Democrats without Democracy? A Multi-level Analysis of Attitudes towards Democracy in Muslim-majority Countries

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Abstract

In this paper I study between and within country differences in attitudes towards democracy, focusing specifically on Muslim-majority countries and the degree to which college educated and high-income individuals in these countries conform to the expectations of modernization theory in their support for democracy. I find that support for democracy among high-income and college educated individuals is reduced in Muslim-majority countries relative to their peers around the world, but that this finding is due to an environment of political instability as well as levels of national income and democracy.
Acknowledgements

This masters paper would not have been possible without the support I received from many people throughout the entire process. Charlie Kurzman has been a wonderful advisor. He not only guided me to the relevant academic literature and critiqued multiple drafts of this paper, but always pushed me to keep making progress through the Sociology program.

In my cohort of UNC sociologists I would particularly like to thank Amy Lucas, Craig Owen, and Andrew Payton for their friendship and our weekly gatherings for non-academic pursuits (watch out for the pretty balloons).

My parents and family have helped and inspired me in innumerable ways, even though they still aren't really sure what I'm doing!

Most of all I need to thank my wife, Leylac, who has patiently suffered through graduate student penury and always offered her complete support and encouragement. I know you're as excited about the rest of this journey as I am.
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Chapter 1. Introduction

This paper explores the relationship between support for democracy in Muslim-majority countries and individual education and income. Inglehart and Welzel's (2005) revised version of modernization theory suggests a progression to post-materialist values (including support for democracy) in all countries as they experience economic development. However, the literature on attitudes to democracy typically uses national averages rather than individual data. Further, there is little exploration of how the effects of education and income vary across countries. This paper is an attempt to fill those gaps through a multilevel analysis of how individual attitudes are shaped by education and income, with a particular focus on the systematic variations that are the result of differences in national context.

The fourth wave of the World Values Survey (WVS) has taught us a lot about political culture in Muslim-majority countries (MMCs), most notably that Muslims are no less supportive of democracy than anyone else (Inglehart and Norris 2003). At the national level there is very little variation in aggregate political attitudes between Muslims and others to be found, but this study focuses on differences among wealthy and college educated individuals across countries – a relatively unexplored area to date. These individuals are worth looking at because they are a crucial factor in modernization theory; more education and increased standards of living resulting from economic development are supposed to produce increased tolerance (Lipset (1963), Inglehart and Welzel (2005)) and thus a more democratic civic culture (Almond and Verba 1963). This study looks directly at support for
democracy as its outcome, and specifically seeks to explain how education (and to a lesser extent wealth) influence support for democracy in MMCs. If individual wealth and education do not promote support for democracy in MMCs, then that would pose a problem for modernization theory and its claims to universal validity.

Figure 1. Difference in mean support for democracy for college educated vs. less than college educated individuals

The vertical axis in figure 1 represents the percentage increase in support for democracy associated with being college educated. Support for democracy is measured by the WVS question asking respondents if they agree with the statement “Democracy may have problems

1 The sample used for this figure and all tables and analyses in this paper is 73731 individuals in 64 countries take from the WVS. Details are given in the Data section. The list of countries can be found at Appendix A.

2 The vertical scale is the average level of support for democracy among people with at least some college education in a country minus the average level of support for democracy among those with a high school diploma or less. For the purposes of figure 1 and table 1 the results are collapsed into two categories of Agree or Disagree. This question in the WVS is described in the data section as the variable 'prodem.'
but it's better than any other form of government.” MMCs are mostly to the left of the scale³, suggesting that any pro-democracy effect resulting from college education is reduced in MMCs. The basic empirical question to be investigated in this paper is posed by the presence of all ten of the MMCs in the WVS on the left half of figure 2: why does college education have less positive association with support for democracy in MMCs as compared to other countries?

As a preliminary step to the more complicated models, I present some comparisons of means below which compare subgroups of the rich and college educated across MMCs and non-MMCs, richer and poorer countries (OECD, non-OECD) and democracies and non-democracies⁴.

### Table 1: Percentage Support for Democracy by Income and College Education across Country Types

<table>
<thead>
<tr>
<th>Population Subgroup (n=73731)</th>
<th>MMC (n=10)</th>
<th>non-MMC (n=54)</th>
<th>OECD (n=26)</th>
<th>non-OECD (n=38)</th>
<th>Democracy (n=48)</th>
<th>Non-democracy (n=18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than college, not rich</td>
<td>88.6%</td>
<td>84.6%</td>
<td>88.6%</td>
<td>83.1%</td>
<td>86.4%</td>
<td>83.2%</td>
</tr>
<tr>
<td>College, not rich</td>
<td>87.2%</td>
<td>89.1%</td>
<td>94.3%</td>
<td>84.1%</td>
<td>91.1%</td>
<td>82.5%</td>
</tr>
<tr>
<td>Less than college, rich</td>
<td>89.9%</td>
<td>87.3%</td>
<td>90.7%</td>
<td>86.1%</td>
<td>89.0%</td>
<td>84.8%</td>
</tr>
<tr>
<td>College, rich</td>
<td>89.4%</td>
<td>92.1%</td>
<td>95.7%</td>
<td>88.2%</td>
<td>93.9%</td>
<td>83.4%</td>
</tr>
</tbody>
</table>

By reading down a column one sees the extent to which education and income are positively correlated with increased support for democracy within a country type. In MMCs, individuals

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³ The first 12 countries in ascending order from left to right are Nigeria, Azerbaijan, Bangladesh, Uruguay, Philippines, Morocco, Algeria, China, Spain, Uganda, Greece, and Jordan. The highest score is Russia’s.

⁴ Classification as a democracy is done using data from the Polity IV dataset (see data section), with a score of 6 or more qualifying a country as a democracy.
with some college education have lower levels of support for democracy among the poor and the rich (although the difference is not significant at the p=0.05 level for the rich). The pattern is the opposite in non-MMCs, OECD countries and democracies, where the individuals with college education have mean levels of support for democracy that are 4-5 percentage points higher than individuals with less than a college education (all statistically significant at the p=0.05 level). As most MMCs are poor countries (only 1 of the 10 in this sample is an OECD member – Turkey), and only a few are considered democracies (3 of the 10), the degree to which these broader groupings reflect the pattern seen in MMCs should shed some light on whether college education has unique correlations in MMCs or is part of a broader pattern. In the non-OECD countries, college educated individuals have 1-2% higher mean support for democracy (statistically significant at the p=0.05 level), which is more than in MMCs but less than in the wealthy OECD countries. In non-democracies, college education is associated with even stronger reductions (mean differences are statistically significant at the p=0.05 level) in support for democracy than was the case for MMCs. That the pro-democracy effects of college education are reduced in poorer countries and reversed in non-democracies suggests that the finding for MMCs may be in part due to national level income and political regime type. The object of the detailed analysis in this paper will be to try and explain these empirical findings in greater detail and with more methodological rigor via a set of theoretically motivated hypotheses linking national context to individual level attitudes towards democracy.

This paper explores the relationship between support for democracy in Muslim-majority countries and individual education and wealth. Inglehart and Welzel's (2005)
revised version of modernization theory suggests a progression to post-materialist values in all countries as they experience economic development. The key mechanism is one of individual attitudinal change, but a gap in the literature is the exploration of how the way in which individual attitudes are shaped by education and wealth varies across countries. I first establish the theoretical background for this paper based on modernization theory and then look to what the literature on political attitudes in MMCs can offer to guide this study.
Chapter 2. What does theory tell us about the expected relationship between attitudes to democracy and individual wealth and education?

Inglehart and Welzel's (2005) update to modernization theory links attitudinal orientations, and particularly the potential for democracy, to social change driven by modernization and industrialization. They identify cognition and experience as driving forces of attitudinal change. A cognitive shift towards rationality is the product of education, particularly higher education (often the domain of the privileged), and a changing social environment which becomes less harsh as a result of economic development and long term stability. Modernization theory also argues that individual attitudinal change drives political change, and specifically that democratization of national regimes follows from the cognitive shift towards rationality and the increased existential security resulting from economic development. I focus on the first causal sequence of attitudinal change favoring democracy and do not address any implications for regime type. The literature on transitions to democracy does not generally support political culture (understood in the Almond and Verba (1963) sense of a set of political attitudes and norms) as a source of that transition.5

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5 Tilly (1998) describes the expansion of citizenship (in terms of participation in national politics) as the result of “continuous struggle” rather than “gradual enlightenment.” That participatory citizenship results is inadvertent, as the motivation for individual action that he draws on is self-interest rather than ideological commitment to democracy. In a similar vein, Waterbury (1994) draws on Dankwart Rustow (1970) and Przeworski (1991) to argue that democracy is a second-best solution to “intractable conflicts of interest ... flow[ing] from bargains arrived at by parties with no experience and little philosophical commitment to
Moreover, the first step (attitudinal change) in this causal sequence is a necessary precondition and thus worth examining in its own right. I look in turn at how education and wealth influence individual attitudes and then look at the role of existential security.

A central argument in Inglehart and Welzel's (2005) restatement of modernization theory is based on Maslow's hierarchy of needs. They argue that “... increasingly favorable existential conditions lead people to place greater emphasis on human freedom and choice” (134), where existential conditions chiefly means economic development and physical security. Education (occurring as part of economic development) plays a key role here because it is through the inculcation of scientific rationality that people leave traditional worldviews, and “there is a universal tendency for higher education to encourage people to place more emphasis on self-expression values” (37). Inglehart and Welzel (2005) use college education as a proxy for elite status and find that it is associated with increased emphasis on self-expression values vis-à-vis the less educated in almost every country, although they do not control for income in doing so. As support for democracy is positively correlated with self-expression (r=0.45), we can expect that education does increase support for democracy. However, including income separately for each individual will allow a more granular analysis of the effects of education.

**Hypothesis: Individual education and income lead to increased support for democracy**

Lipset's (1963) formulation of classic modernization theory had the same essential democracy.” Unlike the literature on transitions to democracy, the consolidation of democracy has a strong role for political culture. Linz and Stepan's (1996:16) definition of consolidation requires democracy to be “routinized and deeply internalized in social, institutional and even psychological life, as well as in political calculations for achieving success.”
mechanism at heart - that of cultural change through economic development. At the individual level, education is a necessary if not sufficient condition for creating a democratic citizen who is tolerant and makes rational political decisions (39-40). A distinction should be drawn here between intellectuals (who are the subject of their own sociological literature, see Kurzman and Owen (2002)) and merely having at least some college education. We needn’t pin ourselves down to a specific definition of intellectual to recognize that the cultural capital associated with intellectuals is far greater than what we would associate with college graduates in general. As such, the leading role of intellectuals in democratizing movements (in the early twentieth century for example, see Kurzman and Leahey(2004)) can be kept distinct from the influence of college education on support for democracy.

Lipset associates attitudes with class membership, conflating education and income somewhat. The lower classes, being poorer and less educated, are intolerant and more attuned to authoritarianism (citing Adorno et al 1950 and Stouffer 1955). However, Lipset also recognizes some role for class conflict in shaping attitudes towards democracy, particularly in a poorer country where the sharp difference in standards of living between the top and the bottom lead to it being “psychologically necessary” for the upper class to treat the lower as “vulgar” and “innately inferior,” and to whom it would be “absurd” and “immoral” to grant political rights (51).

Although Lipset doesn't substantiate the idea of psychological necessity underlying upper class attitudes, we can find ample support for how class differences shape how those in positions of privilege view the extension of political rights to the less privileged. From conflict theory (whether Marxist influenced or not) we can take struggle over resources as a
primary motivation of class relations. In this perspective, individual interests suffice for motivation to resist change for those in positions of privilege. If democracy entails increasing political access and participation for the disadvantaged and is thus a potential threat to the status quo, it would then follow that the privileged might be less supportive of it.

The idea that the privileged could oppose democracy out of a desire to preserve their position should be strengthened when the stakes at risk are higher. Social safety nets and economic opportunity generally are less available in poorer countries and those with greater income inequality. Education and wealth are more clearly markers of privilege in poorer and more unequal countries, and the privileged (i.e. wealthy and educated) will seek to avoid the change entailed in support for democracy so as to preserve their positions of privilege.

Collins (1979) makes a similar argument with reference to the USA when he talks about education as a form of credentialing which serves to reproduce existing class structures. Similarly, Bourdieu and Passeron (1990) make the argument that class advantages are passed on to subsequent generations through the education system.

Hypothesis: Support for democracy among the college educated and rich will be reduced in countries where there is greater inequality

A complication with this hypothesis lies in whether democracy is treated normatively or instrumentally by respondents. Huang (2005) argues that support for democracy by Muslims in the WVS is more of a romanticized and normative statement rather than an conscious embrace of the substance of western liberal democracy. The wording of the question I use (“Democracy may have problems but it's better than any other form of government”) is more abstract than concrete (Rose et al 1998) have a similar discussion for
eurobarometer questions). However, the nearly blanket support for democracy expressed in almost every country suggests that the question is tapping into a global norm rather than a reflection of democratic regimes in the different countries. The diffusion of a global norm of democracy is documented in Eastern and Central Europe (Rose et al 1998) and throughout the world (Norris and Inglehart 2003, Peffley and Rohrschneider 2003). The literature supports the view that the support for democracy demonstrated around the world has a strong normative component.

The above hypothesis can be seen as consistent with the normative treatment of support for democracy by drawing further on Bourdieu (1977). If democracy is a challenge to the status quo, then a normative resistance to democracy is consistent with the perpetuation of a given set of relations that benefit the dominant group and legitimate its dominance. The preservation of an existing field of power which serves the interests of the few would generate its own normative imperatives in opposition to the spread of global norms.

Moreover, we should not expect the effects of education to be the same all over the world. If we treat education as a marker of status attainment (Blau and Duncan (1967)) and look to class membership for its impact on political attitudes (Lipset (1963)), education becomes a proxy for class attitudes which may be reinforced when class differences are starker. However, the shift from class-based politics to culture-based politics through the “new social movements” is a feature of advanced capitalism in the global North (Hechter (2004) draws on Castells (1997) and Habermas (1987) among others in discussing the rise of cultural politics). Hechter's solidaristic theory explaining the shift from class to cultural politics is “limited to advanced capitalist economies with freedom of association” (437)
suggesting that the class based politics interpretation may only be valid in the global south. 

*Hypothesis: Higher national income will lead to increased support for democracy among the college educated and the rich*

It will also be probable that the current regime type will have an impact on support for democracy among the privileged in poorer and more unequal countries. Obviously, the hypothesis that resistance to democracy out of a desire to preserve one's advantages in the status quo is less grounded if the status quo is democracy, but this is typically not the case in the MMCs which are the focus of this paper. Nonetheless, I will include current regime type as one of the variables describing the national level context of my analysis. 

*Hypothesis: There will be greater support for democracy among the college educated and the rich in more democratic countries*

Inglehart and Welzel (2005) recognize that modernization is not linear. Setbacks and discontinuities in a country's development trajectory create instability, and that instability at the national level will affect individual attitudes by bringing survival values back into prominence at the expense of self-expression. They explore this idea in the former communist nations and argue that the economic and social dislocations in the aftermath of the fall of communism had precisely this effect. Given that support for democracy is correlated with self-expression, we can hypothesize that it too will be negatively affected by national level experiences which create insecurity. 

*Hypothesis: Greater levels of political instability and turmoil will be associated with reduced support for democracy among the college educated and the rich.*

In addition, many Muslim-majority countries have experienced such instability and
turmoil, making it possible that the diminished effect of education in MMCs can be linked to national level effects. This would be an alternative to an Islamic culture argument that would suggest that individuals have absorbed some pan-Islamic heritage which orients them against democracy through residence in a Muslim-majority country. The next section makes clear that any such view is based on a reading of Islam which does not take into account the survey data and resultant literature on support for democracy in MMCs.
Chapter 3. What do Muslims think about Democracy?

The specialist literature on the Middle East has noted similar tendencies among the wealthy and educated. Sivan (2003) says that “radical Islam has the effect of making the soft conservative-liberal center embrace authoritarian regimes for fear of the alternative.” Bellin (2000) describes capitalists as contingent democrats – with the contingency being the safeguarding of their own profits. The idea of political turmoil driving would-be democrats into the arms of authoritarian regimes suggests a refinement to modernization theory which highlights the importance of experience and social context (such as political turmoil) in shaping individuals views.

Waterbury's (1994) influential argument described the Middle East as an “environment singularly inhospitable to legal pluralism and democracy” on a reading of its political economy rather than it being exceptional in any essentially cultural way. The idea of Muslims being undemocratic in an essentialist way is an old, old canard that many have tried to put to rest (see, for example, Hudson (1995) with specific reference to Arab political culture and Wedeen (2002) for a more programmatic statement on political culture in political science). Nonetheless, orientalist essentialisms still crop up, such as in Lipset's (1994) address to the American Sociological Association in 1993 where he argues that political freedom is alien to Islam, that the Islamic state is in principle a theocracy, and that the prospects for democracy in Muslim states are poor. Prior literature using WVS data has addressed overall Muslim attitudes to democracy extensively, with the purported “clash of
civilizations” a regular target. Pippa Norris and Ron Inglehart (2004) show that Muslims hold political attitudes (on democratic performance and ideals, as well as of strong, less democratic leaders) of “minimal difference” to those held by people in Western countries. There is more support for religious authority in public life in MMCs, but Catholic countries in Latin America as well as nations in sub-Saharan Africa share that preference. If there is a civilizational difference to be found it is not in political values but in social ones. The greatest difference found by Inglehart and Norris concerned gender equality and sexual liberalization. They suggest that younger generations in the West have become more liberal while those in Muslim countries have retained traditional sexual mores. Esmer (2002) produces similar findings to Norris and Inglehart from WVS data, adding that the Protestant work ethic is present in MMCs as well. Further, Esmer finds no difference in attitudes towards democratic culture between Muslims and non-Muslims in eight countries with sizable Muslim minorities.

The basic finding that Muslims express strong support for democracy has also been confirmed from data sources other than the WVS. The Pew Global Attitudes Project has several reports (2003, 2006) in which the majority of respondents in MMCs agree with the statement that democracy “…is not just for the West and can work well here.” Moataz Fattah (2006) finds majority support for democratic norms and institutions in most MMCs that he considers consistent with Norris and Inglehart (2002)\(^6\).

Mark Tessler (2003) has used survey data from Morocco and Algeria to investigate

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\(^6\) One important discrepancy is that Fattah’s sample is entirely urban, literate, and non-poor. It also includes surveys administered by email as well as face-to-face. The choice of sample and lack of clarity between his survey questions and categories for analysis make direct comparisons with the WVS difficult.
whether "the religious or cultural traditions that predominate in most Arab countries inhibit the emergence of a democratic political culture." Tessler considers dimensions of personal piety and views on the role of Islamic guidance in public affairs against attitudes towards democracy and political participation, finding nothing to suggest that “the Islamic attachments of Arab men and women” discouraged “a democratic, civic and participant political culture.” The only statistically significant relationships Tessler finds in the opposite direction are among women who desire Islamic guidance in economic and commercial affairs, suggesting that the motivation is based on a focus on economic concerns rather than the religious. Education too plays a role, as education is associated with increased support for democracy among men but has the opposite relationship for women. Tessler doesn't explore this point as the focus of the analysis is on religiosity.

The relationship between socio-economic characteristics of respondents and their support for democracy is unclear. Grant and Tessler (2002) found some support\(^7\) for a respondent profile associated with increased support for democracy in Palestine. Having had some higher education, being male, older, wealthy and in an urban area were all associated with increased support for democracy – although it should also be noted that people outside that profile don't necessarily oppose democracy. Respondents also occasionally combined support for political Islam\(^8\) with support for democracy. However, Tessler and Gao (2005)

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\(^7\) This relationship between membership in favored social categories and increased support for democracy was found in only half of their regression results.

\(^8\) Support for political Islam is measured as a composite of three questions asking about a political role for religious leaders, whether religion should be separate from politics, and support for a political system based on Islamic law.
did not find any variation in support for democracy across age, gender, and education in six Arab countries surveyed between 2000 and 2004 despite expecting to do so. On the other hand, Fattah (2006) does find that higher education levels are associated with increased support for democratic norms (in terms of minority electoral participation), although it has the opposite association in Saudi Arabia and the UAE. Fattah suggests that the pro-regime content of the Saudi curriculum is to blame, while in the UAE the negative relationship between education and democratic norms disappears when controlling for age. Fattah also finds education to be positively associated with a scale which taps questions on whether voting, elected rulers, and “democratic norms and institutions” are not anti-Islamic⁹. For six of the countries in Fattah's dataset there is a negative association between income and this second scale, while there is a positive association for eight countries. Fattah can link most of the negative associations to oil-rich rentier states in Arabian Gulf area, but the countries with positive associations are highly heterogeneous and no simple explanation is present. One of the advantages of this study will be the ability to tackle such problems in more detail by combining individual attitudes with national level data on political and economic conditions as well as state type in a systematic fashion. In *Faithlines*, Hassan Riaz (2002) finds that education is associated with increased trust in state institutions, but his data does not include a question on support for democracy. Given that Riaz's four states (Egypt, Indonesia, Kazakhstan, and Pakistan) are not entirely democratic, one can speculate as to how education shapes attitudes towards the state vis-à-vis democracy. Although findings have been mixed,

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⁹ Fattah describes this scale as capturing “support for democratic institutions,” but because each question specifically frames democratic institutions with respect to religious principles I have presented it in those terms.
most of the evidence suggests that higher education levels are associated with increased support for democracy.

The overall view of Muslim attitudes to democracy present in the literature is one of overwhelming and consistent support for democracy. There are some findings of an association between educated and wealthy individuals and an increased support for democracy, but these are not consistent. However, the comparative work on socio-economic variations in support for democracy has been limited in scope to a few countries at a time and has not yet been a focus of any studies. The combination of socio-economic characteristics of respondents with national level contextual information in this study will be a new contribution to the study of attitudes to democracy in MMCs.

This study delves more deeply into the idea of a socio-economic profile associated with increased support for democracy and explores how the attitudes of high education and income individuals vary from that profile in relation to their national contexts.

Hypothesis: College educated and rich individuals will be no less supportive of democracy in MMCs than they are elsewhere
Chapter 4. Data

Table 2a: Descriptive Statistics for Level 1 Variables (Individuals)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prodem</td>
<td>73731</td>
<td>1.76</td>
<td>0.75</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>College</td>
<td>73731</td>
<td>0.22</td>
<td>0.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Rich</td>
<td>73731</td>
<td>0.32</td>
<td>0.47</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>73731</td>
<td>3.13</td>
<td>1.56</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Female</td>
<td>73731</td>
<td>0.50</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2b: Descriptive Statistics for Level 2 Variables (Countries)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMC</td>
<td>64</td>
<td>0.16</td>
<td>0.37</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Polity</td>
<td>64</td>
<td>6.16</td>
<td>5.35</td>
<td>-7.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Gini(^{10})</td>
<td>64</td>
<td>3.63</td>
<td>0.91</td>
<td>2.47</td>
<td>5.93</td>
</tr>
<tr>
<td>PPP(^{11})</td>
<td>64</td>
<td>8.99</td>
<td>1.03</td>
<td>6.25</td>
<td>10.43</td>
</tr>
<tr>
<td>Political Change</td>
<td>64</td>
<td>0.97</td>
<td>1.55</td>
<td>0</td>
<td>7.00</td>
</tr>
<tr>
<td>Political Terror Scale</td>
<td>64</td>
<td>2.29</td>
<td>1.09</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

The main source of data for this study is the Fourth Wave of the WVS conducted from 1999-2001. 63 countries provided the 72277 respondent interviews used for this study.

Respondents missing responses to any of the questions of interest were deleted from the

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10 Although Gini is usually measured on a scale from 0-100, I have transformed it by dividing by 10 so as to keep the range of values closer in magnitude to the other variables.

11 I normalize the PPP variable using a natural log transformation.
sample. The total list of countries in the sample is included for reference in Appendix A. \(^{12}\)

Prodem is the dependent variable of this analysis and represents the question “Democracy may have problems but it's better than any other form of government” asked in the World Values survey. Possible answers were Agree Strongly, Agree, Disagree, and Strongly Disagree. A score of 4 for Prodem indicates a response of Strongly Disagree. \(^{13}\) The low mean score demonstrates broad support for democracy across the world.

The College variable is taken from the WVS and takes values of either 0 or 1, with a score of 1 indicating that the individual has had at least some college education. Individuals with higher education levels are hypothesized to be more pro-democracy.

The Rich variable is also taken from the WVS and is similarly coded, with a score of 1 representing the highest of three income categories in the WVS. The WVS income scores are relative to the country, and scores of 1 in different countries do not reflect absolute income levels but the highest tertile group in that country. \(^{14}\) Individuals with higher income levels are hypothesized to be more pro-democracy than those with lower income levels. It is also worth noting the highest tertile group represents relative wealth, but cannot be thought of as an elite group as it is simply too broad.

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\(^{12}\) Every country and observation that could be included – i.e. for which there was data – was included. The only exclusions were based on a lack of available data.

\(^{13}\) I maintain this coding because the HLM software uses the highest category of an ordinal dependent variable as the reference category. Thus, regression coefficients and resulting odds ratios can be interpreted with respect to support for the question on democracy, i.e. positive coefficients meaning a greater likelihood of support for democracy.

\(^{14}\) The WVS doesn't give details on how country specific incomes were recoded, only that they were separated into higher middle and lower tiers of income.
Age and female are two control variables taken from WVS questions with no associated hypotheses. Age has six categories of ten year increments from 15-24 to the final category of 65-98.

The variable MMC denotes Muslim-majority country, and indicates whether a country has a percentage Muslim population of 50% or more. The source for this data is the World Christian Database. A negative relationship between Muslim-majority countries and having pro-democracy attitudes would provide some support for those who suggest that Muslims are inherently and essentially predisposed against democracy because of the example of the historical community founded by the Prophet Muhammad.

The Polity score ranges from -10 (autocratic regimes) to +10 (liberal democracies) and is taken from the Polity IV project. It is constructed from a series of indicators which capture the extent to which the executive branch is competitively elected, the presence of checks and balances between the branches of government, and that public participation in political life is possible.

15 Coding for Muslims on an individual basis is problematic because the most relevant WVS question has inconsistent response options across countries requiring imputation for almost all respondents in Algeria, Morocco, and Pakistan. For Morocco and Algeria this results in near-perfect collinearity with MMC and causes convergence problems for the HLM software.

16 Published by the Center for the Study of Global Christianity at Gordon-Conwell Theological Seminary in 2004. Available at http://www.worldchristiandatabase.org/wcd


While Polity represents in many ways the best “democracy score” available, there are issues with judge-specific bias which affect subjective measures of liberal democracy (Bollen 1991, Bollen and Paxton 2000). Unfortunately, no review of judge-specific bias has yet been done for the Polity ratings of democracy.
PPP is a measure of per capita national income for the year 2000 in thousands of US$ using purchasing power parity taken from the World Development Indicators published by the World Bank.\textsuperscript{18} Purchasing power parity is an adjustment of national income based on the cost of living in a specific country.

Gini is a country's Gini coefficient\textsuperscript{19}, a measure of national income inequality where 0 represents perfect inequality and 1 represents perfect equality, although I have rescaled it to range from 0-10 in order to keep it in line with the absolute values of other variables. The Gini coefficient is calculated as twice the area between the Lorenz curve (which charts cumulative income by percentile) and the 45° line of prefect income equality (Malinovic 2005). Due to the data demands of calculating Gini coefficients, they are typically not produced in every year. I have used the 2000 value where available, or the most recent prior value (after 1993) that is available. The World Bank (2006) uses surveys from as far back as 1993 in presenting Gini coefficients in its 2006 publication of national indicators. As Gini coefficients do not tend to exhibit strong fluctuations, this compromise should have limited impact on the validity of the indicator. In unequal countries, the potential exists that privileged individuals may take a view towards democracy that reflects their wish to perpetuate their own positions (Bourdieu 1977), which would be contrary to the effects suggested by modernization theory.

Political Change is the standard deviation of a country’s Polity score in the period

\textsuperscript{18} The World Development Indicators are available online at \url{http://devdata.worldbank.org/dataonline/}

\textsuperscript{19} Taken from the \textit{World Development Indicators} online at \url{http://devdata.worldbank.org/dataonline/}. India's gini coefficient was added from the World Bank's (2006:280) \textit{World Development Report} as this data point is missing from the online dataset.
1990-1999. Approximately half the countries in our sample saw no change in this period and thus have a score of 0. Former Soviet bloc countries have the very highest scores for this variable, but Muslim majority countries also have higher mean scores. The hypothesis is that individuals who have experienced recent political turmoil and upheaval may temper their democratic idealism with a desire for short-term stability. The Polity IV dataset contains a variable on the durability of regimes which is intended to capture “a substantive, normative change in political authority considered sufficient to present greater opportunities for regime opponents to challenge the non-institutionalized authority of the polity,” and it does so by marking a break in regime as a 3 point shift in Polity score within a three year period (Marshall and Jaggers (2005:29)). Their formulation sets a higher threshold for registering change than mine, and I use the standard deviation of a country's Polity score so as to capture less grand but still important sources of instability which may influence attitudes.

The Political Terror Scale is a measure of state oppression derived from US State Department and Amnesty International reports on human rights abuses in countries. Yearly country reports are coded on a scale of 1-5 ranging from a score of 1 being “countries under a secure rule of law” to 5 being “The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals” (Gibney and Dalton 1996). The Political Terror Scale is a 5 year average of countries scores from 1995 to 1999.
Table 3: Summary of Hypothesized Effects

<table>
<thead>
<tr>
<th>Level 1 Variables (individual)</th>
<th>Level 2 Variables (country)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MMC</td>
</tr>
<tr>
<td>College</td>
<td>0</td>
</tr>
<tr>
<td>Rich</td>
<td>0</td>
</tr>
</tbody>
</table>
Chapter 5. Models and Analysis

I use a two level ordinal logistic model to analyze how support for democracy varies in different social situations and by individual income and education. The use of a multilevel model is appropriate because of its ability to capture unobserved country level effects while combining national level indicators with individual level ones (Steenbergen and Jones (2002). Others have used multilevel models with WVS data specifically to capture the effects of individual and country level factors (Schofer and Fourcade-Gourinchas (2001)) as well as to capture cross-level interaction effects (Ruiter and de Graaf (2006)). A linear model would be inappropriate because it could predict nonsensical values beyond the range of the dependent variable. An ordinal model reflects the ordering of the four categories in the dependent variable from strongly disagree to strongly agree, and requires a cumulative logit construction. The regression equation for model 3 is described below:

\[ P'(1) = \text{prob(prodem}=1|B) = P(1) \]
\[ P'(2) = \text{prob(prodem}<=2|B) = P(1) + (P2) \]
\[ P'(3) = \text{prob(prodem}<=3|B) = P(1) + P(2) + P(3) \]
\[ P'(4) = \text{prob(prodem}<=3|B) = P(1) + P(2) + P(3) + P(4) = 1 \]

**Level 1**\(^{20}\)

\[ \log \left( \frac{P'(1)}{1-P'(1)} \right) = \beta_0 + \beta_1 \text{College} + \beta_2 \text{Rich} + \beta_3 \text{Age} + \beta_4 \text{Female} \]

\[ \log \left( \frac{P'(2)}{1-P'(2)} \right) = \beta_0 + \beta_1 \text{College} + \beta_2 \text{Rich} + \beta_3 \text{Age} + \beta_4 \text{Female} + \delta_2 \]

\(^{20}\) The age variable is centered at the mean of each country so that the intercept is interpretable.
log \( P'(3)/(1-P'(3)) = \beta_0 + \beta_1 \text{College} + \beta_2 \text{Rich} + \beta_3 \text{Age} + \beta_4 \text{Female} + \delta_3 \)

**Level 2**

\[ \beta_0 = \gamma_{00} + \gamma_{01} \text{MMC} + \gamma_{02} \text{Polity} + \gamma_{03} \text{PPP} + \gamma_{04} \text{Gini} + \gamma_{05} \text{Political Change} + \gamma_{06} \text{Political Terror Scale} + u_0 \]
\[ \beta_1 = \gamma_{10} + \gamma_{11} \text{MMC} + \gamma_{12} \text{Polity} + \gamma_{13} \text{PPP} + \gamma_{14} \text{Gini} + \gamma_{15} \text{Political Change} + \gamma_{16} \text{Political Terror Scale} + u_1 \]
\[ \beta_2 = \gamma_{20} + \gamma_{21} \text{MMC} + \gamma_{22} \text{Polity} + \gamma_{23} \text{PPP} + \gamma_{24} \text{Gini} + \gamma_{25} \text{Political Change} + \gamma_{26} \text{Political Terror Scale} + u_2 \]
\[ \beta_3 = \gamma_{30} + u_3 \]
\[ \beta_4 = \gamma_{40} + u_4 \]

The regression equation for model 1 has none of the \( \gamma \) terms beyond \( \gamma_{k0} \), while model 2 includes \( \gamma_{k0} \) as well as \( \gamma_{k1} \) terms (where \( k \) takes values from 0 to 4).

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21 All the level 2 variables except MMC and Political Change are centered at the grand mean of all the countries in the sample.
Table 4: Regression Results for Multilevel Ordinal Logistic Model of Support for Democracy

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>For Intercept slope, $\beta_0$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept, $\gamma_{00}$</td>
<td>-0.56 ***</td>
<td>-0.63 ***</td>
<td>-0.55 ***</td>
</tr>
<tr>
<td>MMC, $\gamma_{01}$</td>
<td>0.39</td>
<td>0.57</td>
<td></td>
</tr>
<tr>
<td>Polity, $\gamma_{02}$</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPP, $\gamma_{03}$</td>
<td>0.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini, $\gamma_{04}$</td>
<td>0.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Change, $\gamma_{05}$</td>
<td>-0.11 +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Terror Scale, $\gamma_{06}$</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For College slope, $\beta_1$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept, $\gamma_{10}$</td>
<td>0.46 ***</td>
<td>0.50 ***</td>
<td>0.45 ***</td>
</tr>
<tr>
<td>MMC, $\gamma_{11}$</td>
<td>-0.21 **</td>
<td>-0.10</td>
<td></td>
</tr>
<tr>
<td>Polity, $\gamma_{12}$</td>
<td>0.02 *</td>
<td>0.09 *</td>
<td></td>
</tr>
<tr>
<td>PPP, $\gamma_{13}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gini, $\gamma_{14}$</td>
<td>-0.09 +</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>Political Change, $\gamma_{15}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Terror Scale, $\gamma_{16}$</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Rich slope, $\beta_2$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept, $\gamma_{20}$</td>
<td>0.19 ***</td>
<td>0.23 ***</td>
<td>0.26 ***</td>
</tr>
<tr>
<td>MMC, $\gamma_{21}$</td>
<td>-0.23 *</td>
<td>-0.16 +</td>
<td></td>
</tr>
<tr>
<td>Polity, $\gamma_{22}$</td>
<td></td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>PPP, $\gamma_{23}$</td>
<td>-0.06</td>
<td>0.08 *</td>
<td></td>
</tr>
<tr>
<td>Gini, $\gamma_{24}$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Change, $\gamma_{25}$</td>
<td>-0.05 +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Terror Scale, $\gamma_{26}$</td>
<td>-0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Age slope, $\beta_3$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept, $\gamma_{30}$</td>
<td>0.07 ***</td>
<td>0.07 ***</td>
<td>0.07 ***</td>
</tr>
<tr>
<td>For Female slope, $\beta_4$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept, $\gamma_{40}$</td>
<td>-0.14 ***</td>
<td>-0.14 ***</td>
<td>-0.14 ***</td>
</tr>
</tbody>
</table>

Variance Components

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept, $u_0$</td>
<td>0.72 ***</td>
<td>0.72 ***</td>
<td>0.70 ***</td>
</tr>
<tr>
<td>College slope, $u_1$</td>
<td>0.26 ***</td>
<td>0.25 ***</td>
<td>0.23 ***</td>
</tr>
<tr>
<td>Rich slope, $u_2$</td>
<td>0.21 ***</td>
<td>0.19 ***</td>
<td>0.18 ***</td>
</tr>
<tr>
<td>Age slope, $u_3$</td>
<td>0.09 ***</td>
<td>0.09 ***</td>
<td>0.09 ***</td>
</tr>
<tr>
<td>Female slope, $u_4$</td>
<td>0.15 ***</td>
<td>0.15 ***</td>
<td>0.15 ***</td>
</tr>
</tbody>
</table>

Note: + denotes statistical significance at the p=0.10 level, * at the 0.05 level, ** at the 0.01 level, and *** at the 0.001 level

All models were estimated using Restricted Maximum Likelihood estimation
techniques with the software HLM v6.01. The \( \beta \) coefficients in table 4, which are functions of the \( \gamma \) coefficients, tell us how a one unit increase in a given independent variable changes the log odds of an individual being in a higher category of support for democracy (e.g. Disagree rather than Strongly Disagree). In model 1, the odds of a college educated individual expressing stronger support for a democracy than someone with less than a college education are 58\% (exp[0.46]-1). In model 2 this same relationship is now contingent on MMC, as \( \beta_1 = \gamma_{11} + \gamma_{11} \text{MMC} \). In model 2 we see that the odds of a college educated individual expressing stronger support for a democracy than someone with less than a college education are 34\% (exp[0.5-0.21*1]-1) in an MMC versus 65\% (exp[0.5]-1) in a non-MMC. In model 3 this relationship is yet more complex as the value of \( \beta_1 \) is now contingent on all the other level 2 variables as well, which take different values in each country. However, the interpretation of these models which is most relevant to this paper is in the interactions of college education with the different aspects of national context and the question of whether MMC remains a significant factor once other country level factors are included.

Model 1 establishes the basic finding that college educated and rich individuals are more likely to express stronger support for democracy (i.e. \( \gamma_{10} \) and \( \gamma_{20} \) are statistically significant and positive) than individuals who are poor and have less than a college education. Further, the statistical significance of the variance component terms \( u_1 \) and \( u_2 \) show that these relationships vary significantly across countries. Model 2 shows that MMC has statistically significant negative interactions with College and Rich, suggesting that the pro-democracy effects of college education and higher income are reduced in MMCs. In MMCs, a college educated individual is still more likely to express greater support for
democracy, but less so than such individuals in non-MMCs. Figure 1 had also shown this trend, with all ten MMCs on the left of the graph although the mean difference in support for democracy was negative for four of the ten.

Model 3 is intended as a challenge to the finding of model 2: that something intrinsic to MMCs (possibly a pan-Islamic anti-democratic ideology) reduces the pro-democracy effects of higher education. Model 3 does allow us to dismiss that finding, as MMC is no longer statistically significant, and replace it with a combination of factors which includes the level of democracy, national income, and income inequality (the first two have statistically significant interaction effects with college while that of income inequality is of borderline significance at p=0.051). The likelihood that a college educated individual will express greater support for democracy increases in more democratic countries and in richer countries, but decreases in the presence of income inequality. That these factors describing the national context are statistically significant in model 3, while MMC is no longer statistically significant, suggest that they represent a better explanation of how college education is related to support for democracy in MMCs than anything unique to MMCs.

The findings for the interaction of national level characteristics with individual income are similar but different to those of college education. In model 3, the interaction of MMC with Rich ($\gamma_{21}$) is reduced in absolute size and significance, but remains marginally significant at the p=0.09 level. While national income and level of democracy do not have significant interactions with Rich, income inequality does. In more unequal countries, rich individuals are less likely to be more supportive of democracy than in egalitarian countries. Also, recent political change has a negative effect on support for democracy among the rich.
The results for interactions with Rich in model 3 are intriguing because MMC has not been completely eliminated in terms of its negative association, but the arguments about anti-democratic tendencies in Islam operate through ideology and not individual prosperity. There is no theoretically grounded reason why Islam should make the rich less supportive of democracy. Bellin's label of the bourgeoisie as contingent democrats is closest to the bill, but that idea is more to do with political instability. Political instability is easy to conceive of as detrimental to economic growth, and would thus be counter to the interests of the rich as they are most sensitive to the investment environment. Lessened support for democracy could thus be understood as a willingness to tolerate authoritarian tactics in exchange for a stable political environment which is more conducive to business interests.

Taken as a whole, the final model supports the idea that the “effect” of MMC is in fact better represented by a fuller portrayal of a country's economic and political context. MMC, statistically significant in model 2, is no longer as influential in model 3.
Chapter 6. Conclusion

The main finding from this paper is first to confirm that education increases support for democracy less in MMCs than elsewhere. Sivan (2003) and Bellin (2000) appear to have a point in suggesting that otherwise pro-democracy constituencies are less supportive of democracy in MMCs than we might expect. However, this finding is the result of national level contexts which include relatively lower levels of economic development, lower levels of democracy, and income inequality, rather than any overarching Islamic factor linking the MMCs in this sample. A secondary finding is that rich individuals – also a pro-democracy constituency according to modernization theory – decrease their support for democracy in countries with higher levels of income inequality and political instability.

Income inequality has negative interactions with both college education and individual income. High levels of income inequality suggests the potential for more class conflict and polarization in the population. However, rather than polarization inhibiting democracy, Luebbert (1991) suggests that it is the failure of democrats which leads to polarization. This dataset cannot investigate the sequential and causal aspect of that statement, but the findings in model 3 do confirm a reduced support for democracy in unequal environments where there is greater potential for class polarization. The finding on inequality also gives support to the idea that where class differences are strongest, the privileged will be less supportive of democracy.

By including national level and individual level information in the models I have
sought to explore the main democratizing mechanism posited by modernization theory. I find that college educated and rich individuals become less supportive of democracy in national contexts where class differences are strong, the polity is unstable or less democratic, and the country is poorer. Further, the superficial finding that educated and rich individuals are less supportive of democracy in MMCs is shown to be an artifact of national contexts rather than driven by anything intrinsic to Islam.
### Appendix A: List of 64 Countries Included in the Analysis

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>Japan</td>
</tr>
<tr>
<td>Algeria</td>
<td>Jordan</td>
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<tr>
<td>Argentina</td>
<td>Korea, Republic of</td>
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<tr>
<td>Armenia</td>
<td>Latvia</td>
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<tr>
<td>Australia</td>
<td>Lithuania</td>
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<tr>
<td>Austria</td>
<td>Macedonia, The Former Yugoslavian Republic of</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Mexico</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>Moldova</td>
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<td>Belarus</td>
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<td>Pakistan</td>
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<td>Chile</td>
<td>Philippines</td>
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<td>Poland</td>
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<td>Romania</td>
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<td>Czech Republic</td>
<td>Russia</td>
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<td>Uruguay</td>
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<td>Venezuela</td>
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<td>Italy</td>
<td>Zimbabwe</td>
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</table>
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