan, and the Sudan. Each has its own criteria for collection and disbursement. Regimes in each of these countries have linked their *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 (1995; 1993) 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>5</sup> Consequently, while scriptural

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<sup>5</sup> Kuran (1993) and Novossyolov (1993) maintain that rather than benefiting the poor or the needy, obligatory *zakat* (*zakat al Fitr*) mainly benefits those with political connections (such as

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, in fact, prefer allocating donations to private charities of their own choosing. Scott (1987) describes in detail the *zakat* evasion tactics of the peasantry in Kedah, Malaysia and their preference for voluntary instead of centralized *zakat*, with the locals increasingly calling the practice *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 Muslims world as a plausible third way between economic liberalism and socialism, and which may accordingly influence their perceptions of appropriate economic policy. 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 traditional Islamic theology. Alongside requiring the state to distribute *zakat* as a means of alleviating poverty, Islamic economics proscribes interest-based lending (*riba*), requires a similar commitment of the state to looking after the poor and conserving social justice, and demands that all economic decisions be considered through the lens of Islamic law and Islamic practices (Esposito 2003; Fuller 2003).

The motivations of the man who coined the term “Islamic economics,” the Pakistani economist

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those working for the *zakat* administration). Voluntary *zakat* contributions do not produce any better outcomes, benefitting instead those with the necessary economic connections (such as having a wealthy employer).

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.

## *2.2. Mobilization and the Political Economy of Islam*

Islamic social organizations are known for distributing much-needed public services and income in the form of employment opportunities where governments are too weak to coordinate service provision. 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 economic benefits within their respective countries. 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 2005:135-141). 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, which 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 not only satisfies the requirement of *zakat*, but also 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. Clark (2003) finds that Islamic non-governmental organizations in Egypt, Jordan, and Yemen effectively provide employment for jobless professionals. Kepel (1994), Singerman (1996), Wickham (2002), and Walsh (2003) all 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 even 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 these non-Arab Muslim countries, moreover, the private sector's relative independence from government allows it to gain traction as a legitimate political force that eschews demagoguery in its pursuit of power. In countries like Turkey and Malaysia, these Islamic political parties often seem decidedly middle class, so their interests may not lie with redistributing income as much as with economic liberalization (see Nasr 2005; 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 1997). Likewise, in its final years Indonesia's New Order regime embraced a moderate Muslim political platform, and in the past two decades Malaysia's dominant party, the United Malays National Organisation, has promoted a more conspicuously Islamic agenda. Yet while this turn toward Islam was accompanied in each country by a continued rhetorical emphasis on developmentalism and economic populism, the policies implemented by each regime remained on the whole liberal (Nasr 2005). Consequently, while Islamic organizations and parties may incorporate notions of income redistribution within their platforms and even engage in informal service provision, 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 2003; Sivan 2003; Abed 1999; Abootalebi 1995). 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,

wielding “a certain influence over intellectual life and over cultural mediators such as high school teachers and journalists” (Sivan 2003: 36). In liberal conceptions of Islam, modernity and the Islamic faith are reconcilable. Radical Islam, though, appeals to members of the newly urbanized lower class and lower-middle classes, who feel alienated from the current political system as a whole, and remains wed to policies aimed at redistribution. Egypt provides compelling evidence of this. Economic liberalization originally strengthened the moderate arm of the Muslim Brotherhood in Egypt and Jordan, yet also provided fundamentalists with ample opportunity to recruit in neighborhoods that fared poorly under the new policies (Ates 2005; Fuller 2003; Denouex 2002). It may also be the case that these Islamic organizations are channeling the economic and class-based discontents of their primary membership, in which case religiosity is not the driving factor behind 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 overwhelming support for a broad conception of the Islamic redistribution thesis. Yet their research suffers from several troubling 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. It is far from clear that all pious Muslims support *shari’a*, or that all supporters of *shari’a* are equally pious (or pious at all) in the traditional sense of the word. Michael Bratton’s (2003) study of Islamic piety in sub-Saharan Africa shows why. In Nigeria, Bratton 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 rest of the Muslim world, it certainly impugns the construct validity of equating support for *shari'a* with piety. There are other examples as well: Iran's government amendment the Iranian Constitution in 1989, empowering the government to disregard *shari'a* provisions in legislation and policy if they 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: this choice forces them to 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. As we show below, these data coverage and measurement issues have a dramatic impact on their findings.

### **3. Data and Research Design**

Ultimately, the link between piety and economic policy preferences is an empirical matter. To investigate this link, we use data from the fourth wave of the World Values Survey (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 over 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 three percent of the population identified itself as Muslim according to this definition, and then excluding Belgium as a historically Christian country whose Muslim population is composed primarily of recent immigrants. Our baseline 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>6</sup> Although we concentrate the bulk of our analysis on this sample, our sampling method does not drive our findings. We also report below substantively identical findings from analyses that expand the sample to include (1) all Muslim respondents from every country in all four waves, (2) all Muslim respondents from every country the fourth wave, and (3) when we add to our baseline sample the approximately 2,500 respondents from Morocco and Algeria whose religion and ethnic identity were not recorded in the WVS fourth wave.

Our independent variable of interest is *PIETY*. As we detail below, we assume that we cannot directly observe this variable, but that we can measure its correlates through a number of different survey questions. To measure our dependent variable, we searched the WVS for survey questions that dealt with individuals' views on redistributive economic policy preferences. A number of promising variables—asking individuals their solidarity with the unemployed, whether society should be “egalitarian” or “competitive,” whether income inequality should be eliminated, and similar topics—were not asked in the majority of Muslim countries, preventing us from using them. In the end, we chose to examine three survey questions for which responses are widely available and which 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 favor support government efforts to mitigate income inequality. The

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<sup>6</sup> In the fourth wave, no respondents from Algeria and approximately half of the respondents from Morocco were asked their religion or ethnic identity.

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. Responses range from 1 to 10, and we recode these responses so that 10 reflects the most support for government intervention, and 1 the least. 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 (*WELLBEING*, WVS question E037). Respondents are asked to rate the degree to which they support the view that government should take more responsibility for ensuring individuals' personal well-being, versus the view that individuals should themselves be responsible for their own well-being. We again recode these responses so that 10 reflects the most support for government responsibility, and 1 the least. This variable is another way to tap individual preferences over government economic policies, although it is not explicitly about redistribution and 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 (*ENTERPRISE*, WVS question E036). Similar to the previous question, respondents are asked to rate the degree to which they support the view that society should emphasize private rather than state ownership of large enterprises. Responses range from 1 to 10, and we again recode these responses so that 10 reflects the most support for state ownership, and 1 the least. 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 (see Hypotheses 3 and 4 below). 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*.

### *3.1. 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 for 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 for 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. This holds 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 stress redistribution in a number of instances, but 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.

### 3.2. *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 a related discussion of how to measure “fundamentalism”). For instance, some Muslims in the Middle East consider women's wearing of the veil to be required of all pious Muslims, while others in Africa and Southeast Asia believe that covering one's face is a personal choice that has no basis in Islam. 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. We accordingly reject the idea that piety is captured perfectly by simple behavioral indicators such as reported frequency of mosque attendance, or by simple articulated beliefs such as support for *shari'a*. Instead of choosing one measure of piety, we instead work with the maintained hypothesis that a number of measures of behaviors and preferences are likely to measure imperfectly an unobservable

concept, that of piety. In employing WVS data, 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 underlying concept of piety, while simultaneously using as much available data as possible to prevent missing data from influencing our findings.

We confront these challenges with a structural equation modeling (SEM) approach using LISREL (Jöreskog and Sörbom 2005). SEM offers two benefits over competing approaches. First, in contrast to alternative strategies such as creating an index of the measures of religiosity as an independent variable, SEM allows us to represent as completely as possible 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, rather than forcing us to ignore these valuable sources of information. 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. Our measure of piety allows there to exist multiple imperfect measures of piety, so that 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, first, that *PIETY* is a continuous unidimensional variable whose values across individuals are unknown. In SEM terminology, this is known as a *latent* variable. We then assume that we do observe some set of indicators that measure, albeit imperfectly, the latent variable. We choose ten variables with reasonably good coverage across individuals as potential measures of *PIETY*, and we include their precise wording in Table 1.

**\*\*\* Table 1 here \*\*\***

A criticism of the ten indicators included in Table 1 is that they include some indicators that are more properly viewed as indicators of cultural traditionalism than of religiosity or piety.<sup>7</sup> In the analysis below, we test the robustness of our findings using a “restricted” definition of piety that focuses exclusively on religious belief and practice. Table 1 indicates which variables we include in this restricted definition.

Because there are likely many individual-level determinants of preferences over government intervention in the economy, we are careful to test the impact of piety against other explanations for preferences for redistribution. We include a standard set of individual-level demographic and economic control variables in our models to accomplish this. These include variables capturing 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 [*CHILDREN*]). We assume that each of these control variables (as well as each dependent variable) is measured perfectly. We emphasize that this assumption is no different than the implicit assumption of no measurement error in any regression-based framework.

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<sup>7</sup> We thank an anonymous reviewer for alerting us to this possibility.

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.

$$\begin{aligned} \mathbf{y} &= \mathbf{\Gamma}(\mathbf{PIETY} + \mathbf{x}) + \boldsymbol{\zeta} \\ \mathbf{PIETY} &= \mathbf{\Lambda}_{\mathbf{PIETY}}\boldsymbol{\xi} + \boldsymbol{\delta} \end{aligned} \quad \text{Model 1}$$

$$\begin{aligned} \mathbf{y} &= \mathbf{B} \cdot \mathbf{PIETY} + \mathbf{\Gamma}_y \mathbf{x} + \boldsymbol{\zeta} \\ \mathbf{PIETY} &= \mathbf{\Lambda}_{\mathbf{PIETY}}\boldsymbol{\eta} + \mathbf{\Gamma}_{\mathbf{PIETY}} \mathbf{x} + \boldsymbol{\varepsilon} \end{aligned} \quad \text{Model 2}$$

In both models,  $\mathbf{x}$  are control variables (listed above),  $\mathbf{y} = (\mathbf{INEQUALITY}, \mathbf{WELLBEING}, \mathbf{ENTERPRISE})$ , and  $\boldsymbol{\zeta}$  is the equation error. In Model 1,  $\boldsymbol{\xi}$  are our indicators of  $\mathbf{PIETY}$ , and  $\boldsymbol{\delta}$  is the error associated with the measurement of each indicator. In Model 2, by contrast,  $\boldsymbol{\eta}$  are our indicators of  $\mathbf{PIETY}$ , and  $\boldsymbol{\varepsilon}$  is the error associated with each indicator. The strength of the relationship between each observed indicator and the unobserved latent variable is captured through its “factor loading,” represented as  $\mathbf{\Lambda}_{\mathbf{PIETY}}$  in both Model 1 and Model 2. Models 1 and 2 differ substantively in their treatment of  $\mathbf{PIETY}$ . In Model 1,  $\mathbf{PIETY}$  is an independent variable, and the effects of other independent variables  $\mathbf{x}$  operate independently of it. In Model 2, however, we allow  $\mathbf{PIETY}$  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.

To facilitate interpretation, these models appear as path diagrams in Figure 1.

**\*\*\* Figure 1 here \*\*\***

As the figure shows, in both Model 1 and Model 2 we jointly estimate the relationships between each of our independent variables and our three dependent variables. The arrows linking  $\mathbf{PIETY}$  to its ten observed indicators show that we model  $\mathbf{PIETY}$  as an unobserved latent variable, and

the arrows linking *PIETY* and other independent variables to *INEQUALITY*, *WELLBEING*, and *ENTEPRISE* correspond to relations between our independent and dependent variables. All control variables appear in both models as determinants of economic policy preferences. The path diagram for Model 2, though, shows how the SEM framework allows economic variables to affect both piety and redistributive preferences at the same time that we estimate how piety relates to redistributive 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 countries. We also investigate the issue of country-level differences in economic policy preferences below.

#### 4. Results

In presenting our results, we include both the structural parameters and the factor loadings. The results for the factor loadings appear in Table 2. Models 1 and 2 are as described above, employing all ten indicators of piety. Model 3 and 4 are identical, but use 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).

\*\*\* **Table 2 here** \*\*\*

The results in Table 2 indicate that in Models 1 and 2 all variables except for *MULTIPLE WIVES ACCEPTABLE* load positively and significantly onto an underlying dimension of piety, with *t*-values corresponding to significance at  $p < .001$  in one-tailed tests. *MULTIPLE WIVES ACCEPTABLE*, which measures the extent to which individuals support husbands taking 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 all 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.

**\*\*\* Table 3 here \*\*\***

We interpret these results as more closely supporting 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 thesis, and results favor the former (Hypothesis 1A). Among Muslims in the Muslim world, higher levels of piety are associated with lower levels of support for government efforts to eliminate income inequality. The evidence from all four models thus indicates that piety among Muslims in the developing world 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 *WELLBEING* and *ENTERPRISE*, though, the picture becomes 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 here 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 economic statism, in the Muslim world secularism is associated with pro-market ideologies. A second explanation may stem from the increasing penetration of public jobs by sympathizers of Islamic groups such as the Muslim Brotherhood. The civil service sectors in Egypt and Turkey are two areas in which this appears to be taking place (see Denouex 1993). 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.

Our findings are not driven how we constructed our sample of Muslim respondents. We demonstrate this by expanding our sample in three ways, as shown in Table 4.

**\*\*\* Table 4 here \*\*\***

We first add all of the respondents from Morocco and Algeria who were not asked their religion. If we assume that all are Muslims and add them to the sample, we gain 2,534 respondents, and our findings remain substantively identical. Next, we check if our results hold when we include all Muslim respondents in the fourth wave of the WVS. We gain only 174 respondents by doing

this, and not surprisingly our results remain unchanged. Next, we expand the sample to include all Muslim respondents in all four waves of the survey. Doing so adds 9,386 respondents to our sample but once again does not change our results.

Finally, the final row of Table 4 shows the consequences of following Davis and Robinson's (2006) method of measuring piety via support for *shari'a*. Davis and Robinson (2006) find that more pious individuals are 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. Following our method on their sample of seven countries, we only find consistent support for the last of these relationships. This is wholly inconsistent with our earlier results. We are more confident in our earlier results, however, than we are in the results from the sample used by Davis and Robinson (2006), for we believe that our anomalous results in this set of analyses are driven by the particular choice of countries and respondents necessitated by a narrow focus on support for *shari'a* as a measure of piety. That is, Davis and Robinson's results are driven both by their restrictive definition of piety and by the sample of Muslim countries to which this measurement decision restricts their analysis.

As an additional robustness check, we have also followed standard practice and created a simple index of *PIETY*, using the first principal component of our ten indicators. We then estimated a standard series of regressions corresponding to Model 1 above, using this new index as an independent variable and ignoring the problem of measurement error.<sup>8</sup> Our results remain unchanged, and are available upon request.

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<sup>8</sup> We confront the problem of missing data using multiple imputation (King et al. 2001).

Confident that our findings are driven not by our definition of piety, nor our sample of Muslims, nor our SEM approach, in Table 5, 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 there are not one or two outlier countries whose results drive the findings in Tables 3 and 4. As some questions are not asked in particular countries, countries vary in the observed variables used to construct the latent measure of religiosity. Due to high levels of within-country 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 to respondents 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.

**\*\*\* Table 5 here \*\*\***

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, 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. There does not appear to be a clear pattern that distinguishes countries where findings from the cross-sectional analysis hold and countries where they do not, as Figure 2 shows by plotting the estimated coefficient for *PIETY* on *INEQUALITY* from Model 1 against measure of economic development, democracy, and corruption.<sup>9</sup>

**\*\*\* Figure 2 here \*\*\***

Even including Nigeria, which appears to be something of an outlier, the estimated coefficient for piety and each of these variables are uncorrelated at conventional levels of significance ( $p > .3$  for all three). Figure 2 also shows estimates by region. The mean effects by region do not

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<sup>9</sup> Economic development is the natural log of real GDP per capita, averaged from 1995-2004, from Heston et al. (2006). Democracy is the *POLITY2* score, averaged from 1995-2007, from Marshall and Jagers (2007). Corruption is the Transparency International Corruption Perceptions Index, averaged from 1995-2008, from Transparency International (various years). All are measured from 1995 until the most recent year available in the source.

differ from one another at conventional levels of significance (with the Middle East/North Africa as a reference category,  $p > .1$  for all comparisons). However, 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 5 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>10</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 some support for the new political economy of religion, and very little support for the Islamic redistribution thesis in any of its variants. Results from individual countries indicate that while there is important cross-national variation that should form the basis of future research, the overall finding that piety is

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<sup>10</sup> 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).

associated with decreasing support for government efforts to eliminate income inequality is not driven by the inclusion of a few outlier countries.

## **5. Discussion and Conclusion**

Two new literatures offer competing predictions about how piety translates to economic policy preferences in the Muslim world. While existing research has commented on the relationship between Islam and economic policy, few scholars have actually explored whether the 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 piety 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, what evidence we do find is consistent with scholarship of Christian-majority countries, where piety is associated with lower support for redistributive economic policies. Perhaps most importantly, though, we find substantial cross-national 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 paper 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; Lewis 2003; Huntington 1993). 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 differ 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 (some fundamentalist, some less so) 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 deep 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. Understanding these mechanisms is an avenue for future research.

Furthermore, our results show that pious Muslims are more likely to prefer state ownership of enterprises: while pious Muslims do not support economic statism as defined by

*redistribution*, more pious Muslims do support statist policies as defined by *ownership*. We hasten to add that our final statistical model did not find that this support persisted once country-level differences are taken into account, but the overall patterns we find are nevertheless worthy of further study. Note that even in Turkey, where the moderate Islamist Justice and Development Party identifies as a center-right, pro-business party, more pious Muslims are more likely to favor state enterprise ownership than their secular counterparts. One possible interpretation is that religion is a substitute for other forms of insurance against negative income shocks, but respondents do not view religion as capable of setting the national parameters within which individuals pursue their economic interests. In this way, support for state enterprises among the most pious is a form of economic nationalism, one consistent with the developmentalist impulses of Islamic economics, even as opposition to redistribution stems from the compensatory benefits of religious belief and/or participation. Further research will help to clarify the distinctions between preferences over the state's management of the broader economy versus the state's responsibility for each individual's well-being.

To conclude, we find very 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 whose study using survey data requires sophisticated analytical techniques. Our findings indicate that the link between piety and economic policy preferences in the Muslim world is also 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.

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**Table 1: Indicators of Religiosity<sup>a</sup>**

WVS Code	Variable Name	Question Text	Values	Percent Missing	Restricted Definition?
a006	<i>RELIGION IS IMPORTANT</i>	Please say, for each of the following, how important it is in your life. <i>Religion</i>	1 not at all ... 4 very important	1.02	Yes
a040	<i>CHILDREN'S IMPORTANT</i>	<i>RELIGION</i> 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. <i>Religious faith</i>	0 not mentioned 1 mentioned	0.02	Yes
f028	<i>FREQUENCY OF MOSQUE ATTENDANCE</i>	Apart from weddings, funerals and christenings, about how often do you attend religious services these days?	1 never ... 8 more than once a week	1.08	Yes
f034	<i>RELIGIOUS PERSON</i>	Independently of whether you go to church or not, would you say you are? ...	1 a convinced atheist 2 not a religious person 3 a religious person	7.40	Yes
f066	<i>FREQUENCY OF PRAYER</i>	How often do you pray to God outside of religious services?	1 never ... 7 every day	49.66	Yes
d067	<i>VEIL</i>	In your opinion, how important are each of the following traits in a woman? <i>Wearing a veil in public places</i>	1 not important at all ... 5 very important	28.79	No
d070	<i>WOMAN'S IMPORTANT</i>	<i>RELIGION</i> In your opinion, how important are each of the following traits in a woman? <i>Being religious</i>	1 not important at all ... 5 very important	23.25	No
d076	<i>MULTIPLE ACCEPTABLE</i>	<i>WIVES</i> It is acceptable for a man to have more than one wife	1 strongly disagree ... 5 strongly agree	24.08	No
d077	<i>WIFE MUST OBEY</i>	A wife must always obey her husband	1 strongly disagree ... 5 strongly agree	23.45	No
f111	<i>IMPLEMENT ONLY SHARIA</i>	How much do you agree or disagree with each of the following statement: <i>We should implement only the laws of the shari'a</i>	1 strongly disagree ... 5 strongly agree	53.76	No

<sup>a</sup> 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).

**Table 2: Factor Loadings<sup>b</sup>**

<i>Indicator</i>	<i>Factor Loading</i>			
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>
<i>RELIGION IS IMPORTANT</i>	1.00 --	1.00 --	1.00 --	1.00 --
<i>CHILDREN'S RELIGION IMPORTANT</i>	0.62*** (0.09)	0.62*** (0.09)	0.65*** (0.08)	0.65*** (0.08)
<i>FREQUENCY OF MOSQUE ATTENDANCE</i>	1.85*** (0.49)	1.85*** (0.49)	2.15*** (0.42)	2.15*** (0.42)
<i>RELIGIOUS PERSON</i>	0.36*** (0.06)	0.36*** (0.06)	0.41*** (0.06)	0.41*** (0.06)
<i>FREQUENCY OF PRAYER</i>	2.19*** (0.49)	2.19*** (0.49)	2.54*** (0.50)	2.54*** (0.50)
<i>VEIL</i>	2.29*** (0.33)	2.29*** (0.33)	--	--
<i>WOMAN'S RELIGION IMPORTANT</i>	1.55*** (0.33)	1.55*** (0.33)	--	--
<i>MULTIPLE WIVES ACCEPTABLE</i>	0.32* (0.21)	0.32* (0.21)	--	--
<i>WIFE MUST OBEY</i>	0.87*** (0.15)	0.87*** (0.15)	--	--
<i>IMPLEMENT ONLY SHARIA</i>	1.36*** (0.26)	1.36*** (0.26)	--	--

<sup>b</sup> Cells contain factor loadings and standard errors. \*  $p < .1$ , \*\*\*  $p < .01$ . One-tailed tests.

**Table 3: Estimation Results<sup>c</sup>**

	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>	<i>PIETY</i>
<b><i>Independent Variables</i></b>	<b><i>Model 1</i></b>			<b><i>Model 2</i></b>			
<i>PIETY</i>	-1.34** (0.61)	<0.01 (0.21)	1.04*** (0.28)	-1.34** (0.61)	<0.01 (0.21)	1.04*** (0.28)	--
<i>MALE</i>	-0.05 (0.08)	0.17 (0.14)	0.41*** (0.07)	-0.05 (0.08)	0.17 (0.14)	0.41*** (0.07)	-0.04** (0.02)
<i>AGE</i>	<0.01 (0.01)	<0.01 (<0.01)	-0.01 (<0.00)	<0.01 (0.01)	<0.01 (<0.01)	-0.01 (0.00)	> -0.01*** (<0.01)
<i>CHILDREN</i>	<0.01 (0.05)	0.01 (0.03)	0.09*** (0.03)	<0.01 (0.05)	0.01 (0.03)	0.09*** (0.03)	0.04*** (0.01)
<i>EDUCATION</i>	-0.06 (0.06)	-0.09** (0.04)	-0.04 (0.05)	-0.06 (0.06)	-0.09** (0.04)	-0.04 (0.05)	-0.03** (0.01)
<i>CLASS</i>	0.06 (0.06)	-0.25*** (0.04)	-0.15** (0.07)	0.06 (0.06)	-0.25*** (0.04)	-0.15** (0.07)	-0.01 (0.02)
<i>INCOME</i>	-0.26** (0.08)	-0.07** (0.03)	-0.01 (0.05)	-0.26** (0.08)	-0.07** (0.03)	-0.01 (0.05)	0.02 (0.01)
<i>EMPLOYED</i>	-0.11 (0.11)	0.04 (0.10)	-0.07 (0.10)	-0.11 (0.11)	0.04 (0.10)	-0.07 (0.10)	-0.01 (0.02)
<b><i>Independent Variables</i></b>	<b><i>Model 3</i></b>			<b><i>Model 4</i></b>			
<i>PIETY</i>	-1.17** (0.58)	-0.01 (0.22)	0.89*** (0.28)	-1.17** (0.58)	-0.01 (0.22)	0.89*** (0.28)	--
<i>MALE</i>	-0.02 (0.08)	0.17 (0.14)	0.39*** (0.08)	-0.02 (0.08)	0.17 (0.14)	0.39*** (0.08)	-0.02 (0.02)
<i>AGE</i>	<0.01 (0.01)	<0.01 (<0.01)	-0.01* (0.01)	<0.01 (0.01)	<0.01 (<0.01)	-0.01* (0.01)	> -.01* (<0.01)
<i>CHILDREN</i>	-0.01 (0.05)	0.01 (0.03)	0.10*** (0.03)	-0.01 (0.05)	0.01 (0.03)	0.10*** (0.03)	0.03*** (0.01)
<i>EDUCATION</i>	-0.05 (0.06)	-0.09** (0.04)	-0.05 (0.05)	-0.05 (0.06)	-0.09** (0.04)	-0.05 (0.05)	-0.03** (0.01)
<i>CLASS</i>	0.07 (0.06)	-0.25*** (0.04)	-0.16** (0.07)	0.07 (0.06)	-0.25*** (0.04)	-0.16** (0.07)	> -.01 (0.02)
<i>INCOME</i>	-0.27** (0.09)	-0.07** (0.03)	<0.01 (0.05)	-0.27** (0.09)	-0.07** (0.03)	<0.01 (0.05)	0.01 (0.01)
<i>EMPLOYED</i>	-0.10 (0.12)	0.04 (0.10)	-0.08 (0.10)	-0.10 (0.12)	0.04 (0.10)	-0.08 (0.10)	<0.01 (0.02)

<sup>c</sup> Cells contain parameter estimates and standard errors. \* p < .1, \*\* p < .05, \*\*\* p < .01. Two-tailed tests.

**Table 4: Estimates for PIETY, Alternative Samples<sup>d</sup>**

	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>
<b>Sample</b>	<b>Model 1</b>			<b>Model 2</b>		
Original sample, Table 3 <i>N</i> = 24,281	-1.34** (0.61)	<0.01 (0.21)	1.04*** (0.28)	-1.34** (0.61)	<0.01 (0.21)	1.04*** (0.28)
Muslims, extended definition <i>N</i> = 26,815	-1.46** (0.64)	0.02 (0.23)	1.04*** (0.29)	-1.46** (0.64)	0.02 (0.23)	1.04*** (0.29)
All Muslims, wave four <i>N</i> = 24,455	-1.33** (0.60)	0.02 (0.21)	1.03*** (0.27)	-1.33** (0.60)	0.02 (0.21)	1.03*** (0.27)
All Muslims, all waves <i>N</i> = 33,667	-1.07** (0.45)	-0.10 (0.15)	0.75*** (0.22)	-1.07** (0.45)	-0.10 (0.15)	0.75*** (0.22)
ASR (2006) <i>N</i> = 10,308	-0.91 (1.15)	2.42** (1.16)	2.88** (1.15)	-0.91 (1.15)	2.42** (1.16)	2.88** (1.15)
<b>Sample</b>	<b>Model 3</b>			<b>Model 4</b>		
Original sample, Table 3 <i>N</i> = 24,281	-1.17** (0.58)	-0.01 (0.22)	0.89*** (0.28)	-1.17** (0.58)	-0.01 (0.22)	0.89*** (0.28)
Muslims, extended definition <i>N</i> = 26,815	-1.24** (0.59)	0.01 (0.25)	0.90*** (0.30)	-1.24** (0.59)	0.01 (0.25)	0.90*** (0.30)
All Muslims, wave four <i>N</i> = 24,455	-1.15** (0.57)	0.01 (0.22)	0.88*** (0.28)	-1.15** (0.57)	0.01 (0.22)	0.88*** (0.28)
All Muslims, all waves <i>N</i> = 33,667	-0.97** (0.42)	-0.12 (0.15)	0.65*** (0.24)	-0.97** (0.42)	-0.12 (0.15)	0.65*** (0.24)
ASR (2006) <i>N</i> = 10,308	0.26 (2.71)	3.25*** (0.88)	2.44 (2.48)	0.26 (2.71)	3.25*** (0.88)	2.44 (2.48)

<sup>d</sup>“Extended definition” codes all Algerians and Moroccans (for whom religion is missing in WVS wave 4) as Muslims. “All Muslims” includes

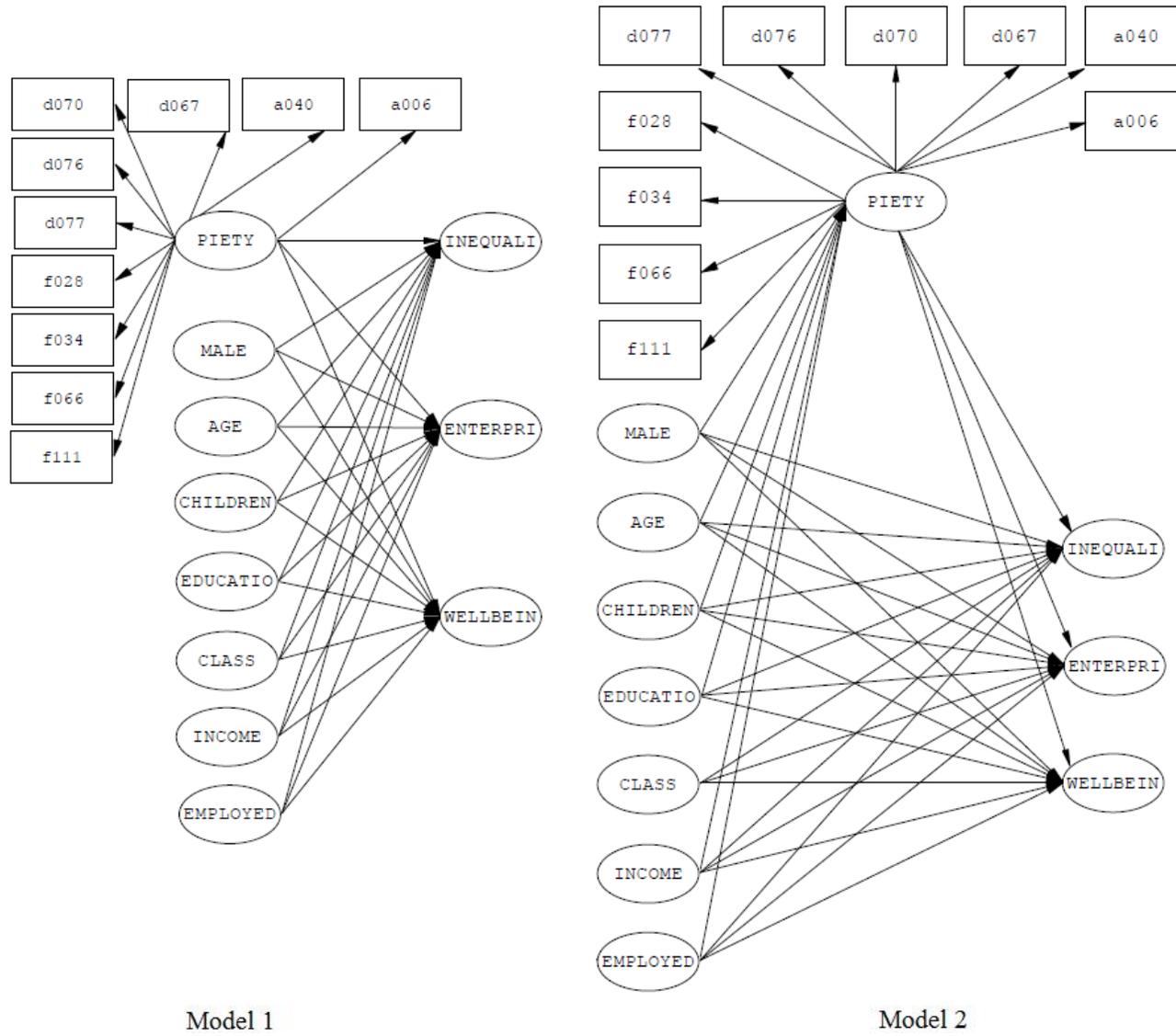
every Muslim respondent in every country. Cells contain parameter estimates and standard errors. “ASR (2006)” refers to the sample of seven countries included in Davis and Robinson (2006). \*  $p < .1$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . Two-tailed tests.

**Table 5: Individual Country Estimates<sup>c</sup>**

<i>Country</i>	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>	<i>Country</i>	<i>INEQUALITY</i>	<i>WELLBEING</i>	<i>ENTERPRISE</i>
<i>ALBANIA</i>	0.33** (0.14)	0.18 (0.16)	0.12 (0.14)	<i>MOROCCO</i>	2.97* (1.56)	8.43*** (2.07)	9.62*** (2.22)
<i>BANGLADESH</i>	-2.13*** (0.67)	5.20*** (0.87)	6.27*** (0.89)	<i>NIGERIA</i>	-8.81** (3.87)	-4.77 (3.29)	--
<i>BOSNIA AND HERZEGOVINA</i>	0.28 (0.18)	-0.63*** (0.20)	-0.21 (0.18)	<i>PAKISTAN</i>	0.72*** (0.17)	0.49*** (0.13)	0.32** (0.15)
<i>BULGARIA</i>	-1.26** (0.52)	0.62 (0.54)	--	<i>PHILIPPINES</i>	1.12 (0.95)	-8.24** (3.98)	5.34** (2.58)
<i>EGYPT</i>	-4.22*** (1.09)	-1.70 (1.33)	-4.17*** (1.43)	<i>RUSSIA</i>	-1.72 (1.43)	3.44** (1.57)	1.20 (1.04)
<i>INDIA</i>	-1.85 (1.40)	-1.74 (1.42)	-3.97** (1.61)	<i>SAUDI ARABIA</i>	-1.02 (0.72)	-0.53 (0.80)	2.08*** (0.79)
<i>INDONESIA</i>	0.90*** (0.21)	1.76*** (0.32)	-0.26 (0.23)	<i>SERBIA AND MONTENEGRO</i>	0.08 (0.50)	-0.09 (0.39)	-0.52 (0.40)
<i>IRAN</i>	0.14 (0.17)	-0.24 (0.19)	0.82*** (0.19)	<i>SINGAPORE</i>	-1.40 (1.19)	-1.55 (1.29)	-0.29 (1.20)
<i>IRAQ</i>	-0.35 (0.56)	0.76 (0.51)	2.42*** (0.48)	<i>SOUTH AFRICA</i>	-3.00 (2.13)	-1.48 (2.01)	-0.80 (1.97)
<i>JORDAN</i>	-0.58 (1.34)	-0.34 (1.41)	1.24 (1.52)	<i>TANZANIA</i>	-2.33 (1.80)	-1.54 (1.40)	-0.79 (1.72)
<i>KYRGYZSTAN</i>	-0.65** (0.30)	0.13 (0.32)	0.86*** (0.32)	<i>TURKEY</i>	-0.68*** (0.17)	-0.60*** (0.17)	-0.28* (0.16)
<i>MACEDONIA</i>	1.46 (0.89)	-0.41 (0.96)	0.43 (0.93)	<i>UGANDA</i>	-1.44 (1.10)	-2.11** (1.02)	0.24 (0.97)
<i>MAJORITY MUSLIM ONLY</i>	-2.12*** (0.77)	0.11 (0.35)	1.20*** (0.40)	<i>MAJORITY MUSLIM ONLY, FIXED EFFECTS</i>	-1.00** (0.47)	-0.30 (0.43)	0.26 (0.33)

<sup>c</sup> Cells contain parameter estimates and standard errors. \* p < .1, \*\* p < .05, \*\*\* p < .01. Two-tailed tests.

**Figure 1:** Path Diagrams of Models 1 and 2



**Figure 2: Country Estimates and Contextual Variables**

