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**SOCIO-POLITICAL ATTITUDES ACROSS THE WORLD:
TO WHAT EXTENT ARE THEY AFFECTED
BY ONE'S RELIGION, ITS IMPORTANCE,
MAJORITY STATUS AND RELATIVE INCOME?**

**Jeffrey B. Nugent, Malgorzata Switek
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Abstract

This paper relates four aspects of an individual's religion (the religion itself, its importance to the individual, and their interactions with each other, whether or not that religion is the dominant one in the country and the individual's relative income) to six important socio-political attitudes. Two of these attitudes can be regarded as socio-economic objectives (the responsibilities that government should assume, and adherence to the norm of not cheating on taxes). The other four may be considered as four different political means of achieving these objectives (willingness to engage in political activity, to defend freedom of speech, to "give people more say" and to maintain order). The primary objective is to shed light on the political economy and governance issues in countries like those of the Middle East and North Africa (MENA) where religious, economic and political differences are strongly interrelated, and already giving rise to social tension and in some cases political instability. The analysis is focused on testing three different but rather general hypotheses concerning the relationships between the four aspects of an individual's religious affiliation and the six attitudes under investigation. It makes use of data on over 215,000 individuals in 90 countries from Waves 2-6 of the World Value Surveys (WVS). Once the various interactions between religious affiliation and related characteristics are taken into consideration, the relationships between the various different religious affiliations and each of the six attitudes under study are shown to vary in ways that cast doubt on the validity of existing stereotypes of these relations. The results highlight a number of patterns in these relationships that may provide useful insights into the direction that socio-economic policies are likely to take in the years ahead in different MENA countries.

JEL Classifications: D63, H4, Z12, Z13

Keywords: Religions, Socio-Economic Attitudes, Political Attitudes

ملخص

تتعلق هذه الورقة بأربعة جوانب للدين للفرد (الدين نفسه، وأهميتهما للفرد، وتفاعلاتها مع بعضها البعض، سواء كان أو لم يكن الدين هو المهيمن في البلاد ودخل النسبي للفرد) وعلاقتها بستة مواقف اجتماعية وسياسية. ويمكن اعتبار اثنين من هذه المواقف كأهداف اجتماعية واقتصادية (المسؤوليات التي ينبغي أن تتولاها الحكومة، والانضمام إلى قاعدة عدم الغش في الضرائب). الأربعة الأخرى التي يمكن اعتبارها أربع وسائل سياسية مختلفة لتحقيق هذه الأهداف هي (الرغبة في الانخراط في النشاط السياسي، للدفاع عن حرية التعبير، إلى إعطاء الناس مساحة أكبر للتعبير " وللحفاظ على النظام). الهدف الرئيسي هو تسليط الضوء على قضايا الاقتصاد والإدارة السياسية في دول مثل تلك الواقعة في الشرق الأوسط وشمال أفريقيا (MENA) حيث الاختلافات الدينية والاقتصادية والسياسية مترابطة بقوة، وبالفعل تؤدي إلى التوتر الاجتماعي، وفي بعض الحالات عدم الاستقرار السياسي. ويركز التحليل على اختبار ثلاث فرضيات مختلفة بشأن العلاقات بين الجوانب الأربعة من الانتماء الديني للفرد وستة مواقف قيد التحقيق. نقوم باستخدام البيانات على أكثر من 215,000 شخص في 90 بلدا من موجات 2-6 من استطلاعات القيمة العالمية (WVS). تؤخذ التفاعلات المختلفة بين الانتماء الديني والخصائص ذات الصلة في الاعتبار، وتظهر العلاقات بين مختلف الانتماءات الدينية المختلفة وكل من المواقف قيد الدراسة تختلف في الطرق التي تشكك في صحة الصور النمطية القائمة على هذه العلاقات. تسليط الضوء على نتائج عدد من الأنماط في هذه العلاقات يمكن أن توفر معلومات مفيدة في الاتجاه الذي من المرجح أن يتخذ في السنوات المقبلة في دول المنطقة المختلفة.

1. Introduction

There is a long history of studies arguing that religion and associated characteristics, such as strength of conviction, particular beliefs and religiosity, matter for economic, social and political development and good governance. Most such studies, however, have been limited to making such comparisons between countries at the aggregate level or between religions in a single country. Only in recent years have studies emerged that combine several countries and religions and in a few cases even at different points of time. Yet, even among these, most focus on a single dimension of attitudes such as entrepreneurship, willingness to invest, family values or preferences for a specific form of governance (especially democracy).

The objective of this paper is to examine the relationships between each of six carefully selected socio-political attitudes of the individual with the following individual characteristics: religious affiliation, its importance at the individual level, relative income and the interactions between them and between whether or not that religion is that of the majority of the people in that country. The six attitudinal variables are chosen because of their deemed relevance to the Middle East (broadly defined to include North Africa and Central Asia) where religion and political life are closely related and where citizens are struggling to find ways to achieve a kind of socio-economic and political development that is more inclusive and participatory than in the past. Specifically, the attitudinal variables chosen for study are: (1) the extent to which the government should assume more responsibility to assure that everyone is taken care of, (2) adherence to the norm that it is never justified to cheat on taxes, (3) the perceived importance of engaging in specific political actions (demonstrations and petitions), (4) the importance of freedom of speech, (5) “giving people more say”, and (6) maintaining order. The latter four of these can be seen as attitudes toward the use of alternative social and political means of achieving the first two, which are norms and objectives. Not surprisingly, these are issues under debate and in some cases being fought over in much of the Middle East at present. As such, attempts to understand the determinants of these attitudes may improve our understanding of the current as well as future dynamics of social and economic stability and growth in the region.

Our ability to investigate these relationships across countries and over time is facilitated by the fact that identical questions on each of these attitudes were asked in at least five rounds of the World Value Surveys (WVS) across a large number of countries between 1980 and 2013. Our analysis is thus based on the responses to common questions from over 210,000 individuals in 90 countries. To help assure the relevance of the data used to the Middle East (broadly defined), 19 of the 90 countries whose surveys are used are either Muslim or located in North Africa, the Middle East or Central Asia. The data also afford the opportunity to control for a large number of individual and household characteristics. We also make use of a limited number of relevant country-level variables and country and year fixed effects to control for unobservables. For comparability purposes, in estimating the relationships between the various religious measures and the many control variables, on the one hand, and each of the four attitudinal measures on the other hand, we will use almost identical specifications for each dependent variable.

To be reasonably comprehensive in our comparisons across different religions and the aforementioned interactions, we distinguish between the following ten different religions: four Christian denominations (Catholics, Protestants, Evangelical and Orthodox), Jewish, Muslim, Buddhist, Hindu, Other Asian, and Other (including no religion). In each case, we also control for whether the individual’s religion is the dominant one in the country, the importance of religion in the individual’s life, relative income and the interactions among these.

The analysis is focused on testing each component of three broad hypotheses relating the individual's religion, the importance of religion, the individual's relative income, and relations between these, to the aforementioned six different socio-political attitudes. To a substantial extent the hypotheses are supported. At the same time, however, we find ample evidence from the effects of interaction terms suggesting that the effects of specific religious affiliations on the different attitudes vary substantially, depending on importance of religion to the individual, whether or not the religion is shared by a majority of the country's population and one's income relative to that of others. These results demonstrate the weakness in stereotyped views of the relation between different religions and socio-economic attitudes.

The remainder of the paper is organized as follows. Section II contains a review of relevant literature and identifies the hypotheses to be tested. Section III identifies the data sources and measures, describes the empirical estimation strategy, and presents descriptive statistics. Section IV presents the results and Section V provides our conclusions including suggestions for policy and further research.

2. Review of Relevant Literature and Some Hypotheses

Researchers have long tried to link religion and religious attitudes to various aspects of human behavior and economic phenomena including mental health, literacy, attitudes favorable to suicide (Durkheim 1897), crime (Evans et al 1995), the role of women in society, governance systems, and political and economic development (Weber 1905, de Tocqueville 2000, Rodinson 1974). Indeed, a number of these contributions have been fundamental to the development of the disciplines of economics, sociology and political science. Some of them have identified links coming through literacy (e.g., Bottacini and Eckstein 2005 for the Jewish religion, and Becker and Woessmann 2009 for Protestantism). Others such as Kuran (2011), Kuran and Singh (2013) have emphasized the different legal systems used by the people of these different religions and the long-term consequences thereof for attitudes to equity and investment.¹ Max Weber and many others have emphasized the ways in which the beliefs, social norms, family, and civic values that accompany different religions may affect attitudes and behavior. While some have argued that these religious influences on societal attitudes and values have changed over time with the appearance of new religious leaders and changing relations between church and state,² Huntington (1996) and others have argued that these influences are sufficiently enduring to be inducing a clash of civilizations.

Yet, for lack of appropriate historical data, none of these scholars has been able to measure the extent to which adherents of each different religion actually live up to these norms in practice and translate these values into specific socio-economic and political attitudes and actions. Although attempts to link religion to social (especially economic) outcomes through the effects of attitude formation have proliferated since the time of Max Weber, many such demonstrations have been based on either single country cross-religion analyses or on cross-country aggregate analyses in which each country is characterized by a dominant religion. The single country analyses quite naturally limit the ability to generalize, in part because the differences in attitudes across religions

¹ Indeed, Kuran 2011 explained ways in which Islamic law was advanced relative to Jewish, Roman and other legal systems in the first several centuries after prophet Mohamed, thereby helping to explain growth and development in the Middle East and North Africa where Islam dominated, but by 1800 had fallen way behind Western European legal systems, thereby contributing to the economic backwardness of that same region relative to Europe.

² For example, Chaney (2008) attributed the decline in the Muslim civilization and Muslim countries to rising intolerance for others and hence declining cooperation among groups, trade and specialization.

may derive more from history than from religion. On the other hand, the cross-country analyses typically are unable to distinguish the effects of differences in religion from those of other unmeasured differences across countries.

Beginning in the late 1980s, several data sets and methodological breakthroughs have come along to allow individual level data on both religion and socio-political and economic attitudes to be related to one another. Since the United States has long been recognized as a country where religious affiliations and religiosity were unusually strong, enduring, and diverse, a considerable number of the recent analyses have been based on US data. Examples include Hertell and Hughes (1987), Hoffman and Miller (1997), Layman (1997) and the Pew Forum (2008) in studies relating religious affiliation to attitudes and behavior ranging from family values, school prayer, and economic attitudes to voting patterns, many of which show substantial differences even between those of different Christian sects.

At the international level much of the attention has been given to differences in attitudes to democracy and capitalism across different religions. Between the 1970s and 1990s many analysts expressed the view that, with both the importance of religion declining and secularism rising, the correlations between different religions and either democracy or capitalism would be weakening. Beginning in the 1990s, however, there has reportedly been a rise in religious fundamentalism, especially among Christians and Muslims. Several scholars including Kedouri (1994) and Huntington (1996) began to point to Islam as the religion most opposed to both democracy and the attitudes complementary to it. Kedourie (1994) went so far as to conclude that the institutions and values associated with democracy are “profoundly alien to the Muslim political tradition.” Certain Muslim traditions, such as the antipathy to usury, interest, and women working outside the household, have also long been deemed factors unfavorable to capitalist development.

Not surprisingly, claims such as these were very controversial and have given rise to many additional comparisons of attitudes to democracy and capitalism between Muslims and non-Muslims. For example, Rodinson (1974) offered a serious challenge to the thesis that Islamic religion is harmful to capitalist development. Using the World Values Survey (WVS), Norris and Inglehart (2005) found essentially no difference in attitudes toward democracy between Western and Muslim countries. Similarly, but focusing more specifically on the Arab world, Tessler (2002, 2004) made use of the WVS and other opinion surveys for Egypt, Jordan and the Occupied Palestinian territories to examine attitudes concerning democracy, and other social and political issues such as the extent of support for negotiations with Israel or relations with the US. These studies revealed relatively little difference between Muslims and others. Yuchtman-Ya’ar and Alkalav (2010), however, argued that the results of some of these studies comparing Muslims with non-Muslims could be misleading because of their failure to make use of a “multi-level analysis.” Only with such an analysis would one be able to identify whether or not the effects of individual religious affiliation would arise independent of whether or not the individual Muslim was embedded in Muslim culture. After replicating the Norris and Inglehart (2005) findings of insignificant differences in preferences for democracy between Muslims and Westerners without multi-level analysis, once they used their preferred multilevel analysis (i.e., with a hierarchical linear model), Yuchtman-Ya’ar and Alkalav (2010) found some significant differences in socio-

political attitudes between these two religious groups but almost invariably attributable to the greater religiosity of Muslims in each country, not to Muslim religion per se.³

Although focused more narrowly on economic attitudes, Guiso et al (2003) provided an important methodological advance in making use of pooled country surveys for 66 countries from Waves 1 to 3 of the World Value Surveys (WVS) covering the years 1981 to 1997 by controlling for fixed effects. They used these measures to estimate the effects of religion on 26 attitudes deemed favorable to productivity and economic growth. Not surprisingly, because of the large number of different attitudes to be explained, there were sizeable differences in the results among some of them.

Despite the very important methodological advance in the Guiso et al (2003) study and the richness of its results, because there were so many component indicators in each attitudinal group, as the authors admitted, they were unable to clearly identify the religion associated with the attitudes most favorable to economic growth. What *was* clear from the results was the varying effect of different aspects of religious affiliation, such as strength of affiliation, and majority religion in country, clearly demonstrating the need to distinguish between these different but interrelated influences. Similar in spirit to Guiso et al (2003) is the study by Barro and McCleary (2003) undertaken at about the same time and again using the WVS.⁴ These authors also examined the effect of religion on economic growth, but in their case ignoring the link through attitudes. Economic growth was found to be positively and directly affected by basic religious beliefs (in heaven and hell) but negatively affected by religiosity (measured by church attendance), and not particularly related to any specific religion. An innovation in this study was the identification of instrumental variables for use in dealing with potential endogeneity in church attendance. These were the declaration by the state of a particular religion as the state religion and state regulation of religion. Yet, by bypassing attitudes, the study did not contribute to the analysis of the effects of religion and/or religiosity on socio-political or economic attitudes.

In a recent paper, Diwan (2013) makes use of micro-level responses (primarily) in one Muslim country (Egypt)⁵ in an attempt to examine some of the factors relevant to the political and economic dynamics of that country. While this was another single country study in which the Muslim religion was the dominant one, it was based on responses from two different waves of the WVS survey. Somewhat closer to the present study, it focused on the priority that different individuals would place on several different objectives including preferences for distributional equity, democracy and Political Islam.

There are also a number of studies examining the effects of religion on happiness or subjective well-being. Several of these (e.g., Clark and Lelkes (2005), Popova (2010), Mookerjee and Beron (2005), and Graham and Crown (2013)), further demonstrate the need to control for macro-level conditions such as income levels in examining the effects religious type variables on attitudes. For

³ The differences were in (a) the legitimacy attributed to an elected secular leader, (b) participation in democratic processes, and (c) belief in gender equality. As a result, they concluded that the negative effect of Muslim religion on certain (but not all) democratic values cannot be fully appreciated without considering the full cultural influence of a Muslim living in a Muslim society in which there is a high degree of religiosity. Yet, since the surveys used were one per country and all at roughly the same time, their multilevel analysis is basically a random effects model that does not allow the analyst to control for other non-observed differences between countries.

⁴ This study, however, also made use of information on religion from the International Social Survey Program (ISSP) and the World Christian Encyclopedia.

⁵ Actually, he also used corresponding data for Iran, Jordan and Morocco but focused on Egypt because only in the case of Egypt did he find significant changes between the two years.

this reason, in this study we make use of an even broader set of individual and macro-level controls but apply them to the explanation of the six socio-economic and political attitudes identified above rather than to either subjective well-being or behavioral effects.

Despite (a) the long histories of the evolution of the world's leading religions and the many factors which may have affected the influences of individual religions within as well as across countries on a whole range of socio-economic and political attitudes, and (b) the importance of numerous other determinants of these same attitudes, we focus the analysis on a few relatively general hypotheses. Since almost all religions have some common characteristics such as faith, and principles of moral behavior (often derived from scriptures), we start with a general hypothesis concerning the importance of religion in general on each of the six social-political attitudes relating the individual and the state. This is hypothesis H1 below. Then, for a salient non-religious influence on these same socio-economic and political attitudes, in H2 below we focus on the effects of one measure of material well-being, namely, the individual's relative income (a proxy for wealth). A third general hypothesis (H3 below) concerns the possibility that the effects of the different religious affiliations would be likely to vary according to whether the individual lives in a country where his (her) religion is that of the majority in the country.

H1: Since most religions are somewhat hierarchical, have existed in most countries for long periods of time and (with certain exceptions such as radical Catholicism) favor maintenance of the status quo, most religious affiliations and the importance of religion would be seen as opposed to political activism, free speech, and "give people more say" attitudes but at the same time buttress the social norm of "no cheat on taxes" and the importance of "maintaining order." Because the state and religion (through charity in giving) could be seen as alternative means of seeking redistributive goals, we hypothesize that Importance of Religion and most religious affiliations (relative to no religion) would be (a) negatively related to the attitudes that government should accept more responsibility for caring for its citizens (Government Responsibility) political activity, free speech and giving people more say but (b) positively related to honesty (and hence adherence to the "No Cheat on Taxes" norm) and the importance of "maintaining order." Since some religions, like Catholicism, are more hierarchical than others, and some might be inclined to act in a more complementary way to government, the magnitudes of some of these effects and even perhaps their direction might be expected to vary somewhat from one religion to another.

H2: The greater the relative wealth or income (Income Quartile) of the individual, the lower would be his (her) attitudes to (a) Government Responsibility and (b) No Cheat on Taxes (because neither of these would be in their self-interest) and, the higher would be attitudes to the Importance of Maintaining Order, and (perhaps because their wealth might allow them to exert greater influence) also with Political Activity, Give People More Say and the Importance of Free Speech.

H3: We also hypothesize that the effects of any particular religion could well be affected by whether or not their own religion is that of the majority (Majority), the expected effects differing from one attitude to another. For example, individuals affiliated with religion A but living in a country where that religion is that of the majority would be likely to feel that both government and religion would be quite synchronized on the extent to which people's needs are being taken care of. (a) Hence, they would be less likely to respond that the Government should assume more responsibility for satisfying people's needs. (b) Similarly, there would be less reason to place importance on "Give People More Say." (c) Yet, by the same token, it would be more likely that individuals would adhere to the "No Cheat on Taxes" norm and also attach greater importance to "Maintaining Order." The strength of these effects, however, might differ somewhat from one

religion to another so that the magnitude and even the direction of these interaction effects on a given attitude might vary across religions.

3. Data Description and Estimation Procedure

The purpose of the present section is to identify the data, model and estimation procedure to be used in testing the above hypotheses.

Thanks to the well demonstrated ability of the WVS to provide detailed information on (1) religious affiliation, importance of religion and other related measures identified below; (2) the importance attached to each of the six quite different individual attitudes under investigation (Government Responsibilities, No Cheating on Taxes, Political Activity, Importance of Freedom of Speech; Give People More Say and Maintain Order) and (3) a large number of individual level characteristics in a large number of countries for at least two points in time, it is the WVS that serves as our primary data source. The precise definitions of each measure used are given in Table 1.

As indicated in Table 1, Government Responsibility is an index ranging from 1 to 10 based on the extent to which the respondent agrees with the statement “The government should take more responsibility to ensure that everyone is provided for.” Similarly, No Cheating on Taxes is based on an index ranging from 1-10 measuring the degree to which the individual identifies with the social norm: “It is never justified to cheat on taxes.” For our analysis, however, because of the extremely high concentration of responses with scores of 10, we convert this index into a bivariate variable taking on the value 1 if the person stated that he or she believes it is never justifiable to cheat on taxes, and 0 otherwise.⁶ We deem both measures to serve as proxies for a socio-political attitudes attaching importance to the usefulness of government for achieving equity through either expenditures or taxes and increasing the likelihood of a more inclusive type of development than in the past.

Political Activity is measured as the sum of the responses to the following two questions “I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things (scored as 3), whether you might do it (scored as 2), or would never, under any circumstances, do it (scored as 1): first, attending lawful demonstrations, and second signing a petition.” Using the sum of responses to these two questions implies that the person would be assigned a minimum value of 2 for never, under any circumstance, attending either a lawful demonstration or signing a petition, and a maximum value of 6 for actually having participated in both types of political activity. We believe this to be a good indicator of the individual's willingness to use common but legal means of addressing desires and grievances to the government as well as of reaching out to, and coordinating with, other citizens.

The Importance of Freedom of Speech, Giving People More Say and Maintaining Order are 0-2 indexes based on the relative importance that the individual attaches to each one of these objectives as well as to another excluded objective “Fighting Inflation.”⁷ A score of 2 is assigned if that objective was ranked highest among the four, a 1 if it was ranked as second most important and a score of 0 if that objective was not mentioned among the top two. As such, these latter four

⁶ In an appendix available (A1) on request we present results using alternative more continuous indicators, which show the results to be very robust to such changes.

⁷ . The Fighting Inflation objective was ignored because this one was important only in the relatively few countries with high inflation. Once again, results are available on request for the inclusion of this additional objective.

measures capture the relative importance assigned by the individual to each of these different means of achieving their socio-economic objectives.

As noted above, we have chosen to use Importance of Religion over some of the alternatives (like church attendance, whether or not one considers him/herself a religious person, or belief in God/heaven/hell/life after death) for the following reasons: (1) its greater coverage across countries and waves of the WVS; (2) its higher response rate (within country and wave), which mitigates the need to deal with concerns for selection bias; (3) its lower degree of skewness, which limits the ability to capture variation across the sample or sub-sample; and (4) its greater ease of interpretation as personal religious attachment (rather than frequency of participation, which might reflect merely closer proximity to a religious facility and other circumstantial factors which would be difficult to control for in the survey data).

As indicated in Table 1, Importance of Religion is measured on a 1-4 scale based on responses to the following question: “How important is religion in your life? Would you say it is very important, rather important, not very important, or not at all important?” For the purpose of our study, we re-scaled this measure so that a score of 1 corresponds to “not at all important,” and a 4 to “very important.”

Given that the religious orientations of individual sects within Christianity are known to vary substantially across countries, as shown in Table 1, we distinguish between four Christian denominations (Catholic, Protestant, Evangelical and Orthodox). The other six religious affiliations distinguished are Jewish, Muslim, Buddhist, Hindu, Other Asian and Other/No Religion. In all specification of the model specified below, the Other/No religion category is omitted so that this category serves as the comparison group.

To assess the effects of specific religious affiliations and the importance of religion on political attitudes and to distinguish these from measured as well as unmeasured country characteristics, we use the model described by equation (1) below to explain the dependent variable (Y) – corresponding to each of the six attitudes identified above in terms of (a) the main variables of interest: bivariate variables distinguishing a person’s religious affiliation (R), the aforementioned Importance of religion (I), and three interaction terms between a person’s religious affiliation (R) and a dummy for whether or not the individual’s religion is the dominant one in the country (D), Importance of Religion (I), and the individual’s relative income quartile (IncQ), (b) vectors of control variables for individual (X) and country (Z) level characteristics, and (c) country and time (wave) fixed effects to control for unobserved features specific to a country or survey date.

$$Y_{ijt} = \beta_1 R_{it} + \beta_2 (R_{it} * D_j) + \beta_3 (R_{it} * I_{it}) + \beta_4 (R_{it} * IncQ_{it}) + \beta_5 I_{it} + \beta_6 X_{it} + \beta_7 Z_{jt} + \alpha_j + w_t + u_{ijt} \quad (1)$$

where the subscript i refers to the individual, j to country, and t to year. The country and wave fixed effects are captured by α_j and w_t respectively, and u_{ijt} is the error term.

From the 100 countries for which WVS data used in estimating equation (1) were available (generally from at least two different waves), we eliminated the countries and waves for which the sample coverage was not comparable.⁸ This left us with the 90 countries listed in Appendix Table A3. The number of observations is the same in all regressions, regardless of the dependent variable

⁸For example, due to a problem with oversampling of respondents in the low income categories in the fifth wave for Colombia, Colombia was dropped from the sample. Observations from the second wave for Nigeria were also excluded because this wave was carried out only in urban areas with greater literacy and education than in other waves and countries, thus creating sampling bias (Easterlin and Sawangfa 2010).

used. This is because only individuals for whom information on all political attitudes was obtained are included to maintain homogeneity of the sample used throughout the analysis.

On the individual level, the control variables used represent the socio-demographic characteristics deemed most likely to affect political attitudes, including Age (with a square term allowing non-linearity in its effect), Gender (male), Marital Status (cohabiting, separated, divorced or widowed, and single), Employment Status (part-time, self-employment, retired, housewife, student, unemployed and other), and the Income Quartile (the quartiles aggregated from the original self-reported deciles in such a way as to make the distributions in each country across the quartiles relatively equal.⁹ Most importantly, each regression also controls for the main explanatory variables, that is, dummies identifying a person's religious affiliation according to the 10 different categories identified above¹⁰, three interaction terms of these dummies with whether or not the individual's religion is the majority religion in his or her country (D), importance of religion (I) and income quartile (IncQ), and the 1-4 index for Importance of Religion (I) described above¹¹. To be coded as the "majority" religion in a country, those reporting that religion have to constitute both (a) a plurality of all respondents in that country and (b) at least 30% of all the respondents in that country.

At the country level, we include six macroeconomic control variables: the level of GDP per capita (PPP adjusted at 2005 prices) and the percentage change in per capita GDP between the preceding year and the survey year to reflect business cycle influences, the share of government expenditures devoted to education and health, the business income tax rate, and indexes for Civil Liberties and Press Freedom. The main source used to obtain both GDP variables were Version 6.3 and 7.1 of the Penn World Tables (PWT).¹² Further details on the GDP values and the exact definitions of all the variables are given in Table 1. The sources of the remaining control variables are World Development Indicators, and Freedom House, respectively.

Appendix Table A3 provides the breakdown of the sample countries as a whole into individual religious affiliation as well as the identity of the majority or dominant religion in the country. The country's major religion was identified as "None" when there was no single religion with as much as 30% having such affiliation.

Descriptive statistics on all variables used in the analysis are presented in Table 2. Notice that on average, the two sociopolitical attitude variables reflecting social values (Government

⁹ In view of recent literature pointing out that the self-classification into deciles in the WVS results in distributions that are skewed (Haggard et al 2013), in this study we have adjusted the distributions so that each quartile represents approximately one fourth of the sample of respondents.

¹⁰ Observations with missing values for religion were included in the other/no religion category due to the likelihood that a person not responding to the religion question is simply not religious.

¹¹ Following Guiso et al (2003) we also identified a few cases in which the distributions by religion in the survey seemed grossly out of line with those based primarily on census information utilized in the US CIA Factbook. In contrast to Guiso et al (2003), however, who argued that religious upbringing would be preferable as a control for religion than importance of religion because it would not have been a choice variable for the interviewed adult and thus less vulnerable to endogeneity, we prefer Importance of Religion. This was because we believe that the slightly weaker vulnerability of religious upbringing to endogeneity bias is more than offset by its considerably smaller relevance to current socioeconomic and political attitudes given the large percentages of people who report changes in their religion between the time of upbringing until adulthood identified by the Pew Forum (2008) and others.

¹² The GDP series from the PWT was complemented with information from the WDI when PWT values were not available. In matching the date of the GDP per capita change to the political attitudes, we matched the dates of the GDP, not with the actual survey dates, but rather with those for which they are most likely to affect the political attitudes. That is, surveys conducted in January-April of a given year were matched with the GDP values of the previous year, the surveys from May-August to an average of the values from the present and previous years, and the surveys from September-December to the values of the present year.

Responsibility and No Cheating on Taxes) receive mean scores well over the midpoint on the scale as does the Importance of Maintaining Order in Nation. On the other hand, all three measures reflecting interest in greater political engagement (Political Activity, Importance of Giving People More Say and Importance of Freedom of Speech) receive mean scores below the mid-points of these indexes. As shown in Table A2, among the religions, individuals identifying themselves as Catholics and Other/No Religion constitute the two largest groups followed by Muslims and Protestants, and the mean of Importance of Religion is slightly over 3 on its 1-4 scale, while as shown in Table A2 the average of this variable is highest for Muslim, followed by Evangelical, Hindu, and Jewish, with Other Asian and Other/No Religion at the bottom. Of the macro-economic variables, not surprisingly Table 2 shows that the change in GDP per capita reflects the greatest variance but there is also substantial variation in Tax Rates, Press Freedom and Civil Liberties. The mean age of respondents is a little over 41, but with a range of 15 to 99. Almost 60% are married, just under 50% are male, 40.1% are employed full time and 13.5% are retired.

4. Empirical Results

Since, as indicated above, the scales used to measure the six different dependent variables vary considerably (1-10 for Government Responsibility, 0-1 for No Cheat on Taxes 2-6 for Political Activity and 0-2 for the remaining three such variables), we have employed several different estimation methods, including Ordered Probit, Probit and OLS regressions. To save on space, for ease of interpretation, to facilitate comparability of the results across the tables, and because the Probit and Ordered Probit estimates were generally quite similar to the OLS estimates, only the OLS estimates are presented here. As noted above, these are all obtained by applying equation (1) to waves 2-6 of the WVS data for our 90 country sample with over 215,000 observations.

There are two tables (Tables 3 and 4), showing the relations among each of the important variables of interest relevant to the three hypotheses. The first of these (Table 3) includes only the Importance of Religion, Income Quartile and the individual religious affiliations, but not the interactions among the religious affiliation dummies and I, IncQ and D that feature in equation (1) and the hypotheses under consideration. Table 4, on the other hand, is similar but includes all the interaction terms as well. Then, there is a third table (Table 5) showing the relationships between each of the six dependent variables and each of the individual and country-level control variables. Naturally, the results akin to Table 5 would vary depending on whether these variable are added to the narrow specification in Table 3 (without the extra interaction terms) or with them as in Table 4. Yet, since the coefficients of these various control variables were without exception almost invariant between the two specifications, again in the interest of space we include in Table 5 only the results of the fuller specification.

Before presenting our findings, it is important to acknowledge that our results *do not demonstrate causality; the relations are only associational*. Nevertheless, attempts have been made to mitigate the extent of endogeneity in the explanatory variables by using lagged variables, aggregates in which the individual is excluded, and factors that are either completely or partially exogenous to the individual such as gender, age, and the country's majority religion. Moreover, since for most of the countries in the sample we have at least two different annual surveys, we make much more use of changes over time than in the majority of existing studies.¹³

¹³Although we are not able to make use of suitable instrumental variables for the different religious measures, this may not be a serious issue given that quite a few of the countries in our sample are the same as those of Popova (2010) which did find suitable instruments but then found the effects of the religious variables (in that case on well-being) to be very similar between IV and OLS estimation.

We begin our discussion of the results of Table 3 with the tests for our general hypotheses H1 concerning the effects on all six attitudinal variables of the Importance of Religion and the individual religious affiliations and then those concerning relative income (Income Quartile) as in H2 above. Since the parameter estimates for these variables are given in two of the rows closest to the bottom of the table, we direct the reader's attention first to the entries in these rows across the different columns. Consistent with H1, Importance of Religion is shown to be positively related to No Cheat on Taxes and the Importance of Maintaining Order, but negatively related to Political Activity Importance of Free Speech and Giving People More Say. Something of a surprise is its marginally significant positive relation with Government Responsibility. Consistent with all elements of H2, Income Quartile is shown to have negative effects on Government Responsibility and No Cheat on Taxes but positive ones on Political Activity, Maintaining Order, Importance of Free Speech and Giving People More Say. As expected, the direction of the relations between the individual religious affiliations vary somewhat but the vast majority of such relations are generally consistent with the expected effects of Importance of Religion as in H1. Among the exceptions are the positive effects of Orthodox and Jewish religious affiliations on Government Responsibility and their negative effects on No Cheat on Taxes. The only other exceptions are the negative effects of both Buddhist and Other Asian Religious affiliations on No Cheat on Taxes.

Turning then to the effects of these same variables based on the full specification including the various interaction terms in Table 4, it can be seen that the effects of these variable are qualitatively at least very similar, especially for Importance of Religion and Income Quartile. The only exceptions in these cases are (1) that the somewhat surprising positive effect of Importance of Religion on Government Responsibility is no longer significant once the extra interactions are included and (2) that the positive effect of Income Quartile on Maintain Order is no longer statistically significant.

With respect to variations in the effect of Importance of Religion across religions, in most cases the effects of its interaction with the individual religious affiliations on the individual attitudes are either of the same sign as Importance of Religion by itself or sufficiently small in magnitude as to not change the direction of its net effect. A few exceptions are the following: (1) the large negative effect of the interaction with Hindu on Government Responsibility (column 1), (2) the positive effects of the interactions of Importance of Religion with both Protestant and Buddhist on Importance of Free Speech (column 4), (3) the positive effects of its interactions with Evangelical, Jewish, and Buddhist on Give People More Say (column 5) and (4) the negative effects of its interactions with Jewish, Buddhist and Hindu (Column 6). On the other hand, the interaction terms also identify some cases of exceptionally strong re-enforcing effects. Some examples include the strong positive effects of interaction effects between Importance of Religion and all four Christian religious affiliations on No Cheat on Taxes, the negative effects of Importance of Religion interactions with Jewish and Orthodox religious affiliations on Political Activity and of that with Jewish religion also on Freedom of Speech. Considering also that Muslims are also the religious group that attaches the greatest importance to Religion (from Table A 1), it is important to point out that the interactions of Importance of Religion with the Muslim dummy demonstrate well above-average positive effects on No Cheat on Taxes, Government Responsibility, and Give People More Say, the latter seeming to go against the stereotyped impression that Muslims who take their religion seriously are inherently less progressive and democratic in their values.

With respect to variations across religions in the effect of Income Quartile, once again there are few cases in which the effect of the interactions terms are large enough and of opposite direction

to the direct effect of Income Quartile as to change the net direction of the effect. For No Cheat on Taxes there are two exceptions in which the positive interaction terms are large enough to more than offset the direct negative influence of Income Quartile. These are Evangelical and Buddhist. For Political Activity, Other Asian religion is the single exception to the positive direct effect. For Importance of Free Speech, there are two such exceptions to its direct positive effect, namely Buddhist and Other Asian. For Give People More Say there is again but one exception in which the direct positive effect is more than offset by a negative and significant interaction effect, namely, Protestant. For Maintain Order, the only case of a large negative interaction term effect is that for Catholic, perhaps indicating the prominence of progressives and radicals in several Latin American countries. With the interaction effects with Income Quartile included, one can also identify several cases in which these interaction effects strongly re-enforce the direct effect of Income Quartile. For example, Catholics, Orthodox and Muslims in the higher income quartiles all have well above average positive effects on Give People More Say while Protestants tend to have especially high evaluations of Maintain Order and Jews especially high negative views about No Cheat on Taxes.

Even the few cases of exceptions in which the interaction effects of either Importance of Religion or Income Quartile with the individual religions are of the opposite sign to the direct effects of these variables and statistically significant, they are in fact tiny in absolute terms and in no cases sufficiently large to lead to a net effect that is of the opposite sign and statistically significant. Hence, these interactions at most eliminate the significance of the direct effect but never lead to a significant effect of the opposite sign. Therefore, these results do nothing to undermine the aforementioned support for H1 and H2, though as expected they do show some variation in the strength of these hypotheses across the individual religions.

What is really new and different about the results from Table 4 vis-à-vis Table 3 are the effects of the interactions of the individual religious affiliations with dummy variables for cases in which the individual religion is that of a majority in the country. While such an interaction term cannot be introduced for Jewish religion since there is but one country (Israel) where this religion is that of a majority of survey respondents, for all other religions the effects of the interaction terms with this dummy are statistically significant on many of the six socio-political attitudes under study. This is true in at least five of the six attitudes for each of the following religions: Catholics, Protestant, and Orthodox, and in four of the six attitudes in the case of Other Asian religions. Once again, there are cases in which the interaction effect re-enforces the effect of that religious affiliation by itself but others in which the effect is of opposite sign.

In particular, consistent with H3a individual Evangelicals, Hindus, Muslims and Other Asian religions are significantly less likely to rate Government Responsibility highly when their religion is the dominant one in the country. For none of the religions was the religion-Majority Religion interaction term positive and significant. Similarly, consistent with H3b, three of the religion-Majority Religion interaction terms (Catholics, Orthodox and Other Asian) have negative and significant influences on Give People More Say and there is no case of one being positive and significant. Finally, consistent with H3c religion-specific interaction terms with Majority Religion have significant positive influences on No Cheat on Taxes in three cases (Catholics, Protestants and Hindus) and on Maintain Order in four cases (Catholics, Protestants, Orthodox and Other Asian) without a single case in which one of the other interaction terms has a negative influence. For the other two attitudes (Political Activity and Importance of Free Speech), the effects of these interaction terms are more mixed, with some positive and some negative.

Given the large number of statistically significant and often quantitatively quite large coefficients of the various interaction terms, a natural question to ask is: “To what extent has the inclusion of these interaction terms affected the estimates of the effects of the individual religious affiliation variables shown in Table 3”? This can be determined by comparing the parameter estimates of these religion dummy variables in Table 3 with the corresponding estimates in Table 4. While there are quite a few examples in which the magnitudes of the significant coefficients vary after adding the whole set of interaction terms as in Table 4, there are relatively few cases in which the directions of the effects change significantly between the two tables. But, there are at least a few cases where even the direction of the effects differs between the two tables. For each socio-political attitude we call attention to at least one such case.

In particular, for Government Responsibility, the coefficient of the Hindu religion dummy changed from -0.145 in Table 3 to +0.783 in Table 4. From the interaction terms with the Hindu dummy in Table 4, it can be seen that the negative effects of Hindu on Government Responsibility is being picked up by the significant negative effects of its interaction with Importance of Religion and Hindu Majority Religion. An interpretation of this is that the initial negative direct influence of Hinduism on Government Responsibility in Table 3 is largely limited to those for whom religion is deemed important and/or are located in a Hindu majority country. In the case of No Cheat on Taxes, where the coefficient of Evangelical changes from positive in Table 3 to negative in Table 4, it appears that the original positive influence seems to be confined to those for whom religion is important and who are in the high income quartiles. After controlling for those factors, Evangelical religious affiliation seems to have a direct negative influence. In the case of Political Activity, there is a significant difference in the dummy variables for Buddhist religion between the two tables, positive but not significant in Table 3 but negative and significant in Table 4. In this case, some of the positive influence from Table 3 is being picked up in Table 4 by the positive and significant coefficients of the Buddhist interactions with Importance of Religion and the Buddhist majority dummy. In the case of Free Speech, the Muslim dummy changes from negative and significant in Table 3 to positive and significant in Table 4, the negative effect being captured in Table 4 by the negative interaction with Income Quartile. In the case of Give People More Say, the coefficient of the Jewish Dummy variable changes from positive but not significant in Table 3 to negative and highly significant in Table 4. In this case, the positive effects seem to be confined to those for whom their religion is very important. Finally in the case of the attitude Maintain Order, the coefficient of Hindu changes from negative but not statistically significant in Table 3 to positive and significant in Table 4. Much of the negative influence of Hindu religion identified in Table 3 seems in Table 4 to be limited to those deeming their Hindu religion to be very important.

Some other results from Table 3 which may be of interest are the estimated effects of the various country-level controls, such as the share of Government Expenditures in GDP (EXP Share), the corporate income tax rate, and indexes of Civil Liberties and Press Freedom. As expected from column (1), the higher the share of Government Expenditures in GDP, the less reason individuals would have to believe that the Government should assume greater responsibility for its people (Government Responsibility). Somewhat relatedly, this variable has significant negative effects on Political Activity and on the objective of Maintain Order. The tax rate was expected to have a negative effect on the No Cheat on Taxes norm. The estimated effect of this variable in Column (2) is negative, but also is not statistically significant. Somewhat relatedly perhaps are the positive effects of Tax Rate on Political Activity, Importance of Free Speech, and Government Responsibility. Civil liberties seem to be positively related to Government Responsibility and

Importance of Free Speech, somewhat more surprising would seem to be the relationships between several of the attitudes and Press Freedom, especially its negative relation with Government Responsibility, Political Activity, and Importance of Free Speech. Perhaps Freedom of Press is seen as a substitute for some of these other objectives.

In the interest of space, what were excluded from both Tables 3 and 4 are the effect of the individual controls on the six attitudes under study. Table 5 presents the estimates of these obtained from the model in Table 3. The corresponding results from Table 4 are omitted in the interest of space, in large part because they are almost identical to those in Table 5.

Among the individual level controls, as might be expected, up to a certain age level at least, age has a positive effect on all these attitudes except Maintain Order. The one surprise is its negative effect on Freedom of Speech, which could indicate that young people are more anxious to get socio-political and economic changes without waiting for the longer term influence of free speech to come into play. Single, cohabiting and separated, divorced or widowed individuals generally rate Government Responsibility, the Importance of Free Speech and Give People More Say more highly than others but assign lower scores to No Cheat on Taxes and Maintain Order. Males tend to assign low importance to Government Responsibility and are less likely to adhere to the No Cheat on Taxes norm but rate all the other attitudinal factors more highly. Retired people align themselves with the Government Responsibility, No Cheat on Taxes and Maintain Order objectives but not with Political Activity, Free Speech or Give People More Say. Housewives seem to be similar in their attitudes to the retired except that they are less likely to adhere to the No Cheat on Taxes norm. Those members of the labor force with less secure positions (i.e., unemployed, those working part time and “other”), tend to assign high values to Government Responsibility but low ones to No Cheat on Taxes, Political Activity, Freedom of Speech and Maintain Order. The self-employed are a little different in that, while they assign low values to No Cheat, Political Activity, and Give People More Say, they also assign low ratings to Government Responsibility. Students, by contrast, assign higher scores to Political Activity, Free Speech, and Give People More Say but low ones to Maintain Order. Most of these findings are as expected, but in any case serve to underscore the significance of differences in each of the six different sociopolitical attitudes across age, marital status, occupational and other groups

5. Conclusions

This study has focused on some important and interrelated socio-economic and political attitudes that have been insufficiently studied in other studies and which would seem to be very relevant to the current situation of countries, such as those of the Middle East, whose populations would seem to be going through political change and are demanding socio-economic and political development that is more inclusive and participatory than that which has been experienced in the past. It has also examined a broader set of individual religious affiliations and their interactions with the importance of religion, whether or not that religion is that of a majority in the country and the individual's relative income, and other control variables than most existing studies. By drawing on WVS surveys with identical questions and coding systems for some 90 countries over as many as five different waves, the study also makes use of a larger data set (with over 210,000 observations drawn from a larger number of different countries) than has been used in most existing studies.

In Section IV we have provided evidence showing considerable empirical support for many of the elements of the hypotheses H1-H3.

For example, with respect to H1 the results demonstrate that, regardless of the specific religion, individuals who attach more importance to their religion tend to assign less importance to Political Activity, Free Speech and Give People More Say but more importance to the No Cheat on Taxes norm and Maintaining Order. The weakest link between Importance of Religion and a specific attitude is Government Responsibility. While because religion and government might well be expected to be seen as alternative vehicles (or substitutes) for achieving socio-economic and political objectives, the relationship was instead found to be positive, though at best (in Table 3) of only marginal significance. Yet, as we argued, the different religions might well differ in the extent to which they operate as complements to or substitutes for government efforts and this may also differ across countries. Government agencies and institutions of the individual's religion would seem to be more closely aligned with each other when that individual's religion is that of the majority since that individual would be likely to have convenient access to both, but would in practice rely on one more than the other. Evidence in support of this explanation is provided by the fact that all but one of the Individual Religion-Majority Religion interaction variables is found to have a negative and significant effect on Government Responsibility. This negative effect of the interaction term is especially large for Evangelicals. The lone case of where that interaction term effect on Government Responsibility is positive is for Protestants for whom the direct effect of Protestant by itself is negative and comparatively large in absolute terms. Another factor lying behind observed differences in the impacts of the different individual religion influences on some of the same attitudes, like Government Responsibility and Maintain Order, would be differences in the degree of hierarchy between the religions. Catholics and Orthodox would seem to be more hierarchical than most of the other religions, perhaps helping to explain why in each such case both the religious affiliation dummy and its interaction with majority religion have positive and significant effects on Maintain Order and significant negative effects on Give People More Say.

Then, with respect to H2 and the role of Income Quartile and its interactions with the different religious affiliation dummies, the results of Table IV tend to be very supportive of their hypothesized different effects on the different attitudes under study. With the occasional exception of a particular religion or two, the effects of relative income, reflected in the effect of Income Quartile, show that those with incomes in the higher quartiles tend to assign lower scores to Government Responsibility and No Cheat on Taxes but higher ones to Political Activity and the Importance of Free Speech.

Finally with respect to H3, Table 4 provides considerable evidence that the estimated effects of individual religious affiliations by themselves, and/or their interaction with Income Quartile vary considerably according to whether or not the individual's religious affiliation is that of a majority in the country. As hypothesized, several of the religions assigned lower values to Government Responsibility and Give People More Say and higher values to No Cheat on Taxes and Maintain Order when that religion was that of a majority in the country. In no case was the interaction term significant of the opposite sign.

Especially considering the extent to which the effects some of the religious affiliation dummy variables by themselves are changed when the various interaction terms for Income Quartile, Importance of Religion and Majority Religion are included, and the many statistically significant values of the interaction effects, it is quite clear that broad generalizations about differences in attitudes between individuals of different religion are seldom valid. Even for individuals of a given religion, there are likely to be differences in their attitudes depending on their relative income, the importance that they attach to religion and whether or not their religion is that of a majority in the

country. As such, the results cast considerable doubt on the validity of existing stereotyped opinions on distinctive attitudinal conventions for people with different religious affiliations, such as that Muslims are fundamentally opposed to progressive attitudes like Government Responsibility or democratic ones like Give People More Say.

This does not mean, however, that there are not some general patterns by religious affiliation. Take, for example, Government Responsibility for Catholics. From the relevant coefficients it can be seen that the only religion-related coefficients that are statistically significant are the Catholic Religion dummy (-0.270) and its interaction with Income Quartile (0.0509). Because at the bottom of column (1) the effect of Income Quartile by itself is also negative and significant (-0.272) and dominates the positive interaction term with Income Quartile of 0.0506, for Catholics and especially for those not in a Catholic majority country (such as Catholics in the Middle East) and with relatively high income quartiles, it could be said that Catholics would be less inclined to support Government Responsibility than those in other religions (a finding consistent with that of Putnam (1993)).

Of greater relevance to the Middle East are Orthodox, Muslims, and Jews. For Orthodox, few of the relevant coefficients are both significant and of even moderate magnitude, except in the case of Political Activity. In this case, moreover, there are several coefficients of opposite sign, suggesting that any net effect of Orthodox on Political Activity will be very small, even for an Orthodox who regards religion as very important. By contrast, the same calculation for Jews suggests that Jews would seem rather positively inclined toward Political Activity except for those for whom religion is very important. The same is true for the Importance of Free Speech. The clearest difference for Jews would seem to be the especially large reduction in the No Cheat on Taxes norm for those in the highest income quartiles. For Muslims, the coefficients of interaction terms in the Government Responsibility column reveal a number of significant terms with different signs. Once again, this leads to an implication that the overall net effect of Muslim on Government Responsibility is unlikely to be very clear. Those with the most positive attitude to Government Responsibility would be those with relatively high incomes and for whom religion is important but not living in a country where Muslims are a majority. Another seemingly distinctive element for Muslims is a more positive relation with No Cheat on Taxes for those for whom religion is important.

What does all this imply for the Middle East or other regions covered by the sample used in this study? First, it implies that religious affiliations and other religion-related measures do seem to matter for important socio-economic and political attitudes. Second, it implies that generalizations are likely to break down as a result of the significant and often fairly large effects of the interaction terms of opposite signs applying to subsets of the different religious groups, such as rich or poor groups, or those for whom religion is very important (or not important). Third, the fact that there seems to be little basis for assuming that those affiliated with religions that are common in the Middle East, like Orthodox, Jewish and Muslim, are strongly and negatively linked to attitudes like Government Responsibility, No Cheat on Taxes, Political Activity or Freedom of Speech, would also seem to cast doubt on the validity of assertions that any of these religions, especially Islam, is inherently incompatible with the achievement of democracy. Fourth, the fact that most religious groups have people of quite different positions in the relative income scale, and of varying views about the importance of religion might lead one to suspect that having religious parties run the government may not necessarily eliminate frictions. Fifth, putting these findings together would seem to suggest that arriving at winning coalitions of people supporting policies aimed at

achieving greater inclusivity of the population is not likely to be either easier or more difficult in the MENA region than in other parts of the world. Sixth, some of the country level controls in Table 3 may also provide some clues to policy makers and leaders concerned with the potential for social conflict and perhaps instability. Note, for example, that the larger the share of government expenditures in the country and greater freedom of the press, seem to lower the demand that the government should accept greater responsibility for the needs of its citizens. So too, the higher the tax rate and greater the civil liberties in the country, the greater will be the demand for greater Government Responsibility. Similarly, by lowering the tax rate, or raising the share of government spending in GDP, government policy makers may reduce the desire for Political Activity and the foreseen need by the citizens to Maintain Order in the country.

Finally, we call attention to the need for further research. While the data employed in this study have allowed us to broaden the empirical approach to identifying factors associated with relevant and important political attitudes; clearly, the effects of a religious affiliation are more complex and diverse than they have been treated in this analysis. For example, we have not been able to capture regional differences within each country and thus the extent to which attitudinal values of various types such as those studied here would vary within a given region, and whether or not regional differences might interact with the religious differences and relative incomes. Therefore, before any definitive conclusions can be reached on the effects of a specific religion on any attitudinal variables, other cultural and socio-demographic effects must also be taken into account. We have controlled for many of these factors but not examined the kinds of interaction terms that we have applied in the case of the religion-related variables. To do so, will likely require, among other things, new and improved data. Along the same lines, since the analysis employed here has been strictly static in nature, more dynamic analyses should be encouraged, which in turn implies the need for following many of the same people in these surveys over time.

References

- Barro, Robert J. and Rachel .M. McCleary 2002. "Religion and Economic Growth across Countries", *American Sociological Review* 68 (5), 760-781.
- Becker, Sascha O. and Ludger Woessmann 2009. "Was Weber Wrong? A Human Capital Theory of Protestant Economic History", *Quarterly Journal of Economics* 124 (2), 531-596.
- Bottacini, Maristella and Zvi Eckstein 2005. "Jewish Occupational Selection: Education, Restrictions, or Minorities?", *Journal of Economic History*, 65 (4), 922-948.
- Chaney, Eric 2008. "Religious Competition and the Rise and Fall of Muslim Science", W.P..
- Clark, Andrew and Orsolya Lelkes 2005. "Deliver Us from Evil: Religion as Social Insurance", Paris School of Economics Working Paper.
- De Tocqueville, Alexis 2000. *Democracy in America*. Chicago: University of Chicago Press Translated by H.C. Mansfield and Delba Winthrop. An earlier translation (by Henry Reeve) of the book was published in 1835.
- Diwan, Ishaq 2013. "Understanding Revolution in the Middle East: The Central Role of the Middle Class" *Middle East Development Journal* 5 (1)
- Durkheim, Emile 1897 *Suicide – a Study in Sociology*. London: Routledge
- Easterlin, R.A. and Sawangfa, O. (2010) "Happiness and Growth: Does the Cross Section Predict Time Trends? Evidence from Developing Countries", in *International Differences in Well-Being*, E. Diener, J. Helliwell, and D. Kahneman (eds.), Princeton University Press, Princeton, pp. 162-212.
- Evans, T. D., Cullen, F. T., Dunaway, R. G., & Burton, V. S. 1995. "Religion and Crime Re-examined: The Impact of Religion, Secular Controls, and Social Ecology on Adult Criminality". *Criminology*, 33(2), 195-224.
- Graham and Crown 2013 "Religion and Well-being around the World: Social Purpose, Social Time or Social Insurance"
- Guiso, Luigi, Paola Sapienza and Luigi Zingales 2003. "People's Opium? Religion and Economic Attitudes", *Journal of Monetary Economics* 50, 225-283.
- Haggard, Stephan, Robert R. Kaufman and James D. Long 2013. "Income, Occupation, and Preferences for Redistribution in the Developing World" *Studies in Comparative International Development* 48, 113-140.
- Hertel, Bradley R. and Michael Hughes 1987. Religious Affiliation, Attendance and Support for Pro-Family Issues in the United States", *Social Forces* 65, 858-882.
- Hoffman, John P. and Alan S. Miller, 1997. Social and Political Attitudes among Religious Groups: Convergence or Divergence over Time, *Journal of the Scientific Study of Religion* 36 (1), 52-70.and
- Huntington, Samuel P. 1996. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon and Schuster.
- Kedourie, Elie 1994. *Democracy and the Arab Political Culture*. London: Frank Cass

- Kuran, Timur 2011. *The Long Divergence: How Islamic Law Held Back the Middle East*. Princeton: Princeton University Press.
- Kuran, Timur 2013. "Religious Obstacles to Democratization in the Middle East: Past and Present" *The Wealth and Well-Being of Nations* 5, 15-39.
- Kuran, Timur and Anantdeep Singh 2013. Economic Modernization in Late British India: Hindu-Muslim Differences" *Economic Development and Cultural Change* 61 (April), 503-538.
- Layman, Geoffrey C. 1997. Religion and Political Behavior in the United States: The Impact of Beliefs, Affiliations, and Commitment from 1980 to 1994, *The Public Opinion Quarterly* 61 (2), 288-316.
- Mookerjee, Rajen and Krista Beron 2005. Gender, Religion and Happiness" *Journal of Socioeconomics* 34, 674-685.
- Norris, Pippa and Ron Inglehart 2004. *Sacred and Secular: Religion and Politics Worldwide*. Cambridge: Cambridge University Press
- Pew Forum on Religion and Public Life, U.S. Landscape Survey 2008.
- Popova, Olga 2010. "Can Religion Insure against Aggregate Shocks to Happiness? The Case of the Transition Economies"
- Putnam, Robert 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- Rodinson, Maxime 1974. *Islam and Capitalism*. London: Allen Lane.
- Tessler, Mark 2002. Islam and Democracy in the Middle East: The Impacts of Religious Orientations on Attitudes toward Democracy in Four Arab Countries, *Comparative Politics* 34 (3), 337-354.
- Tessler, Mark 2004 Arab and Muslim Political Attitudes: Stereotypes and Evidence from Survey Research, *International Studies Perspectives* 4 (2).
- Weber, Max 1905. *The Protestant Ethic and the Spirit of Capitalism*. London: Unwin.
- Yuchtman-Ya'ar, Ephraim and Yasmin and Alkalav 2010. Political Attitudes in the Muslim World, *Journal of Democracy* 21 (3).

Table 1: List of Variables Used in the Analysis

A. Individual level information - source: the World Values Survey		
Variable	Question asked	Response categories
Political activity	The sum of the response regarding participation in peaceful demonstrations and signing petitions, calculated using the following question: I'm going to read out some different forms of political action that people can take, and I'd like you to tell me, for each one, whether you have actually done any of these things, whether you might do it, or would never, under any circumstances, do it: Attending lawful demonstrations; Signing a petition.	For each political action, the response categories were 1=would never do, 2=might do, 3=have done. For the purpose of the study, the two responses were added, and the final value used is therefore given on a scale of 2 to 6.
Government responsibility	How would you place your views on this scale? 1 means you agree completely with the statement on the left, 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between: People should take more responsibility to provide for themselves (1) vs. The government should take more responsibility to ensure that everyone is provided for (10).	Scale: 1=people should take more responsibility to provide for themselves, to 10= the government should take more responsibility to ensure that everyone is provided for.
No cheating on taxes	Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: Cheating on taxes if you have a chance.	Scale: 1=never justifiable to 10=always justifiable. Note: For the purpose of the analysis this question was converted to a dummy variable taking on the value 1 if the person answered it was never justifiable to cheat on taxes, and 0 if the person chose any other of the response categories
No cheating on taxes (rescaled)	Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: Cheating on taxes if you have a chance.	Scale: 1=never justifiable to 10=always justifiable. For robustness check, the variable is rescaled to take three values 0= if the original variable takes 6, 7, 8, 9, or 10 1= if the original variable takes 2, 3, 4, or 5 2= if the original variable takes 1
Importance of freedom of speech, giving people more to say, or maintaining order in nation	If you had to choose, which one of the things on this card would you say is most important? And which would be the next most important? Protecting freedom of speech Fighting rising prices Maintaining order in nation Giving people more to say	Freedom of speech: 0=freedom of speech not chosen as first, and not chose as second, 1= freedom of speech chosen as second, 2= freedom of speech chosen as first Giving people more to say: 0= giving people more to say not chosen as first, and not chose as second, 1= giving people more to say as second, 2= giving people more to say as first Maintaining order in nation 0= maintaining order in nation not chosen as first, and not chose as second, 1= maintaining order in nation as second, 2= maintaining order in nation as first

Table 1: Continued

Age	Self-reported age	
Gender	Dummy variable for males used to identify the gender of the respondent	0=female; 1=male
Marital Status	Are you currently...	...married, living together as married, divorced, separated, widowed, single/never married Dummy variables for each category were created, so that: 1= belongs to this group; 0=belongs to different group
Employment category	Are you employed now or not?	Full time, part time, self-employed, retired, housewife, student, unemployed, other Dummy variables for each category were created, so that: 1=belongs to this group; 0=belongs to different group
Income quartile	We would like to know in what group your household is counting all wages, salaries, pensions, and other incomes that come in. Just give the letter of the group your household fall into, before taxes and other deductions.	The original survey provides ten income brackets specific to each country, the first representing the lowest income decile and the tenth the highest. For the purpose of the study, this variable was rescaled to construct income quartiles, each of which contains approximately 25% of the respondents of a given country in a given wave.
Religious Affiliation categories: shown in the column to the extreme right	Do you belong to a religious denomination? In case you do, which one?	Responses re-coded to form 10 groups: Four types of Christians (Catholic, Protestant, Evangelical and Orthodox) Jewish, Muslim, Buddhist, Hindu, Other Asian. And Other/No Religion Each group is converted to a dummy variable equal 1 if the person belongs to this denomination, and 0 otherwise
B. Country level information - varying sources		
Variable	Scale of measurement/units	Source
GDP per capita	Gross Domestic Product given in constant dollars (base year 2005) adjusted for Purchasing Power Parity. Matching of the dates was performed based on the month in which the survey was conducted as follows: Jan-April matched with GDP from previous year, May-Aug matched with average GDP of previous and current year, Sept-Dec matched with GDP from current year.	Penn World Tables version 6.3 and 7.1 (Real GDP per capita, constant prices: laspeyres), complemented with World Development Indicators of the World Bank.
Change in GDP per capita	Percent change from previous year in GDP per capita defined as above.	Penn World Tables version 6.3 and 7.1 , complemented with World Development Indicators .
Expense (% of GDP)	Expense is cash payments for operating activities of the government in providing goods and services. It includes compensation of employees (such as wages and salaries), interest and subsidies, grants, social benefits, and other expenses such as rent and dividends.	World Development Indicators, complemented with National Accounts Statistics: Analysis of Main Aggregates (2012)
Civil liberties	Civil liberties are measured on a one-to-seven scale, with one representing the lowest degree of Freedom and seven the highest.	Freedom in the World Country Ratings
Total tax rate (% of commercial profits)	Total tax rate measures the amount of taxes and mandatory contributions payable by businesses after accounting for allowable deductions and exemptions as a share of commercial profits. Taxes withheld (such as personal income tax) or collected and remitted to tax authorities (such as value added taxes, sales taxes or goods and service taxes) are excluded.	World Development Indicators
Freedom of press	Freedom of press is measured on a zero-to-two scale, with zero representing not free, one representing partly free, and two representing free.	Freedom House's annual Press Freedom survey 1980-2011

Table 2: Descriptive Statistics on the Full Sample

Dependent Variables	mean	sd	min	max
Government Responsibility	5.989	3.007	1.000	10.000
Political Activity	3.614	1.354	2.000	6.000
No Cheat on Taxes	0.605	0.489	0.000	1.000
Importance of Free Speech	0.444	0.683	0.000	2.000
Importance of Giving People more to Say	0.673	0.810	0.000	2.000
Importance of Maintaining Order in Nation	1.129	0.871	0.000	2.000
Main Explanatory Variables				
relig_Catholics	0.266	0.442	0.000	1.000
relig_cath_maj	0.207	0.405	0.000	1.000
relig_Protestants	0.136	0.343	0.000	1.000
relig_prot_maj	0.092	0.288	0.000	1.000
relig_Evangelical	0.023	0.151	0.000	1.000
relig_evan_maj	0.001	0.036	0.000	1.000
relig_Orthodox	0.105	0.307	0.000	1.000
relig_orth_maj	0.086	0.281	0.000	1.000
relig_Jewish	0.003	0.052	0.000	1.000
relig_Muslim	0.177	0.382	0.000	1.000
relig_musl_maj	0.154	0.361	0.000	1.000
relig_Buddhist	0.021	0.144	0.000	1.000
relig_budd_maj	0.010	0.100	0.000	1.000
relig_Hindu	0.028	0.164	0.000	1.000
relig_hind_maj	0.021	0.142	0.000	1.000
relig_Asian	0.008	0.088	0.000	1.000
relig_asia_maj	0.005	0.069	0.000	1.000
relig_Other/No Religion	0.233	0.423	0.000	1.000
Importance of Religion	3.007	1.061	1.000	4.000
Income Quartile	2.312	1.123	1.000	4.000
Control Variables				
log_GDP per capita (in month of survey)	9.102	0.992	5.865	10.747
GDP_change (in percent)	1.933	7.539	-62.464	36.850
Expense (% of GDP)	25.868	10.369	0.119	71.486
Civil liberties	5.063	1.569	2.000	7.000
Total tax rate (% of commercial profits)	46.754	17.852	9.000	137.300
Freedom of press	1.278	0.770	0.000	2.000
age	41.225	16.011	15.000	99.000
cohabiting	0.054	0.226	0.000	1.000
sep_div_wid	0.119	0.324	0.000	1.000
single	0.239	0.427	0.000	1.000
male	0.491	0.500	0.000	1.000
part_time	0.074	0.261	0.000	1.000
self_empl	0.102	0.303	0.000	1.000
retired	0.135	0.341	0.000	1.000
housewife	0.133	0.339	0.000	1.000
student	0.071	0.257	0.000	1.000
unempl	0.089	0.285	0.000	1.000
other	0.020	0.140	0.000	1.000
<i>N</i>	210069			

Table 3: Effects of Religious Affiliations on Government Responsibility, No Cheat on Taxes, Political Activity, Importance of Free Speech, Giving People More to Say, and Maintaining Order

Variables	(1) govresp	(2) nocheat	(3) polact_2	(4) imp_speech2	(5) give_people	(6) maintain_order
relig_cath	-0.196*** (0.0213)	-0.0217*** (0.00358)	-0.0870*** (0.00893)	-0.0451*** (0.00525)	-0.0473*** (0.00616)	0.0515*** (0.00635)
relig_prot	-0.332*** (0.0253)	0.00438 (0.00429)	-0.0407*** (0.0104)	-0.0341*** (0.00630)	-0.0504*** (0.00737)	0.0845*** (0.00765)
relig_evan	0.0349 (0.0486)	0.0170** (0.00771)	-0.129*** (0.0191)	-0.00570 (0.0112)	-0.101*** (0.0133)	0.0632*** (0.0139)
relig_orth	0.0673** (0.0322)	-0.0327*** (0.00555)	0.0232 (0.0141)	-0.0216*** (0.00629)	-0.0333*** (0.00885)	0.0128 (0.00927)
relig_jewi	0.356*** (0.117)	-0.0594*** (0.0206)	0.200*** (0.0472)	0.0787*** (0.0290)	0.0177 (0.0336)	0.0189 (0.0347)
relig_musl	-0.126*** (0.0313)	0.0289*** (0.00489)	-0.0692*** (0.0122)	-0.0309*** (0.00662)	-0.00425 (0.00808)	-0.00247 (0.00887)
relig_budd	-0.104* (0.0536)	-0.0353*** (0.00921)	0.00919 (0.0224)	-0.0258** (0.0113)	-0.0319** (0.0162)	0.0245 (0.0168)
relig_hind	-0.145** (0.0716)	0.0159 (0.0101)	-0.138*** (0.0277)	-0.0418*** (0.0134)	0.000777 (0.0177)	-0.0170 (0.0191)
relig_asia	-0.459*** (0.0888)	-0.0287** (0.0141)	-0.198*** (0.0323)	-0.0211 (0.0173)	-0.149*** (0.0237)	0.100*** (0.0252)
imp_relig	0.0138* (0.00785)	0.0416*** (0.00131)	-0.0541*** (0.00334)	-0.00361* (0.00185)	-0.0284*** (0.00221)	0.0357*** (0.00231)
inc_q	-0.240*** (0.00579)	-0.0106*** (0.000937)	0.0905*** (0.00236)	0.0269*** (0.00131)	0.0246*** (0.00159)	0.00464*** (0.00168)
exp_share	-0.0207*** (0.00223)	-0.00282*** (0.000370)	-0.00505*** (0.00100)	0.00247*** (0.000523)	0.00882*** (0.000654)	-0.00413*** (0.000687)
tax_rate	0.0176*** (0.00360)	-0.000640 (0.000547)	0.00498*** (0.00128)	0.00690*** (0.000703)	-0.00475*** (0.000862)	0.00409*** (0.000931)
civ_lib	0.182*** (0.0163)	-0.0127*** (0.00259)	0.00133 (0.00657)	0.0187*** (0.00351)	-0.0121*** (0.00435)	0.00175 (0.00466)
freedom_press	-0.0985*** (0.0289)	0.0333*** (0.00449)	-0.106*** (0.0117)	-0.0349*** (0.00599)	-0.0109 (0.00761)	-0.0559*** (0.00830)
Individual Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Wave Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	210,069	210,069	210,069	210,069	210,069	210,069
R-squared	0.127	0.107	0.266	0.117	0.067	0.103

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 4: Effects of Religious Affiliations and Their Interactions on Government Responsibility, No Cheat on Taxes, Political Activity, Importance of Free Speech, Giving People More to Say, and Maintaining Order

Variables	(1) govresp	(2) nocheat	(3) polact_2	(4) imp_speech2	(5) give_people	(6) maintain_order
relig_cath	-0.270*** (0.0719)	-0.0941*** (0.0123)	-0.187*** (0.0309)	0.00721 (0.0178)	-0.134*** (0.0212)	0.0621*** (0.0217)
relig_cath_maj	0.0635 (0.0392)	0.0150** (0.00659)	-0.0738*** (0.0162)	-0.0791*** (0.00960)	-0.0219* (0.0113)	0.0645*** (0.0117)
cath_imp	-0.0200 (0.0182)	0.0214*** (0.00303)	0.0248*** (0.00767)	0.00308 (0.00442)	0.0213*** (0.00522)	-0.0146*** (0.00537)
cath_inc_q	0.0509*** (0.0156)	0.00390 (0.00262)	0.0357*** (0.00655)	-0.00390 (0.00375)	0.0236*** (0.00449)	-0.0104** (0.00464)
relig_prot	-0.613*** (0.0820)	-0.160*** (0.0143)	-0.108*** (0.0349)	-0.0173 (0.0208)	-0.0906*** (0.0242)	0.0894*** (0.0250)
relig_prot_maj	0.0773* (0.0461)	0.0237*** (0.00784)	-0.0559*** (0.0190)	-0.0495*** (0.0115)	-0.0140 (0.0135)	0.0283** (0.0140)
prot_imp	0.0769*** (0.0216)	0.0491*** (0.00370)	0.0489*** (0.00894)	0.0175*** (0.00552)	0.0360*** (0.00631)	-0.0280*** (0.00657)
prot_inc_q	0.0110 (0.0185)	0.00344 (0.00309)	-0.0163** (0.00751)	-0.0152*** (0.00448)	-0.0182*** (0.00530)	0.0182*** (0.00549)
relig_evan	0.181 (0.195)	-0.0807** (0.0337)	-0.174** (0.0807)	0.0282 (0.0487)	-0.284*** (0.0587)	0.155*** (0.0591)
relig_evan_maj	-0.863*** (0.241)	0.0177 (0.0264)	0.259*** (0.0721)	0.161*** (0.0488)	-0.00163 (0.0539)	0.00414 (0.0627)
evan_imp	-0.0698 (0.0490)	0.0225*** (0.00856)	0.0197 (0.0204)	0.00233 (0.0125)	0.0698*** (0.0148)	-0.0455*** (0.0150)
evan_inc_q	0.0806** (0.0405)	0.0182*** (0.00643)	-0.00874 (0.0160)	-0.0220** (0.00928)	-0.0139 (0.0112)	0.0189 (0.0116)
relig_orth	-0.103 (0.104)	-0.0295 (0.0181)	-0.128*** (0.0457)	0.0152 (0.0219)	-0.0937*** (0.0285)	0.0812*** (0.0301)
relig_orth_maj	-0.115* (0.0679)	-0.00801 (0.0116)	0.215*** (0.0292)	0.0249* (0.0138)	-0.0847*** (0.0188)	0.0345* (0.0198)
orth_imp	0.0647** (0.0251)	0.0101** (0.00425)	0.0358*** (0.0109)	0.000388 (0.00532)	0.0361*** (0.00668)	-0.0401*** (0.00711)
orth_inc_q	0.0321 (0.0204)	-0.00726** (0.00349)	-0.0403*** (0.00893)	-0.0194*** (0.00437)	0.0132** (0.00554)	0.00235 (0.00590)
relig_jewi	-0.242 (0.554)	-0.00137 (0.0960)	0.615*** (0.224)	0.445*** (0.142)	-0.285** (0.144)	0.302* (0.155)
jewi_imp	0.118 (0.134)	0.00973 (0.0234)	-0.109** (0.0538)	-0.105*** (0.0337)	0.0895** (0.0365)	-0.0642* (0.0383)
jewi_inc_q	0.104 (0.103)	-0.0314* (0.0178)	-0.0234 (0.0426)	-0.0118 (0.0264)	0.0164 (0.0283)	-0.0423 (0.0300)
relig_musl	-0.405*** (0.115)	-0.0143 (0.0184)	-0.250*** (0.0470)	0.0463* (0.0244)	-0.105*** (0.0300)	0.0633* (0.0326)
relig_musl_maj	-0.274*** (0.0631)	-0.00336 (0.00986)	0.0775*** (0.0250)	0.00356 (0.0131)	-0.00733 (0.0163)	0.00693 (0.0177)
musl_imp	0.106*** (0.0288)	0.0134*** (0.00451)	0.0622*** (0.0115)	-0.00799 (0.00608)	0.0308*** (0.00739)	-0.0255*** (0.00804)
musl_inc_q	0.0391** (0.0177)	0.00596** (0.00275)	-0.0309*** (0.00707)	-0.0169*** (0.00387)	0.00990** (0.00463)	-0.00431 (0.00500)
relig_budd	-0.217 (0.172)	-0.0761*** (0.0292)	-0.165** (0.0687)	0.0364 (0.0330)	-0.236*** (0.0510)	0.150*** (0.0514)
relig_budd_maj	-0.223* (0.129)	0.0141 (0.0200)	0.422*** (0.0549)	0.0314 (0.0281)	8.33e-05 (0.0412)	0.0575 (0.0420)
budd_imp	0.0536 (0.0490)	-0.00243 (0.00842)	0.0694*** (0.0203)	0.0176* (0.0103)	0.0712*** (0.0150)	-0.0875*** (0.0152)
budd_inc_q	0.00606 (0.0369)	0.0230*** (0.00637)	-0.0374*** (0.0142)	-0.0467*** (0.00713)	0.0108 (0.0112)	0.0360*** (0.0115)
relig_hind	0.783*** (0.228)	0.0371 (0.0310)	0.108 (0.0930)	0.00441 (0.0430)	0.0396 (0.0567)	0.156** (0.0633)
relig_hind_maj	-0.677*** (0.150)	0.0494** (0.0205)	-0.0557 (0.0596)	-0.00101 (0.0273)	-0.0427 (0.0359)	-0.0210 (0.0399)
hind_imp	-0.251*** (0.0510)	-0.0134** (0.00679)	-0.0333 (0.0209)	0.00462 (0.00961)	-0.00661 (0.0126)	-0.0582*** (0.0140)

Table 4: Continued

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	govresp	nocheat	polact_2	imp_speech2	give_people	maintain_order
hind_inc_q	0.109*** (0.0389)	0.0113** (0.00515)	-0.0377** (0.0155)	-0.0214*** (0.00700)	0.0130 (0.00945)	0.00271 (0.0105)
relig_asia	-0.311 (0.301)	-0.0973** (0.0470)	-0.128 (0.106)	0.0779 (0.0554)	-0.175** (0.0745)	0.0372 (0.0819)
relig_asia_maj	-0.436** (0.177)	0.0358 (0.0283)	0.0438 (0.0640)	0.0686** (0.0343)	-0.120*** (0.0465)	0.207*** (0.0500)
asia_imp	-0.0730 (0.0922)	0.0129 (0.0135)	0.0478 (0.0318)	-0.0168 (0.0172)	0.0302 (0.0229)	-0.0512** (0.0245)
asia_inc_q	0.127** (0.0641)	0.00968 (0.00966)	-0.106*** (0.0220)	-0.0421*** (0.0125)	0.0112 (0.0169)	0.0290 (0.0179)
imp_relig	0.000136 (0.0129)	0.0273*** (0.00211)	-0.0770*** (0.00541)	-0.00625** (0.00306)	-0.0482*** (0.00361)	0.0547*** (0.00374)
inc_q	-0.272*** (0.0114)	-0.0137*** (0.00192)	0.0956*** (0.00480)	0.0373*** (0.00271)	0.0172*** (0.00326)	0.00430 (0.00336)
Individual Level						
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Country Level Controls	Yes	Yes	Yes	Yes	Yes	Yes
Wave Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	210,069	210,069	210,069	210,069	210,069	210,069
R-squared	0.128	0.108	0.267	0.117	0.068	0.104

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table 5: Effects of Controls on Government Responsibility, No Cheat on Taxes, Political Activity, Importance of Free Speech, Giving People More to Say and Maintaining Order

Variables	(1) govresp	(2) nocheat	(3) polact_2	(4) imp_speech2	(5) give_people	(6) maintain_order
log_gdpmonth	0.0765** (0.0390)	0.0724*** (0.00564)	-0.350*** (0.0138)	0.0173** (0.00766)	-0.0861*** (0.00936)	-0.0675*** (0.0106)
gdp_change	0.0162*** (0.00170)	-0.00496*** (0.000270)	-0.00776*** (0.000701)	0.00106*** (0.000361)	-0.00206*** (0.000454)	0.000446 (0.000472)
age	0.0131*** (0.00260)	0.00274*** (0.000419)	0.0297*** (0.00107)	-0.00180*** (0.000591)	0.00361*** (0.000710)	-0.00435*** (0.000758)
age_sq	-0.000145*** (2.80e-05)	7.39e-07 (4.49e-06)	-0.000368*** (1.16e-05)	1.51e-06 (6.34e-06)	-6.91e-05*** (7.62e-06)	8.30e-05*** (8.18e-06)
cohabiting	0.133*** (0.0301)	-0.0471*** (0.00495)	0.0124 (0.0119)	0.0254*** (0.00717)	0.00676 (0.00843)	-0.0458*** (0.00864)
sep_div_wid	0.0505** (0.0209)	-0.0235*** (0.00346)	-0.0117 (0.00879)	0.00839* (0.00469)	0.00987* (0.00579)	-0.0415*** (0.00616)
single	0.0183 (0.0197)	-0.0227*** (0.00324)	0.0622*** (0.00811)	0.0589*** (0.00464)	0.0178*** (0.00552)	-0.0301*** (0.00578)
male	-0.157*** (0.0138)	-0.0376*** (0.00229)	0.140*** (0.00575)	0.0217*** (0.00319)	0.0130*** (0.00388)	0.0379*** (0.00406)
part_time	0.0414 (0.0252)	-0.0148*** (0.00422)	0.0172 (0.0105)	0.0161*** (0.00596)	0.00711 (0.00705)	-0.00248 (0.00737)
self_empl	-0.106*** (0.0233)	-0.0286*** (0.00372)	-0.0831*** (0.00954)	0.00402 (0.00525)	-0.0169*** (0.00638)	0.00601 (0.00675)
retired	0.164*** (0.0269)	0.0293*** (0.00437)	-0.127*** (0.0115)	-0.0261*** (0.00591)	-0.0301*** (0.00737)	0.0397*** (0.00783)
housewife	0.0670*** (0.0230)	-0.00803** (0.00369)	-0.357*** (0.00906)	-0.0414*** (0.00511)	-0.0576*** (0.00624)	0.0194*** (0.00670)
student	0.0244 (0.0295)	-0.00588 (0.00480)	0.121*** (0.0120)	0.0552*** (0.00709)	0.0313*** (0.00827)	-0.0239*** (0.00861)
unempl	0.271*** (0.0247)	-0.00796** (0.00399)	-0.120*** (0.0100)	-0.00610 (0.00546)	-0.00576 (0.00670)	-0.0261*** (0.00708)
other	0.217*** (0.0481)	-0.00507 (0.00747)	-0.135*** (0.0191)	-0.0246** (0.0103)	0.000352 (0.0130)	-0.00629 (0.0136)
wave3	0.940*** (0.0258)	-0.0255*** (0.00418)	-0.0404*** (0.0107)	-0.0570*** (0.00603)	0.0407*** (0.00732)	0.125*** (0.00760)
wave4	0.439*** (0.0257)	-0.00239 (0.00407)	0.0735*** (0.0107)	-0.0464*** (0.00605)	0.0827*** (0.00724)	0.133*** (0.00752)
wave5	0.810*** (0.0315)	-0.0286*** (0.00498)	0.00830 (0.0128)	-0.0641*** (0.00753)	0.0792*** (0.00880)	0.00479 (0.00923)
wave6	0.689*** (0.0513)	-0.0646*** (0.00777)	-0.154*** (0.0195)	-0.0725*** (0.0112)	0.0398*** (0.0136)	0.151*** (0.0148)
Constant	4.320*** (0.385)	-0.0780 (0.0588)	6.082*** (0.141)	-0.170** (0.0757)	1.155*** (0.0935)	1.902*** (0.102)
Country Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	210,069	210,069	210,069	210,069	210,069	210,069
R-squared	0.127	0.107	0.266	0.117	0.067	0.103

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Appendix

Table A1: Effects of Religious Affiliations and their Interactions on No Cheat on Taxes (Rescaled)

Variables	(1) nocheat2	(2) nocheat2
relig_cath	-0.0163*** (0.00501)	-0.109*** (0.0173)
relig_cath_maj		0.0203** (0.00905)
cath_imp		0.0265*** (0.00427)
cath_inc_q		0.00513 (0.00367)
relig_prot	0.0128** (0.00581)	-0.209*** (0.0198)
relig_prot_maj		0.0241** (0.0105)
prot_imp		0.0626*** (0.00514)
prot_inc_q		0.0103** (0.00425)
relig_evan	0.0345*** (0.0104)	-0.0505 (0.0453)
relig_evan_maj		0.0264 (0.0336)
evan_imp		0.0176 (0.0114)
evan_inc_q		0.0214** (0.00865)
relig_orth	-0.0309*** (0.00800)	-0.0371 (0.0259)
relig_orth_maj		0.0116 (0.0163)
orth_imp		0.0184*** (0.00617)
orth_inc_q		-0.0191*** (0.00500)
relig_jewi	-0.0629** (0.0284)	0.131 (0.130)
jewi_imp		-0.0125 (0.0322)
jewi_inc_q		-0.0583** (0.0245)
relig_musl	0.0343*** (0.00667)	-0.0132 (0.0258)
relig_musl_maj		0.00594 (0.0135)
musl_imp		0.0122* (0.00635)
musl_inc_q		0.00853** (0.00383)
relig_budd	-0.0515*** (0.0121)	-0.0713* (0.0377)
relig_budd_maj		-0.00312 (0.0252)
budd_imp		-0.00967 (0.0113)
budd_inc_q		0.0251*** (0.00831)
relig_hind	0.0290** (0.0146)	0.101** (0.0446)
relig_hind_maj		0.0904*** (0.0305)
hind_imp		-0.0338*** (0.00962)

Table A1: Continued

Variables	(1) nocheat2	(2) nocheat2
hind_inc_q		0.0152** (0.00749)
relig_asia	-0.0364** (0.0166)	-0.105* (0.0548)
relig_asia_maj		0.0337 (0.0334)
asia_imp		0.00703 (0.0151)
asia_inc_q		0.0177 (0.0112)
imp_relig	0.0597*** (0.00183)	0.0424*** (0.00298)
inc_q	-0.0153*** (0.00130)	-0.0192*** (0.00272)
exp_share	-0.00430*** (0.000515)	-0.00418*** (0.000519)
tax_rate	-0.00220*** (0.000792)	-0.00213*** (0.000800)
civ_lib	-0.0132*** (0.00361)	-0.0135*** (0.00363)
freedom_press	0.0542*** (0.00626)	0.0522*** (0.00627)
Individual Controls	Yes	Yes
Country Level Controls	Yes	Yes
Wave Fixed Effects	Yes	Yes
Country Fixed Effects	Yes	Yes
Observations	210,069	210,069
R-squared	0.108	0.109

Notes: Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A2: Means of Importance of Religion across Religious Affiliations (Scale 1-4)

	Mean of Importance of Religion	Observations
Catholic	3.132	55876
Protestant	3.102	28547
Evangelical	3.4	4916
Orthodox	3.036	22148
Jewish	3.176	573
Muslim	3.686	37211
Buddhist	2.96	4421
Hindu	3.34	5794
Other Asian	2.299	1639
Other/Missing	2.225	48944
Total	3.007	210069

Table A3: Percent People in the Sample Professing Each Religion, by Country, and Country's Majority Religion

Country/Region	Catholic	Protestant	Evangelical	Orthodox	Jewish	Muslim	Buddhist	Hindu	Other Asian	Other/missing	Religious Majority(>= 50%)	Religious Majority(>= 30%)
Albania	0.0790395	0.002001	0.0065033	0.192096	0.0010005	0.6433217				0.076038	Muslim	Muslim
Argentina	0.7732861	0.0104322	0.0117362	0.0046572	0.0121088	0.0005589	0.0128539	0.0011177		0.1732489	Catholic	Catholic
Australia	0.2565467	0.3906749	0.0029806	0.0123483	0.0261869	0.0091548	0.0236321	0.0159676	0.0002129	0.2622951	None	Protestant
Austria	0.7763246	0.0573441		0.0033535	0.001006	0.001006				0.1609658	Catholic	Catholic
Bangladesh	0.0056198	0.0006612		0.0003306	0.0003306	0.8872727	0.0033058	0.0998347		0.0026446	Muslim	Muslim
Belgium	0.6397675	0.0102582		0.0011968	0.0020516	0.0124808	0.000171			0.3340742	Catholic	Catholic
Bosnia and Herzegovina	0.13625	0.0120833		0.2320833	0.0033333	0.3379167				0.2783333	None	Muslim
Brazil	0.666441	0.0275333	0.0699616	0.0243737	0.000677	0.0004514	0.0015798			0.2089822	Catholic	Catholic
Bulgaria	0.0043828	0.0046262	0.0002435	0.5234965	0.000487	0.0913075	0.000487	0.0007305		0.3742391	Orthodox	Orthodox
Belarus	0.0560019	0.000487		0.3859265	0.0002435	0.0009739				0.5563672	None	Orthodox
Canada	0.4158779	0.2446673	0.0132787	0.0042379	0.0070631	0.0064981	0.0033903	0.0031078		0.3018788	None	Catholic
Chile	0.6329787	0.0487234	0.0391489	0.0297872	0.0014894		0.0002128	0.0010638		0.2465957	Catholic	Catholic
Czech Republic	0.3429698	0.0377792		0.0009855	0.0003285					0.6179369	None	Catholic
Egypt	0.0599901					0.9396794				0.0003305	Muslim	Muslim
Estonia	0.0036256	0.0995386		0.0998682	0.0003296	0.001648	0.001648			0.7933421	None	None
Finland	0.0708423	0.4606911	0.1816415	0.0097192	0.0183585	0.0136069				0.2451404	None	Protestant
France	0.5502283	0.0132835	0.0016604	0.0043587	0.0076795	0.0136986	0.0024907	0.0006227		0.4059776	Catholic	Catholic
Germany	0.2542089	0.2559866	0.0714211	0.0019868	0.0003137	0.0049148	0.0003137			0.4108543	None	None
Iceland	0.0042357	0.9372353								0.0585291	Protestant	Protestant
India	0.0252839	0.0055016		0.0015217	0.002224	0.0891958	0.0111202	0.8040501		0.0611027	Hindu	Hindu
Indonesia	0.0215303	0.045048			0.0003312	0.9224909				0.0105995	Muslim	Muslim
Ireland	0.9238154	0.0182719			0.0006194	0.0003097	0.0015485	0.0012388		0.0541963	Catholic	Catholic
Italy	0.8504233	0.0032926		0.0001568	0.0001568		0.0006272	0.0001568		0.1451866	Catholic	Catholic
Japan	0.0078575	0.0097783		0.017985	0.0005238		0.3535883	0.0005238		0.6097433	None	Buddhist
Korea	0.1471891	0.2020443		0.0040886	0.0005111	0.0010221	0.2495741	0.0005111		0.3950596	None	None
Latvia	0.178113	0.1585366		0.1473042	0.0019255	0.0019255	0.0003209			0.5118742	None	None
Lithuania	0.6967294	0.0115626		0.0327056	0.0013214	0.0003304	0.0009911	0.0003304		0.2560291	Catholic	Catholic
Macedonia	0.004878	0.002439		0.5287805	0.0019512	0.2463415				0.2156098	Orthodox	Orthodox
Mexico	0.7413617	0.0382916	0.0310411	0.0044183	0.0014728	0.0005664	0.0009063	0.0003399		0.1816019	Catholic	Catholic
Moldova	0.0134957	0.016129		0.8762344	0.0052666	0.0006583				0.0882159	Orthodox	Orthodox
Morocco				0.0002887	0.0011547	0.6362587		0.0005774		0.3617206	Muslim	Muslim
Netherlands	0.2728968	0.1277092	0.0030296	0.0132836	0.0011652	0.0069914	0.0013983	0.0018644		0.5716616	None	None
Nigeria	0.1251867	0.4435042	0.1154803		0.0007466	0.2889497				0.0261324	None	Protestant
Norway	0.0087798	0.8192256		0.0022512	0.0004502	0.0049527	0.001801	0.0002251		0.1623143	Protestant	Protestant
Peru	0.7872745	0.0441595	0.0754986		0.0011871		0.0007123	0.0009497		0.0902184	Catholic	Catholic
Portland	0.7679954	0.0056115		0.0044505	0.0001935	0.0001935	0.0001935			0.2213622	Catholic	Catholic
Puerto Rico	0.5748408	0.1008492	0.0684713		0.0053079		0.0132696			0.2372611	Catholic	Catholic
Romania	0.0594605	0.0277356		0.8675912	0.0013298	0.0013298	0.0003799			0.0421733	Orthodox	Orthodox
Russia	0.001992	0.0025779	0.001289	0.4494961	0.0008202	0.0304664	0.0024607	0.0002344		0.5106632	None	Orthodox
Slovakia	0.6633565	0.0978153		0.0126614	0.0007448					0.225422	Catholic	Catholic
Slovenia	0.6778458	0.0095471		0.0137087		0.0122399	0.0004896			0.2861689	Catholic	Catholic
South Africa	0.1075066	0.4687288	0.1112788	0.0076198	0.0207469	0.0445869	0.001358	0.0402112		0.197963	None	Protestant

Table A3: Continued

Country/Region	Catholic	Protestant	Evangelical	Orthodox	Jewish	Muslim	Buddhist	Hindu	Other Asian	Other/missi ng	Religious Majority(>= 50%)	Religious Majority(>= 30%)
Spain	0.8383319	0.0043478		0.0005324	0.0002662	0.0007986	0.0007986	0.0001775		0.1547471	Catholic	Catholic
Sweden	0.0131265	0.776253		0.0013922	0.005171	0.0019889	0.0009944	0.0009944		0.2000796	Protestant	Protestant Catholic
Switzerland	0.4653517	0.3677654		0.0018168	0.0025954	0.0062289	0.0002595	0.0002595		0.1557228	None	&Protestant
Taiwan	0.0124564	0.0343797				0.0004983	0.2326856		0.2760339	0.4439462	None	None
Turkey	0.0028121	0.0010124		0.0007874	0.0004499	0.8167604				0.1781777	Muslim	Muslim
Ukraine	0.0489413	0.0077907		0.5345585	0.0023971	0.0025969	0.000799	0.0003995		0.402517	Orthodox	Orthodox
United States	0.2594727	0.3877376		0.0024525	0.0174126	0.0025751	0.0038013	0.0015941		0.324954	None	Protestant
Uruguay	0.38	0.014	0.0495		0.002		0.0015	0.0005		0.5525	None	Catholic
Venezuela	0.7404167	0.0645833		0.0008333			0.0008333	0.0004167		0.1929167	Catholic	Catholic
Vietnam	0.060521	0.0104208		0.0004008	0.0012024	0.0004008	0.153507	0.0004008	0.4593186	0.3138277	None	Other Asian
Algeria	0	0	0	0	0	0.4811	0	0	0	0.5189	None	Muslim
Armenia	0.0065	0.001	0.0085	0.83	0.0005	0	0	0	0	0.1535	Orthodox	Orthodox
Azerbaijan	0.000999	0.0024975	0	0.018981	0.0014985	0.9095904	0	0	0	0.0664336	Muslim	Muslim Muslim&
Burkina Faso	0.3083442	0.0782269	0	0.0019557	0.0013038	0.5332464	0	0.0006519	0	0.0762712	Muslim	Catholic
Croatia	0.8353797	0.001819	0	0.0068213	0.0022738	0.0063665	0	0.0004548	0	0.1468849	Catholic	Catholic Orthodox&
Cyprus	0.0028571	0.0009524	0	0.4942857	0.0019048	0.4514286	0	0	0	0.0485714	None	Muslim
Dominican Republic	0.58753	0.0167866	0.1151079	0	0	0	0	0	0	0.2805755	Catholic	Catholic
Ethiopia	0.0153333	0.194	0	0.6473333	0.004	0.1053333	0.0006667	0	0	0.0333333	Orthodox	Orthodox
Ghana	0.2079531	0.553455	0	0.0365059	0	0.148631	0.0006519	0	0	0.0528031	Protestant	Protestant
Great Britain	0.0933449	0.3763181	0.0010372	0.0010372	0.0031115	0.0100259	0.0022472	0.0036301	0	0.5092481	None	Protestant
Guatemala	0.56	0.015	0.293	0	0	0.002	0.001	0	0	0.129	Catholic	Catholic
Kyrgyzstan	0.0038351	0.0134228	0	0.0747843	0.0076702	0.7430489	0.0019175	0.0009588	0	0.1543624	Muslim	Muslim
Malaysia	0.0699417	0.0457952	0	0	0.0024979	0.5736886	0.2006661	0.0782681	0	0.0291424	Muslim	Muslim
Mali	0.017601	0.0052151	0	0.0006519	0.0071708	0.9295958	0.0006519	0.0052151	0	0.0338983	Muslim	Muslim
Rwanda	0.5228932	0.2986065	0	0.0026543	0.0013271	0.1499668	0.0033179	0	0	0.0212342	Catholic	Catholic
Singapore	0.0641534	0.0767196	0	0	0	0.3796296	0.1712963	0.1170635	0.0641534	0.1269841	None	Muslim
Tanzania	0.2818104	0.1870196	0	0.0495303	0.0358668	0.4005124	0	0.000854	0	0.0444065	None	Muslim
Thailand	0	0.0013038	0	0	0.0006519	0.0254237	0.9680574	0	0	0.0045632	Buddhist	Buddhist
Trinidad and Tobago	0.2045908	0.4401198	0	0.003992	0	0.0489022	0.003992	0.2305389	0	0.0678643	Protestant	Protestant Protestant&
Uganda	0.3652695	0.4301397	0.010978	0.003992	0	0.1696607	0	0.000998	0	0.0189621	None	Catholic Protestant &
Zambia	0.342	0.4626667	0	0.0013333	0.0006667	0.0133333	0.0013333	0.0026667	0	0.176	None	Catholic
Zimbabwe	0.1746507	0.2654691	0.3632735	0.002994	0	0.00499	0	0	0	0.1886228	None	Evangelical
Jordan	0.0268262	0.0012381	0	0.0024763	0	0.9686339	0	0	0	0.0008254	Muslim	Muslim
New Zealand	0.1406032	0.4779582	0.0863109	0	0.0023202	0.0027842	0.0069606	0.0051044	0.0009281	0.2770302	None	Protestant
Pakistan	0	0	0	0	0	0.7800951	0	0	0	0.2199049	Muslim	Muslim
Philippines	0.7945833	0.02	0.0891667	0	0.0004167	0.0229167	0	0	0	0.0729167	Protestant	Protestant

Table A3: Continued

Country/Region	Catholic	Protestant	Evangelical	Orthodox	Jewish	Muslim	Buddhist	Hindu	Other Asian	Other/missing	Religious Majority(>= 50%)	Religious Majority(>= 30%)
Georgia	0.4868871	0.0088369	0.0048461	0.4150513	0.0216648	0.0156784	0.0002851	0.0005701	0	0.0461802	None	Catholic & Orthodox
Serbia and Montenegro	0.0616402	0.0044974	0	0.7068783	0.0005291	0.105291	0.0002646	0	0	0.1208995	Orthodox	Orthodox
Ecuador	0.6264559	0	0.1347754	0	0	0	0	0	0	0.2387687	Catholic	Catholic
Libya	0	0	0	0	0	0.9657438	0	0	0	0.0342562	Muslim	Muslim
Occupied Palestinian Territory	0.002	0	0	0	0	0.997	0	0	0	0.001	Muslim	Muslim
Tunisia	0	0	0	0	0	1	0	0	0	0	Muslim	Muslim
Yemen	0	0	0	0	0	1	0	0	0	0	Muslim	Muslim
Columbia	0.7977656	0.0121189	0.0444045	0.0120242	0.0001894	0.0001894	0.0001894	0	0	0.1331187	Catholic	Catholic
China	0.0038388	0.0223928	0	0.000128	0	0.0097249	0.0400512	0.000128	0.0011516	0.9225848	None	None
Iraq	0.0059428	0.0003212	0	0.0014456	0	0.9892387	0	0	0	0.0030517	Muslim	Muslim
Kazakhstan	0.0093333	0.006	0.0013333	0.266	0.0006667	0.5113333	0.0013333	0.0013333	0	0.2026667	Muslim	Muslim
Lebanon	0.2175	0.0108333	0	0.1108333	0	0.5183333	0	0	0	0.1425	Muslim	Muslim