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Islam and Democracy – A Dynamic Perspective

NAIWEI CHEN
Jiangxi Normal University, China
906218956@qq.com

TSAI-CHEN YANG
National Chung Cheng University, Taiwan
orangerange915@gmail.com

Abstract

This study examines the relationship between Islam and democracy with emphasis on the issue of whether and how Islam has bearings on democratic adjustment speed. Using comprehensive data on 17 Asian countries from 1996 to 2010, the study demonstrates that religion is a significant factor for determining democracy. Results indicate that the level of democracy in Islamic countries is generally lower than that in non-Islamic countries. However, the level of democracy in Islamic countries exhibits an upward trend, whereas that in non-Islamic countries displays a downward trend. Moreover, when benchmark variables are controlled, democratic adjustment in Islamic countries is faster than in non-Islamic countries. Hence, despite the current lower level of democracy in Islamic countries, the results of this study refute the conventional wisdom that Islam hinders democracy. Instead, Islamic countries are highly malleable and exhibit a potential for faster democratic development compared with non-Islamic countries. Results further suggest that Islamic countries can effectively promote democracy by improving education, minimizing the gender gap, controlling population growth, or becoming an oil exporter similar to non-Islamic countries. However, Islamic countries likely own an additional unique advantage in effectively improving democracy – that is, promoting urbanization. This aspect is in contrast to non-Islamic countries where urbanization plays no role in determining democracy.

1. Introduction

The existing literature has extensively explored democracy, which primarily focuses on the factors for determining democracy. The determinants of democracy have been identified, and the relationship democracy has with most of its determinants has been clearly established. However, the link between religion and democracy has remained mixed. In particular, Islam receives relatively more attention than other religions, and

its relation to democracy has been highly debatable. However, research on whether and how Islam has bearings on the dynamic process of democracy is lacking. This study aims to fill this research gap.

Promoting democracy has been of major global concern, which culminated in the recent Jasmine revolution and the ensuing Arab Spring. Consequently, the Islamic awakening and uprising has rekindled the debate on the relationship between religion and democracy. Considerable attention has been paid to the issue of whether Islam is the reason for the absence of democracy or the low level of democracy in Islamic countries. However, the issue of whether Islamic countries that have recently experienced revolutions would successfully transform into democratic countries, or whether their religious affiliation (i.e., Islam) would hamper their democratic development as widely believed, has yet to be examined. Despite the criticism of Islam as a hindrance to democratic development, Islam should be open to democracy. This idea is bolstered by the fact that countries that have recently undergone a series of democratic movements (e.g., Indonesia, Pakistan, Tunisia, Egypt, Libya, and Morocco) are primarily populated by Muslims, and Muslims have been involved in the democratic movement (e.g., the Muslim brotherhood fighting for democracy and freedom) – otherwise, democratic movements would not ensue. In fact, although a low level of democracy is widely recognized among Islamic countries, there is nevertheless a strong desire for democracy. Such a desire should motivate democratic development in Islamic countries when compared to non-Islamic countries that are currently more democratic (Maseland and van Hoorn, 2011). However, a lower level of democracy in Islamic countries means that Islamic countries have more room for improvement; therefore, these countries have greater potential to reach a higher level of democracy more rapidly based on the concept of convergence (Verdier, 1998). Hence, the dynamic process of democracy, or democratic adjustment, should be faster in Islamic countries than in non-Islamic countries.

The majority of related studies merely provide literary arguments on the relationship between Islam and democracy, and any empirical work has been retrospective in nature. Thus, this study contributes to the existing literature by exploring the issue of whether and how Islam has any bearing on the dynamic process of democracy. It likewise provides policy recommendations on the manner of promoting democracy more effectively in Islamic countries as opposed to non-Islamic countries. To the best of our knowledge, this research issue remains unexplored in the existing literature.[1] However, this issue is worth exploring because our results will verify the validity of the view that is generally held by the western world, that is, Islamic countries are unlikely to develop democracy, particularly after the occurrence of Arab Spring when the newly established democracy has been caught in a conundrum. In fact,

[1] Prior research has examined the relationship between Islam and level of democracy (Barro, 1999). However, no research to date has examined the dynamic relationship, i.e. how Islam has bearings on democratic development.

attributing any ostensibly low level of democracy to Islam alone may be inappropriate. Any pessimism about the future democratic development in Islamic countries can be attributed to other historical and cultural factors that are deeply rooted in the politics of Islamic countries (Kubba *et al.*, 2002; Donno and Russett, 2004; Fish, 2002; Stepan and Robertson, 2003; Weiffen, 2004). Without solid empirical investigation and clarification, any misconception about the relationship between Islam and democracy is likely to persist, and any existing conflict between Islamic and non-Islamic countries is likely to intensify. This condition prompts and necessitates further clarification, which is the purpose of the current study.

This study uses comprehensive aggregate data from 17 Asian countries (i.e., six Islamic countries and 11 non-Islamic countries) from 1996 to 2010. The results reveal that religion indeed plays a role in determining democracy. More specifically, the level of democracy in Islamic countries is generally lower than that in non-Islamic countries as commonly believed. Nevertheless, democratic adjustment is faster in Islamic countries than in non-Islamic countries. Moreover, the results suggest that Islamic countries can reach a higher level of democracy by improving education, minimizing the gender gap, controlling population growth, or becoming oil exporters similar to non-Islamic countries. However, Islamic countries own a unique advantage in improving democracy, that is, they can effectively promote democracy through urbanization, which turns out to be an ineffective strategy for non-Islamic countries.

The remainder of this paper is organized as follows. A review of the literature that leads to the study hypotheses is initially presented. The research data and methodology are then described, and the empirical results are analyzed. The final section of the paper concludes the study.

2. Literature review

Democracy in Asia

According to Croissant (2004), the democratic trend in Asia can be classified based on geographic locations. Northeast Asian countries tend to exhibit democratic consolidation, whereas South and Southeast Asian countries are likely to experience democratic stagnation and retreat, respectively. Overall, the majority of Asian countries lag behind western countries in terms of democracy. Although several Asian countries gradually progressed toward democracy during the democratization wave in the 1990s, they seemed to superficially establish an electoral system without realizing the spirit of democracy. The slow or impeded democratic development in these countries can be attributed to the lack of the essential elements of democracy, such as the rule of law, civil society, and accountability (Hood, 1998). Consequently, after the incumbent in many countries steps down, the subsequent elections are typically tainted with violence, and military intervention is involved, resulting in the stagnation of democracy. The Philippines and Thailand are good examples of this case (Croissant, 2004).

Any democratic deficit, stagnation, or retreat in Asian countries can also be attributed to the unique Asian cultures, which profoundly influence political development. In particular, Confucianism, considered as a religion by previous research (Taylor, 2014), has the most extensive effect. Huntington (1991) argued that Confucianism and the significance of democracy are contradictory in the sense that the fundamental ideological element in Confucianism is either no democracy or anti-democracy. Such ideology that is deeply rooted in Asia likely hinders the transition to a truly democratic political regime (Hood, 1998). However, similar to other religions, Confucianism may not be entirely detrimental to democratic development because it is characterized by multi-cultural tolerance and is accepting of the idea and values of western culture (Huntington, 1991). Such a characteristic should be at least open to, if not favorable toward, democratic development in Asia (Hu, 1997).

The openness of Confucianism to democracy is best exemplified by Japan where Confucianism similarly takes root in its culture. The success of Japan in achieving the highest level of democracy in Asia can be attributed to its active pursuit of westernization and modernization after the Meiji Restoration, which laid the foundations of democratization and helped establish a fully westernized and modernized country (Bowen, 1984). Moreover, after World War II, Japan developed a policy of secularism, which successfully facilitated democratic development (Paul, 2005). Hence, although Confucianism influences Japan as in other Asian countries, the willingness of Japan to be westernized is likely the key to its success in realizing full democracy.

In addition to Confucianism, Islam is believed to contribute to 'undemocracy' or a low level of democracy in several Muslim-populated Asian countries (Huntington, 1991; Croissant, 2004). However, the relationship between religion and democracy is complicated and mixed based on previous research (Halliday, 1996; Yetiv, 1997; Barro, 1999; Huntington, 1991; Lipset, 1994; Stepan, 2000; Minkenberg, 2007; Bloom and Arikan, 2012, 2013; Fradkin, 2000; Reichley, 1986). Islam, as one of major religions in the world, should be no exception in this respect. Hence, to ensure fairness and objectivity, the relationship between Islam and democracy should be reconsidered and reexamined.

Islam and democracy

The emergence of Islam and Islamic countries in the seventh century is primarily attributed to the desire of national rulers to unite people through religious ideology, such that people would respect and obey those in power, thus successfully establishing an autocratic empire (Borooah and Paldam, 2007). For centuries, these countries adopted and practiced Islamic law (Sharia), whose legal code is derived from the Koran, the Muslim bible. Enforcing Sharia to regulate people is apparently well intentioned in terms of attaining social order. Nevertheless, the legal system practiced in Islamic countries is considered undemocratic in nature, compelling Muslims to

live in an undemocratic environment; this condition has caused difficulty in building democracy (Esposito and Mogahed, 2008). In other words, Islam is more than a religion because its doctrine provides a set of guidelines for national governance to ensure that governments act according to the commandments (norms) of God; national citizens are expected to abide by these guidelines, and they risk severe punishments in case of non-compliance (Lipset, 1994). The issue that emerges is that several concepts underlying Sharia are considered incompatible with democracy. For instance, men and women are treated unequally based on Sharia, and this practice conflicts with the fundamentals of modern democracy that highlights equality and fairness (*The Economist*, 2010). Such a patriarchal social system that is inherent and prevalent in Islamic countries has been regarded as the primary contributor to authoritarianism (supremacy) and the low level of democracy (Lipset, 1994).

Even if Sharia is indeed undemocratic from the perspective of western countries, most people in Sharia-practicing countries are devout Muslims, who highly support the implementation of Sharia and never question its legitimacy (Mogahed, 2006); that is, Sharia law is the only recognized norm of life that regulates all of the aspects of Muslim life. Hence, Muslims who have been extensively exposed to such an environment are unlikely to demand a change by adopting a democratic system (Bukay, 2007). Such complacency with their existing political system can further ensure a lower level of democracy in Islamic countries than in non-Islamic countries.

Furthermore, the experience of being colonized by the western power in the early twentieth century likely contributes to the persistent democratic deficit in Islamic countries. More specifically, Muslims feared that the introduction of the western culture (i.e., modernization and democracy) during the colonial era would threaten their imperialism and culture. Islamic culture has its own religious and political norms; thus, Muslims are reluctant to be influenced by the western culture (Hunter, 2009). To avoid or reduce the influence of western powers on politics, economics, and culture in Islamic countries, Muslims initiated the campaign of reviving the Islamic culture, evoking Islamic nationalism to resist western colonization, democratization, and modernization (Somer, 2007). Several Islamic countries remain hostile toward the West because of their past colonial experience. Considering that democracy originated in the West, the hostility of Islamic countries toward the West implies that Muslims are hostile toward democracy, causing difficulty in the development of a democratic system (Farooq, 2011). To resist western colonization, Islamic countries consolidated their military regime and applied any modernization absorbed from the West into military power. This approach resulted in the current militarization of politics in several Islamic countries, which, in turn, reinforced their authoritarian regime and further inhibited the growth of democracy (Stein, 2012).

Finally, given the extreme resilience of an authoritarian regime that has been driven by cultural or historical factors for centuries, any democratization effort may be

thwarted or any promotion of democracy may be expectedly ineffective or unproductive (Hashemi, 2003).

In addition to the preceding arguments, previous studies have provided empirical evidence, albeit limited, indicating a negative relationship between Islam and democracy. For instance, the level of democracy has been found to be lower in Islamic countries than in other countries, and Islamic countries encounter difficulty in developing democracy likely because of the high association between Islam and authoritarianism (Barro, 1999; Clague *et al.*, 2001; Fish, 2002). Moreover, after the 9/11 terrorist attacks in the United States, numerous people started to think, or became more convinced, that Islam disfavors democracy and freedom, given that the alleged terrorists are from Islamic countries (Berman, 2003; Dalmasso and Cavatorta, 2013). In sum, any negative relationship between Islam and democracy can be attributed to Islam and the factors related to it.

As previously mentioned, in addition to Islam, the legal environment and historical background unique to Islamic countries can also cause difficulty in adopting democratic institutions and realizing the democratic spirit; thus, the level of democracy has remained lower in Islamic countries than in non-Islamic countries. However, similar to other religions, Islam is multi-vocal, whose doctrines can be theoretically used in promoting democracy (Anderson, 2004; Tessler, 2002). Although abundant research has reported the negative relationship between Islam and democracy, considering the potential positive relationship between Islam and democracy, the net relationship between Islam and democracy is ambiguous, depending on the relative magnitude of these two opposing relationships. However, if the negative relationship between the preceding Islam-related factors and democracy is more overwhelming than the positive relationship between Islam and democracy, then the net relationship between Islam and democracy is negative. Based on this analysis, the following hypothesis is proposed:

Hypothesis 1 (H1): The level of democracy is lower in Islamic countries than in non-Islamic countries.

Islam and democratic adjustment

Despite the criticism of Islam as a hindrance to democracy, the relationship between Islam and democracy deserves reconsideration based on several studies. For instance, Mogahed (2006) revealed the absence of conflict between Islamic law and democracy based on poll results. In addition, Tessler (2002) used the Middle East countries as the study sample and reported little relationship between Islam and political orientations, suggesting that Islam neither hinders nor fosters democratic orientations (Ciftci, 2010). Moreover, any negative relationship between Islamic attachment and support for democracy appears to be driven by Muslim women. Finally, any low level of democracy has been determined to be more related to systemic variables in Islamic countries, such as country, culture, and historical factors (Tessler, 2002; Hashemi, 2003;

Haklai, 2009; Heydemann and Leenders, 2011).[2] Based on the preceding evidence, any documented negative relationship between Islam and democracy may be attributed to a particular sample coverage or failure to control relevant variables, such as gender and country-specific variables. In other words, the real relationship between Islam and democracy remains undetermined. In fact, any negative relationship between Islam and democracy could be the cumulative consequence of the aforementioned factors rather than resulting from Islam only. Additionally, any historically low level of democracy in Islamic countries does not imply that such negative relationship between Islam and democracy will endure, particularly when we look into the future, noting that the Muslim world has been undergoing a series of democratic movements.

The preceding arguments and findings indicate that any conception on anti-democracy or undemocracy in relation to Islam can be biased and non-substantiated. Although the negative relationship between Islam and democracy has obtained empirical support, the underlying methodology is subject to scrutiny, and the related empirical research is limited. More specifically, in addition to the preceding problems, and missing variables (e.g., gender, colonial experience, culture) that could yield biased results, model specification and research focus should be carefully reconsidered. The controversial relationship between Islam and democracy and any negative relationship may be attributed to Islam and other enduring Islam-related factors; thus the level of democracy, as examined in previous studies, should be superceded by focusing on the speed of democratic adjustment. The underlying reason is that history shows that no authoritarian regime lasts forever, and democracy is expected to spread to every corner of the world (Tocqueville, 2000). Moreover, a low level of democracy does not imply slower democratic adjustment or minimal opportunity to achieve a higher level of democracy. For instance, Indonesia and Turkey are typical Islamic countries in Asia, which used to be under authoritarian rule. However, these countries have successfully transformed into democracies, probably because Islam in these countries is less powerful and their governments allow for more interaction between Islam and the political parties rather than putting divine law above secular law (Buehler, 2009). Given that previous studies are essentially backward looking and emphasize static democracy in Islamic countries, the adoption of a forward-looking stance by future researchers is worthwhile when examining the relationship between Islam and democracy. The reason is that democracy should be continual and dynamic rather than sporadic and static (Rustow, 1970). Hence, the current study makes an unprecedented attempt by examining the issue of whether and how the speed of democratic adjustment differs between Islamic and non-Islamic countries to provide new insight into the perennially debated research issue.

[2] Hashemi (2003) argued that a low level of democracy in the Islamic world has more to do with cultural and historical factors rather than Islam itself. In fact, when it comes to the compatibility of Islam with democracy, the real issue is what Muslims are demanding rather than what Islam really is.

As previously mentioned, the low level of democracy in Islamic countries may be related to social, historical, and cultural factors rather than Islam only (Tessler, 2002; Haklai, 2009; Heydemann and Leenders, 2011). Hence, Islam should be further reexamined to ascertain whether it indeed deters democratic development as extensively documented in the existing literature. In fact, a few studies provide evidence indicating that Islam is not inimical but friendly towards and even fosters democracy. For instance, from the perspective of the scripture, Islam includes the concepts of *shura*, *ijma*, and *ijtihad*, which denote consultation, consensus, and independent reasoning, respectively. All of these concepts are the building blocks for democracy, suggesting that democratic development is feasible in Islamic countries (Anderson, 2004). In addition, the recent successful transformation in Islamic countries of several enduring authoritarian regimes into democratic ones, as well as several democratic movements initiated by Islamic organizations, at least signifies that Islam facilitates democratization (Hofmann, 2004). Otherwise, Muslims would not pursue and realize democracy. In other words, these democratic events disprove the conception that Islam is undemocratic or anti-democracy. Moreover, Islam may not be necessarily less democratic than other religions. For instance, Muslims are found to be more supportive of democracy than non-Muslims, such as those who are affiliated with Eastern Orthodox Christianity (Hofmann, 2004). Furthermore, given that any democracy established in Islamic countries remains premature and that democracy is an unstoppable trend (Tocqueville, 2000), Islamic countries should have considerable room for promoting democracy and should rapidly undertake democratic adjustment as opposed to non-Islamic countries from the perspective of convergence (Verdier, 1998). That is, Islamic countries should have the potential to achieve significant progress in democratic development as opposed to non-Islamic countries that are already highly democratic. Finally, Maseland and van Hoorn (2011) revealed a negative relationship between the level of democracy and aspirations for democracy. Given the observed level of democracy being generally lower in Islamic countries than in non-Islamic countries, this finding implies that Muslims have stronger democratic aspirations, which should intensify the propagation of democracy, especially after any incidence that triggers a major democratic reform (Dalmasso and Cavatorta, 2013). Based on the preceding reasoning, the following hypothesis is proposed:

> Hypothesis 2 (H2): Democratic adjustment is faster in Islamic countries than in non-Islamic countries.

3. Methodology

Data

The study sample consists of 17 Asian countries (Japan, Taiwan, South Korea, China, India, Singapore, Thailand, Indonesia, Philippines, Russia, Turkey, Malaysia, Vietnam, Pakistan, Sri Lanka, Saudi Arabia, and Kuwait), and the study period spans from 1996 to 2010. This time span is selected because it corresponds to the starting year for the data

on democracy (i.e., voice and accountability). Asian countries are selected because of their higher religious diversity compared with western countries where Christianity and Catholicism tend to dominate. In addition, the level of democracy in Asian countries generally lags behind that in western countries (e.g., European and North American countries); such a context makes the examination of democracy in Asian countries worthwhile and interesting, and prompts the research on whether a perceivably low level of democracy is related to religious distribution in Asia. Furthermore, high variation in the level of democracy among countries in Asia, as opposed to the West, similarly allows for richer testing.

In sum, the selection of Asian countries as the study sample is justified by heterogeneity in the level of democracy and religion. In addition, the study sample holds the advantage of not including Islamic countries experiencing an Arab Spring or any similar political upheaval in the sample period. Thus, results based on the study sample should be reliable because such results did not arise from a dramatic shift in the political regime.

The data on democracy (Voice and Accountability (*VA*)) are derived from the Worldwide Governance Indicators databank.[3] *VA* is an index that captures 'perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media' (Kaufmann *et al.*, 2011).[4] The values of *VA* range from –2.5 to 2.5; a high value of *VA* indicates a high level of democracy in a given country.

To test our hypotheses, we categorize the sampled countries into different religious groups. First, we determine the major religion in a given country using religious demography from the 2012 Report on International Religious Freedom provided by the US Department of State.[5] Major religion in a given country is defined as a religion believed by the highest percentage (more than 50%) of national citizens. If the percentage of people believing in a religion is less than 50% in a given country, then that country is regarded as having no major religion. Table 1 summarizes the cross-country religious demography and major religions. Six countries (i.e., Indonesia, Kuwait, Malaysia, Pakistan, Saudi Arabia, and Turkey) are classified as Islamic countries because more than 50% of their respective populations believe in Islam. The remaining 11 countries (i.e., China, India, Japan, Philippines, Russia, South Korea, Singapore, Sri Lanka, Thailand, Taiwan, and Vietnam) are non-Islamic countries.

[3] Please visit the following website for details: http://info.worldbank.org/governance/wgi/index.aspx#home.

[4] The definition of *VA* is unrelated to religious freedom. *VA* and other worldwide governance indicators 'are based on several hundred variables obtained from 31 different data sources, capturing governance perceptions as reported by survey respondents, nongovernmental organizations, commercial business information providers, and public sector organizations worldwide' (Kaufmann *et al.*, 2011).

[5] Please visit the following website for details: http://www.state.gov/j/drl/rls/irf/religiousfreedom/index.htm#wrapper.

Table 1. *Summary of religious demography and major religions by country*

Country	Religious demography	Major religion
China	Religious believers 31.4% (Buddhism, Taoism, or folk religion 20.9%); five nationally recognized religions: Buddhism, Taoism, Islam, Protestantism, and Catholicism (note: officially atheist)	None
India	Hinduism 80.5%, Islam 13.4%, Christianity 2.3%, Sikhs 1.9, others <1%	Hinduism
Indonesia	Islam 87%, Protestant 7%, Roman Catholic 3%, Hinduism 1.5%, others 1.25%	Islam
Japan	Shinto and Buddhism >100% (note: the majority of Japanese practice both Shinto and Buddhist rites)	Shinto and Buddhism
Kuwait	Islam close to 100%	Islam
Malaysia	Islam 61.3%, Buddhism 19.8%, Christianity 9.2%, Hinduism 6.3%, others 3.4%	Islam
Pakistan	Islam 95%, others 5%	Islam
Philippines	Christianity 93%, Islam 5%	Christianity
Russia	Russian Orthodox 74%, Islam 7%, others <5%	Christianity
Saudi Arabia	Islam approximately 100%	Islam
Singapore	Buddhism 33%, Christianity 18%, Islam 15%, Taoism 11%, Hinduism 5%, others <5%	None
South Korea	Buddhism 23%, Protestant 18%, Roman Catholic 11%, no religious belief 47%, others <5%	None
Sri Lanka	Buddhism 70%, Hinduism 15%, Christianity 8%, Islam 7%	Buddhism
Taiwan	Buddhism 35%, Taoism 33%, Folk religion 80% (note: some people believe in Buddhism, Taoism, and folk religion at the same time)	Folk religion
Thailand	Buddhism 93%, Islam 5%, others 2%	Buddhism
Turkey	Islam 99%, others 1%	Islam
Vietnam*	Buddhism >50%, Roman Catholics 7%	Buddhism

Notes: Religious demography is adapted from International Religious Freedom Report for 2012, US Department of State.

* According to Vietnam National Administration of Tourism, 'over 70% of the population of Vietnam are either Buddhist or strongly influenced by Buddhist practices', http://www.vietnamtourism.com/e_pages/country/overview.asp.

Table 2. *Classification of countries into Islamic and non-Islamic countries, further divided into five religious groups*

Country group	Belief type	Country coverage
Islamic countries	Islam	Indonesia, Kuwait,, Malaysia, Pakistan, Saudi Arabia, Turkey
Non-Islamic countries	Polytheism	India, Japan, Taiwan
	Diverse beliefs	South Korea, Singapore
	Buddhism	Sri Lanka, Thailand, Vietnam
	Christianity	Philippines, Russia
	Atheism	China

Non-Islamic countries are further classified into five country groups with different belief types, namely, polytheism, diverse belief, Buddhism, Christianity, and atheism. Given that major religions in India, Japan, and Taiwan (Hinduism, Shinto, and folk religion, respectively) are polytheistic in nature, we classify these three countries into the polytheistic country group. In addition, although no major religions exist in South Korea and Singapore, religious demography shows that populations with religious beliefs account for more than 50% in each country. Thus, we classify both countries as countries with diverse beliefs. In addition, we classify Sri Lanka, Thailand, and Vietnam as Buddhist countries because Buddhism is their major religion. Furthermore, although major religions in the Philippines and Russia are reportedly Catholic and Russian Orthodox, both countries are classified as Christian countries because Catholicism and Russian Orthodox are regarded as branches of Christianity; both religions similarly follow the Bible and Jesus Christ. Finally, China is classified as an atheist country, not only because it is officially atheistic but also because the religious population accounts for substantially less than half (31.4%) of the total population. Table 2 summarizes the finalized classification of countries based on belief types.

Figure 1 presents the secular trend of level of democracy for Islamic and non-Islamic countries. The level of democracy is generally lower in Islamic countries than in non-Islamic countries during the entire sample period. The results of a *t*-test for the mean values and the median test further indicate that the level of democracy for Islamic countries is significantly lower than that for non-Islamic countries (p-value = 0 for both tests). Results support H1 and concur with conventional wisdom that Islamic countries have a lower level of democracy compared with non-Islamic countries. However, the level of democracy apparently shows an upward trend for Islamic countries, as opposed to non-Islamic countries where a downward trend is observed for the entire sample period. The graphic pattern observed in Figure 1 appears to support H2. However, advanced regression analysis is required to further test H2 and verify whether democratic adjustment is faster in Islamic countries than in non-Islamic countries.

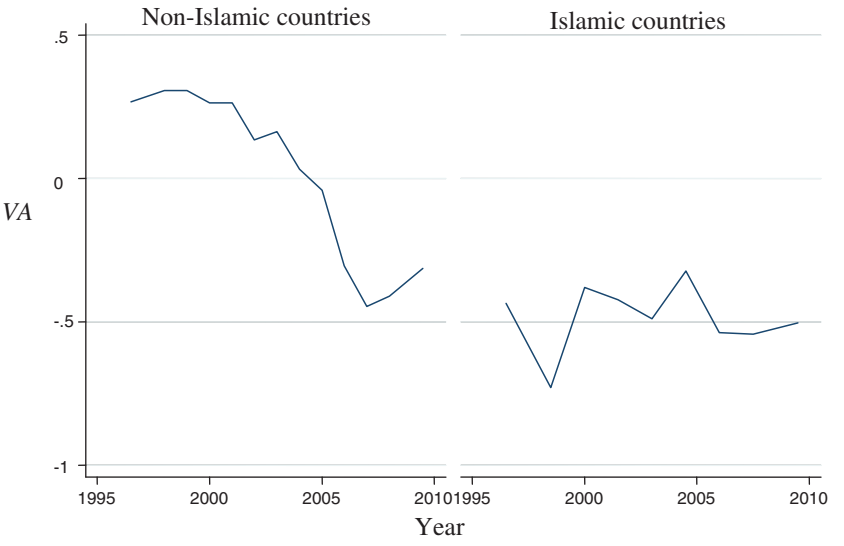

Figure 1 Level of democracy for Islamic and non-Islamic countries, 1996–2010
Notes: This figure shows the secular trend of median values of voice and accountability (*VA*) index for Islamic countries and non-Islamic countries. The *VA* index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.* 2011). Higher index values indicate higher levels of democracy.

Table 3 presents the correlation matrix and the variance inflation factors (VIFs) of the variables used in this study. *VA* is related to other variables, thereby justifying the inclusion of these variables as independent variables in the regression analysis. More specifically, *VA* is positively correlated with per capita gross domestic product (*GDP*), primary schooling (*SCHOOL*), and urbanization (*URBAN*), whereas *VA* is negatively correlated with gender gap in primary schooling (*GAP*), population (*POP*), and being an oil-exporting country (*OIL*), thus concurring with previous research findings.[6] The correlation coefficients for variables other than *VA* are generally not excessively high, except for the correlation coefficient of ln(*GDP*) vs. *URBAN*, and several are statistically insignificant (e.g., *SCHOOL* vs. *GAP*, *SCHOOL* vs. *URBAN*, *SCHOOL* vs. *OIL*, *GAP* vs. ln(*POP*), and *GAP* vs. *OIL*). In addition, the VIFs are generally low, ranging from 1.07 to 4.12; thus, the concern about multicollinearity can be alleviated.

Table 4 presents the mean and median values of *VA* and its determinants, as well as the number of observations across countries. The sample consists of 235 country-year observations. Each country yielded 14 observations, except Taiwan and Thailand where

[6] Barro (1999) also shows that urbanization is positively related to democracy, but it is negatively related to democracy when other variables are controlled for in the regression analysis. In contrast, we observe a positive relationship between urbanization and democracy in results from both correlation and regression analysis.

Table 3. *Correlation matrix and variance inflation factors*

	VA	*ln(GDP)*	*SCHOOL*	*GAP*	*URBAN*	*ln(POP)*	*OIL*	*VIF*
VA	1							
ln(*GDP*)	0.38*	1						4.12
SCHOOL	0.33*	0.27*	1					1.12
GAP	−0.18*	−0.21*	−0.06	1				1.07
URBAN	0.22*	0.84*	0.12	−0.18*	1			4.11
ln(*POP*)	−0.12	−0.59*	−0.13*	0.03	−0.61*	1		1.72
OIL	−0.31*	0.19*	0.02	0.06	0.32*	−0.32*	1	1.18

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. VIF indicates the values of variance inflation factors. * stands for 5% significant.

the number of observations are 12 and 13, respectively. The mean and median values of *VA* and its determinants exhibit wide variation. The mean (median) values of *VA* range from –1.57 (–1.57) (Saudi Arabia) to 0.97 (0.98) (Japan). The mean and median values of *VA* for the entire sample are –0.30 and –0.28, respectively. The top three countries in terms of *GDP* per capita are Japan, Kuwait, and Singapore, whereas countries with the lowest *GDP* per capita are Vietnam, Pakistan, and India. Despite the documented relationship between *GDP* and democracy, rich countries do not necessarily experience higher levels of democracy than the others. Saudi Arabia, for instance, ranks seventh in terms of *GDP* per capita in the study sample of 17 countries, despite having the lowest level of democracy. The mean and median values of *SCHOOL* range from five to six years, except for Kuwait and Russia where the mean and median values of *SCHOOL* are below five years. *GAP* is lowest (i.e., 0) in Japan, Taiwan, and the Philippines, whereas it is largest in Sri Lanka where the mean and median values are 0.79 and 1, respectively. *URBAN* is highest in Singapore where the mean and median values are 1.00, whereas it is the lowest in Sri Lanka where the mean and median values are 0.15. The top three countries in terms of *POP* are China, India, and Indonesia, whereas the three least populated countries are Kuwait, Singapore, and Sri Lanka. Of the entire sample, only Saudi Arabia, Kuwait, and Indonesia are oil exporters.[7]

Table 5 presents the descriptive statistics (mean, median, maximum, minimum, standard deviation, and number of observations) of democracy and its determinants for Islamic and non-Islamic countries to facilitate comparison between these two

[7] Given that Indonesia withdrew from OPEC on 10 September 2008, Indonesia was designated as an oil exporter from 1996 to 2008, whereas it was not from 2009 to 2010 in creating the oil exporter dummy variable.

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Table 4. *Descriptive statistics of democracy and its determinants by country, 1996–2010*

Country		*n*	*VA*	*GDP*	*SCHOOL*	*GAP*	*URBAN*	*POP*	*OIL*
China	Mean	14	−1.50	1885.14	5.00	0.71	0.39	1290.00	0.00
	Median		−1.53	1382.00	5.00	1.00	0.39	1290.00	0.00
India	Mean	14	0.38	712.29	5.00	0.64	0.29	1110.00	0.00
	Median		0.42	592.50	5.00	1.00	0.29	1110.00	0.00
Indonesia	Mean	14	−0.39	1348.43	6.00	0.36	0.46	223.00	0.86
	Median		−0.32	1100.50	6.00	0.00	0.47	223.00	1.00
Japan	Mean	14	0.97	35160.93	6.00	0.00	0.66	127.00	0.00
	Median		0.98	34379.50	6.00	0.00	0.66	128.00	0.00
Kuwait	Mean	14	−0.39	29183.38	4.43	0.36	0.98	2.19	1.00
	Median		−0.41	22511.00	4.00	0.00	0.98	2.16	1.00
Malaysia	Mean	14	−0.36	5286.64	6.00	0.43	0.66	25.20	0.00
	Median		−0.36	4737.00	6.00	0.00	0.66	25.30	0.00
Pakistan	Mean	14	−1.00	665.43	5.00	0.57	0.35	154.00	0.00
	Median		−0.90	586.50	5.00	1.00	0.35	154.00	0.00
Philippines	Mean	14	0.08	1323.93	6.00	0.00	0.61	83.00	0.00
	Median		0.08	1117.00	6.00	0.00	0.62	83.10	0.00
Russia	Mean	14	−0.67	5103.79	3.50	0.07	0.73	144.00	0.00
	Median		−0.59	3542.50	3.50	0.00	0.73	144.00	0.00
Saudi Arabia	Mean	14	−1.57	11602.14	6.00	0.64	0.81	22.90	1.00
	Median		−1.57	10195.50	6.00	1.00	0.81	22.80	1.00

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Table 4. *Continued*

Country		*n*	*VA*	*GDP*	*SCHOOL*	*GAP*	*URBAN*	*POP*	*OIL*
Singapore	Mean	14	−0.05	28778.50	6.00	0.43	1.00	4.32	0.00
	Median		0.02	26893.00	6.00	0.00	1.00	4.17	0.00
South Korea	Mean	14	0.67	14769.14	6.00	0.71	0.80	47.70	0.00
	Median		0.67	14240.00	6.00	1.00	0.81	47.90	0.00
Sri Lanka	Mean	14	−0.30	1269.50	5.00	0.79	0.15	19.50	0.00
	Median		−0.28	1014.50	5.00	1.00	0.15	19.50	0.00
Taiwan	Mean	12	0.83	15472.25	6.00	0.00	0.79	22.70	0.00
	Median		0.84	15531.50	6.00	0.00	0.79	22.70	0.00
Thailand	Mean	13	0.03	2658.39	6.00	0.42	0.32	65.20	0.00
	Median		0.21	2442.00	6.00	0.00	0.32	65.40	0.00
Turkey	Mean	14	−0.25	6115.29	5.00	0.36	0.67	66.80	0.00
	Median		−0.16	5200.00	5.00	0.00	0.67	66.80	0.00
Vietnam	Mean	14	−1.40	646.07	5.00	0.36	0.26	80.90	0.00
	Median		−1.43	525.00	5.00	0.00	0.26	81.00	0.00
Total	Mean	235	−0.30	9422.87	5.40	0.41	0.58	208.00	0.17
	Median		−0.28	3507.00	6.00	0.00	0.65	69.10	0.00

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. The number of years is denoted by *n*.

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Table 5. *Descriptive statistics for Islamic and non-Islamic countries, 1996–2010*

Countries		*VA*	*GDP*	*SCHOOL*	*GAP*	*URBAN*	*POP*	*OIL*
Islamic	mean	−0.660	8790.783	5.405	0.452	0.653	82.4	0.476
	median	−0.491	4599	5.5	0	0.66	44.6	0
	max	0.004	58384	6	1	0.98	240	1
	min	−1.773	446	4	0	0.32	1.679	0
	sd	0.519	11167.79	0.661	0.501	0.213	80.8	0.502
	N	84	84	84	84	84	84	84
Non-Islamic	mean	−0.101	9770.305	5.397	0.38	0.544	277	0
	median	0.032	2375	6	0	0.61	78.6	0
	max	1.055	42831	6	1	1	1340	0
	min	−1.704	361	3	0	0.15	3.796	0
	sd	0.82	12176.97	0.784	0.487	0.265	447	0
	N	151	151	151	150	151	151	151
All	mean	−0.301	9422.868	5.4	0.406	0.583	208	0.17
	median	−0.28	3507	6	0	0.65	69.1	0
	max	1.055	58384	6	1	1	1340	1
	min	−1.773	361	3	0	0.15	1.679	0
	sd	0.774	11814.04	0.741	0.492	0.253	373	0.377
	N	235	235	235	235	235	235	235
t test	t-value	6.827*	0.738	0.065	−1.118	−3.552*	5.357*	−9.024*
Median test	z-value	5.929*	−0.525	0.600	−1.127	−3.321*	2.232**	−9.719*

Notes: This table presents mean, median, maximum (max), minimum (min), and standard deviation (sd) values as well as number of observations (N) for different country groups. Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. * and ** indicate significance at 5% and 1% levels, respectively.

country groups. Islamic and non-Islamic countries account for 35.7% and 64.3% of total observations, respectively. We performed a *t*-test and median test to examine any difference in the values of variables between the two country groups by comparing non-Islamic countries with Islamic countries. The test statistics for *VA* are significantly positive, indicating that the level of democracy in non-Islamic countries is significantly higher than that in Islamic countries. The results thus support H1. In addition, the test statistics for *URBAN* are significantly negative, indicating that the urbanization rate in Islamic countries is significantly higher than that in non-Islamic countries. The test statistics for *POP* are significantly positive, thus indicating that the population in non-Islamic countries is significantly higher than that in Islamic countries. The test statistics for *GDP*, *SCHOOL*, and *GAP* are insignificant, indicating no significant difference in *GDP* per capita, primary schooling, and gender gap in primary schooling between Islamic and non-Islamic countries. Finally, the test statistics for *OIL* are significantly negative, concurring with the observation in Table 4 that all oil exporters are Islamic countries.

To obtain further insight into the research question, we examined the descriptive statistics (mean, median, maximum, minimum, and standard deviation values as well as number of observations) of democracy and its determinants for Islamic and non-Islamic countries divided into five country groups based on belief types (i.e., polytheism, diverse beliefs, Buddhism, Christianity, and atheism) (Table 6). Islamic countries account for the largest number of observations (84); by contrast, the atheist country group consisting only of China shows the smallest number of observations (14). The *t*-test results indicate that the value of *VA* for polytheist nations is significantly larger than that for nations with diverse beliefs (*t*-value = 5.238, p-value = 0.000). *VA* is significantly larger for nations with diverse beliefs than for Christian nations (*t*-value = 5.591, p-value = 0.000), and *VA* is significantly larger for Christian nations than for Buddhist nations (*t*-value = 1.976, p-value = 0.026). In addition, *VA* is higher for Buddhist nations than for Islamic nations but with an insignificant difference (*t*-value = 0.930, p-value = 0.822). Finally, *VA* for Islamic nations is significantly larger than for the atheist country (i.e., China) (*t*-value = 6.183, p-value = 0.000). Thus, religions sorted by level of democracy (from high to low) are as follows: polytheism, diverse beliefs, Christianity, Buddhism, Islam, and atheism. Moreover, the mean value of *VA* for countries with polytheism, diverse beliefs, and Christianity is higher than the overall mean value of *VA* (–0.301), whereas the mean value of *VA* for countries with Buddhism, Islam, and atheism is lower than the overall mean value of *VA*. Furthermore, excluding atheism associated with only one country in the study sample, polytheist countries show the highest value of *VA*, whereas Islamic countries exhibit the lowest value of *VA*. Even if the atheist country is not excluded, Islamic countries have the lowest minimum value of *VA* (–1.773) among all country groups. The preceding observations lend additional support for H1. As for the determinants of democracy, based on the observation of the corresponding mean and median values, *GDP* per capita is the highest in countries with diverse beliefs and the lowest in Buddhist countries. The gender gap of primary

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Table 6. *Descriptive statistics of democracy and its determinants for 17 countries classified into six religious affiliations, 1996–2010*

		VA	*GDP*	*SCHOOL*	*GAP*	*URBAN*	*POP*	*OIL*
Polytheism	mean	0.722	17197.300	5.650	0.225	0.566	441.000	0.000
	median	0.835	15531.500	6.000	0.000	0.660	128.000	0.000
	max	1.055	42831.000	6.000	1.000	0.800	1220.000	0.000
	min	0.264	409.000	5.000	0.000	0.270	22.100	0.000
	sd	0.267	14800.470	0.483	0.423	0.215	503.000	0.000
	N	40	40	40	40	40	40	40
Diverse beliefs	mean	0.309	21773.820	6.000	0.571	0.902	26.000	0.000
	median	0.436	21672.000	6.000	1.000	0.910	25.500	0.000
	max	0.743	41120.000	6.000	1.000	1.000	48.900	0.000
	min	−0.445	7463.000	6.000	0.000	0.790	3.796	0.000
	sd	0.417	9119.861	0.000	0.504	0.100	22.100	0.000
	N	28	28	28	28	28	28	28
Christianity	mean	−0.298	3213.857	4.750	0.036	0.672	114.000	0.000
	median	−0.235	1840.000	5.000	0.000	0.695	118.000	0.000
	max	0.378	11700.000	6.000	1.000	0.730	147.000	0.000
	min	−0.986	966.000	3.000	0.000	0.560	72.400	0.000
	sd	0.432	3160.061	1.323	0.189	0.064	31.600	0.000
	N	28	28	28	28	28	28	28
Buddhism	mean	−0.571	1497.000	5.317	0.525	0.242	54.900	0.000
	median	−0.496	1130.000	5.000	1.000	0.260	65.400	0.000
	max	0.517	4608.000	6.000	1.000	0.340	86.900	0.000
	min	−1.566	361.000	5.000	0.000	0.150	18.400	0.000
	sd	0.681	1039.205	0.471	0.506	0.070	26.700	0.000
	N	41	41	41	41	41	41	41

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Table 6. *Continued*

		VA	*GDP*	*SCHOOL*	*GAP*	*URBAN*	*POP*	*OIL*
Islam	mean	−0.660	8790.783	5.405	0.452	0.653	82.400	0.476
	median	−0.491	4599.000	5.500	0.000	0.660	44.600	0.000
	max	0.004	58384.000	6.000	1.000	0.980	240.000	1.000
	min	−1.773	446.000	4.000	0.000	0.320	1.679	0.000
	sd	0.519	11167.790	0.661	0.501	0.213	80.800	0.502
	N	84	84	84	84	84	84	84
Atheism	mean	−1.501	1885.143	5.000	0.714	0.390	1290.000	0.000
	median	−1.530	1382.000	5.000	1.000	0.390	1290.000	0.000
	max	−1.271	4428.000	5.000	1.000	0.450	1340.000	0.000
	min	−1.704	774.000	5.000	0.000	0.330	1230.000	0.000
	sd	0.159	1209.225	0.000	0.469	0.037	34.100	0.000
	N	14	14	14	14	14	14	14
All countries	mean	−0.301	9422.868	5.400	0.406	0.583	208.000	0.170
	median	−0.280	3507.000	6.000	0.000	0.650	69.100	0.000
	max	1.055	58384.000	6.000	1.000	1.000	1340.000	1.000
	min	−1.773	361.000	3.000	0.000	0.150	1.679	0.000
	sd	0.774	11814.040	0.741	0.492	0.253	373.000	0.377
	N	235	235	235	235	235	235	235

Notes: This table presents mean, median, maximum (max), minimum (min), and standard deviation (sd) values as well as number of observations (N) for different country groups. Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise.

schooling is the largest in the atheist country and the lowest in Christian countries. The atheist country has the largest population, whereas countries with diverse beliefs have the smallest population. Finally, as observed in Tables 4 and 5, oil exporters are Islamic countries.

Model

We examined the relationship between Islam and democratic adjustment by estimating the econometric model similar to that used by Barro (1999). We used control variables such as *GDP*, *SCHOOL*, *GAP*, *URBAN*, and *POP*, and introduced a dummy variable *OIL*. These control variables were included based on previous research. Democracy has been shown to be positively related to standard of living, which is directly proxied by *GDP* per capita, primary schooling, and income share of the middle class and inversely proxied by gender gap in primary schooling. In addition, democracy is negatively related to urbanization and dependency on natural resources (Barro, 1999; Shafiq, 2010). Information about oil-exporting countries was obtained from the Organization of Petroleum Exporting Countries.[8] Data for all of the other control variables are derived from the World Bank.[9]

Considering that the sample covers 17 countries and spans the period from 1996 to 2010, a panel data model was used for estimation, and different specifications of the following econometric model were estimated.

$$VA_{i,t} = \beta_0 + \beta_1 VA_{i,t-1} + \beta_2 VA_{i,\,t-1} \times ISLAM + \beta_3 \ln(GDP_{i,t-1}) + \beta_4 SCHOOL_{i,t-1} + \beta_5 GAP_{i,t-1} + \beta_6 URBAN_{i,t-1} + \beta_7 \ln(POP_{i,t-1}) + \beta_8 OIL_{i,t} + u_i + v_{i,t}$$

where $VA_{i,t}$ is the democracy variable (voice and accountability) for country i in year t. $VA_{i,t-1}$ is the lagged dependent variable for country i in year t–1. The lag of the *VA* variable is included as one of the independent variables to estimate the speed of democratic adjustment, which is measured by (1 – the sum of the coefficient on $VA_{i,t-1}$ and that on $VA_{i,t-1} \times ISLAM$) (Appendix A1). As a result, the larger (smaller) the coefficient on $VA_{i,t-1}$, the lower (higher) the adjustment speed. *ISLAM* is a dummy variable that returns a value of 1 if Islam is the major religion in a given country and 0 otherwise. $GDP_{i,t-1}$ is per capita *GDP* for country i in year t–1. $SCHOOL_{i,t}$ is primary schooling (number of years) for country i in year t–1. $GAP_{i,t-1}$ is the gap between male and female primary education (number of years) for country i in year t–1. $URBAN_{i,t-1}$ is the urbanization rate for country i in year t–1. $POP_{i,t-1}$ is the population for country i in year t–1. $OIL_{i,t}$ is the dummy variable that returns a value of 1 if country i is a member of OPEC in year t and 0 otherwise. u_i is the country-specific effect for country i; $v_{i,t}$ is the white noise for country i in year t.

[8] Please visit the following website for details: http://www.opec.org/opec_web/en/index.htm.
[9] Please visit the following website for details: http://data.worldbank.org/.

The fixed-effects panel data model was estimated to provide consistent estimators in hypothesis testing. Based on the preceding model, β_2 is expected to be negative if H2 holds up, that is, adjustment to the target level of democracy is faster in Islamic countries than in non-Islamic countries (Appendix A1).

4. Empirical results

Table 7 presents the results on the relationship between Islam and democracy. Panels A and B present the obtained results based on the entire sample and reduced sample, respectively. Focusing on Column 1 in Panel A, results on how democracy is related to its benchmark determinants generally concur with those in previous studies. The coefficients of *GDP*, *URBAN*, and *OIL* are insignificant, thus indicating that the level of democracy is generally unrelated to economic growth, urbanization, and being an oil exporter. The coefficients of the other three determinants are significant and demonstrate the expected signs. More specifically, *SCHOOL* has a significantly positive coefficient, indicating a positive relationship between the level of democracy and the duration of primary schooling, likely because education promotes civic participation. That is, people are more inclined to recognize the value of democracy and support democracy when they are more educated than when they are not (Glaeser *et al.*, 2007). The coefficient of *GAP* is significantly negative, indicating a negative relationship of the level of democracy to the gender gap in primary schooling; that is, the level of democracy is higher when people of different genders are treated more equally in terms of education than when they are not. These results concur with the finding that gender equality is positively related to democracy (Inglehart *et al.*, 2002). The coefficient of *POP* is significantly negative, indicating a negative relationship of the level of democracy to population. This observation supports the view that overpopulation can result in the dilution of democracy and transitive loss of democracy; that is, when a population exceeds a certain level, getting one's opinion heard by government becomes increasingly difficult as the population increases (Bartlett, 2000). In sum, the results on the relationship between democracy and its benchmark determinants generally concur with those of previous research (Barro, 1999).

Focusing on the results on democracy, the coefficient on VA_{t-1} is significantly positive, thereby indicating that democratic adjustment is costly and that reaching the target level of democracy requires time. In addition, the coefficient on the interaction variable $VA_{t-1} \times ISLAM$ is significantly negative, indicating that the speed of adjustment to the target level of democracy is higher for Islamic countries than for non-Islamic countries. These results support H2.

For the robustness check, we applied a stricter definition for Islamic countries in estimating the model to verify if the results in Column 1 continue to hold. Based on the religious demography provided by CIA World Factbook (CIA, 2011), Indonesia, Kuwait, and Malaysia have Muslim populations of less than 90% as opposed to other Islamic countries, such as Pakistan, Saudi Arabia, and Turkey, where close to or virtually 100%

Table 7. *Relationship between Islam and democratic adjustment*

Panel A. Full sample

Dependent variable: VA_t	(1)	(2) Malaysia	(3)	(4)
Independent variables	All six Islamic countries included	excluded from Islamic countries	Malaysia and Kuwait excluded	Malaysia, Kuwait and Indonesia excluded
VA_{t-1}	0.877***	0.880***	0.869***	0.844***
	(0.063)	(0.063)	(0.067)	(0.055)
$VA_{t-1} \times ISLAM$	−0.188*	−0.228*	−0.194+	−0.222**
	(0.088)	(0.096)	(0.103)	(0.063)
Ln(GDP_{t-1})	−0.032	−0.037	−0.030	−0.036
	(0.044)	(0.042)	(0.046)	(0.047)
$SCHOOL_{t-1}$	0.135**	0.131**	0.129**	0.123*
	(0.040)	(0.041)	(0.042)	(0.044)
GAP_{t-1}	−0.099***	−0.101***	−0.099***	−0.095***
	(0.023)	(0.024)	(0.024)	(0.023)
$URBAN_{t-1}$	0.769	1.095	0.925	0.641
	(0.689)	(0.664)	(0.639)	(0.429)
Ln(POP_{t-1})	−0.435*	−0.439*	−0.338	−0.325†
	(0.167)	(0.173)	(0.194)	(0.185)
OIL	−0.023	−0.016	−0.016	0.030
	(0.048)	(0.047)	(0.046)	(0.045)
Constant	6.963*	6.904*	5.157	5.143
	(3.012)	(3.034)	(3.518)	(3.407)
N	235	235	235	235
n	17	17	17	17
R^2	0.732	0.733	0.731	0.732

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

Table 7. *Continued*

Panel B. Reduced sample

Dependent variable: VA_t	(1)	(2)	(3)
Independent variables	Malaysia excl	Malaysia and Kuwait excl	Malaysia, Kuwait and Indonesia excl
VA_{t-1}	0.888***	0.882***	0.879***
	(0.059)	(0.064)	(0.066)
$VA_{t-1} \times ISLAM$	−0.265*	−0.254*	−0.288**
	(0.093)	(0.104)	(0.081)
Ln(GDP_{t-1})	−0.046	−0.058	−0.041
	(0.041)	(0.044)	(0.045)
$SCHOOL_{t-1}$	0.124*	0.129*	0.118*
	(0.046)	(0.048)	(0.043)
GAP_{t-1}	−0.102**	−0.105**	−0.104**
	(0.027)	(0.030)	(0.029)
$URBAN_{t-1}$	1.657†	1.765†	1.074
	(0.813)	(0.858)	(0.659)
Ln(POP_{t-1})	−0.416*	−0.519*	−0.456†
	(0.188)	(0.239)	(0.218)
OIL	0.009	0.010	
	(0.054)	(0.054)	
Constant	6.304†	8.315†	7.466†
	(3.251)	(4.212)	(3.925)
N	221	207	193
n	16	15	14
R^2	0.737	0.735	0.720

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

of the total population are Muslims.[10] The above-mentioned three countries were excluded incrementally from the Islamic country group and incorporated into the

[10] According to CIA World Factbook (CIA, 2011), Indonesia, Kuwait, and Malaysia have Muslim population of 86.1%, 85%, and 60.4%, respectively.

non-Islamic country group. When increasingly more countries were excluded from the Islamic country group in Columns 2 to 4, the results are similar to those in Column 1, except that the coefficient on *POP* becomes insignificant when Malaysia and Kuwait are excluded from the Islamic country group in Column 3. Most importantly, the coefficient on $VA_{t-1} \times ISLAM$ remains significantly negative in Columns 2 to 4. Thus, the observation of a higher adjustment speed for Islamic countries in Column 1 remains robust when the Islamic country group is increasingly smaller in Columns 2 to 4.

Panel B presents the results obtained based on the reduced sample. Following the preceding approach, Islamic countries were increasingly excluded from the sample. However, different from Panel A, the excluded countries were not incorporated into the non-Islamic country group. The results on the relationship of democracy to its benchmark determinants are similar to those in Panel A, except that the coefficients on $URBAN_{t-1}$ are borderline significant in Columns 1 and 2 of Panel B. Moreover, the coefficients on $VA_{t-1} \times ISLAM$ remain significantly negative in all of the columns of Panel B. Thus, the observation of faster democratic adjustment for Islamic countries from Panel A carries over to Panel B where the sample size decreases as increasingly more countries are excluded from the Islamic country group but not included in the non-Islamic country group.

To further confirm the robustness of the above-mentioned results, we divided the non-Islamic country group into five country groups with different belief types, and then reexamined the relationship of Islam to democracy by comparing Islamic countries to each of the other five non-Islamic country groups. Table 8 presents the results in four panels. Panels A, B, C, and D present the results obtained based on different combinations of Islamic countries; the panels consist of six, five, four, and three Islamic countries, respectively. In Panel A where the Islam country group consists of all six Islamic countries in the sample, the coefficient on $VA_{t-1} \times ISLAM$ is significantly negative in Column 3 where Islamic and Buddhist countries are compared, indicating that democratic adjustment is faster in Islamic countries than in Buddhist countries. In Panel B, where Malaysia is excluded from the Islamic country group, the coefficient on $VA_{t-1} \times ISLAM$ is significantly negative in Columns 2 and 3, where Islamic countries are compared to countries with diverse beliefs and Buddhist countries, respectively. The results indicate that democratic adjustment is faster in Islamic countries than in countries with diverse beliefs and in Buddhist countries. In Panel C, where Malaysia and Kuwait are excluded, and in Panel D, where Malaysia, Kuwait, and Indonesia are excluded from the Islamic country group, the results are similar to those in Panel A. That is, the coefficient on $VA_{t-1} \times ISLAM$ is significantly negative when Islamic countries are compared to the Buddhist country group in Column 3 of Panels C and D. The coefficient on $VA_{t-1} \times ISLAM$ is negative albeit insignificant when the Islamic country group is compared to Christian countries or the atheist country in Panels B to D of Table 8.

In sum, the results strongly indicate that democratic adjustment is generally faster for Islamic countries than for non-Islamic countries. In addition, such a phenomenon

Table 8. *Relationship between Islam and democratic adjustment – Islamic countries vs. countries with different belief types*

Panel A. All six Islamic countries

Dependent variable: VA_t	(1)	(2)	(3)	(4)	(5)
Independent variables	Islam vs. polytheism	Islam vs. diverse beliefs	Islam vs. Buddhism	Islam vs. Christianity	Islam vs. Atheism
VA_{t-1}	0.512**	0.728***	0.877***	0.590**	0.971**
	(0.140)	(0.088)	(0.056)	(0.166)	(0.260)
$VA_{t-1} \times ISLAM$	0.108	−0.069	−0.206+	0.069	−0.307
	(0.126)	(0.110)	(0.111)	(0.200)	(0.307)
Ln(GDP_{t-1})	0.033	0.128	0.084	−0.011	−0.087
	(0.043)	(0.089)	(0.084)	(0.069)	(0.092)
$SCHOOL_{t-1}$	0.213*	0.171*	0.226*	0.310**	0.174+
	(0.077)	(0.065)	(0.080)	(0.083)	(0.074)
GAP_{t-1}	−0.118+	−0.084	−0.201**	−0.184**	−0.114*
	(0.061)	(0.046)	(0.055)	(0.038)	(0.040)
$URBAN_{t-1}$	0.224	1.184	0.558	1.437	−0.695
	(1.174)	(1.260)	(1.179)	(1.211)	(1.349)
Ln(POP_{t-1})	−1.184**	−0.622+	−0.705	−0.383	−1.160+
	(0.312)	(0.277)	(0.475)	(0.391)	(0.576)
OIL	−0.033	0.022	−0.013	−0.034	−0.098
	(0.055)	(0.076)	(0.056)	(0.054)	(0.074)
Constant	19.931**	7.865	10.294	4.608	21.023+
	(5.765)	(5.617)	(8.886)	(7.413)	(10.456)
N	124	112	125	112	98
n	9	8	9	8	7
R^2	0.673	0.703	0.745	0.700	0.682

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

Table 8. *Continued*

Panel B. Five Islamic countries

Dependent variable: VA_t	(1)	(2)	(3)	(4)	(5)
Independent variables	Islam vs. polytheism	Islam vs. diverse beliefs	Islam vs. Buddhism	Islam vs. Christianity	Islam vs. Atheism
VA_{t-1}	0.435**	0.659***	0.873***	0.623**	1.093*
	(0.096)	(0.078)	(0.055)	(0.121)	(0.325)
$VA_{t-1} \times ISLAM$	0.066	−0.165+	−0.339**	−0.115	−0.517
	(0.128)	(0.071)	(0.094)	(0.129)	(0.391)
Ln(GDP_{t-1})	0.009	0.053	0.036	0.013	−0.135
	(0.054)	(0.099)	(0.099)	(0.072)	(0.101)
$SCHOOL_{t-1}$	0.121+	0.052	0.093	0.330*	0.128
	(0.064)	(0.072)	(0.066)	(0.094)	(0.084)
GAP_{t-1}	−0.070	−0.033	−0.122*	−0.233**	−0.102+
	(0.057)	(0.046)	(0.044)	(0.051)	(0.046)
$URBAN_{t-1}$	3.084**	4.755**	3.669**	3.616***	2.103
	(0.817)	(0.882)	(0.992)	(0.397)	(1.758)
Ln(POP_{t-1})	−0.858*	−0.333	−0.375	−0.492	−0.617
	(0.348)	(0.302)	(0.487)	(0.358)	(0.761)
OIL	0.092*	0.179+	0.116*	0.068*	−0.005
	(0.036)	(0.084)	(0.045)	(0.025)	(0.105)
Constant	12.796+	1.335	3.857	4.887	10.199
	(6.275)	(5.778)	(8.967)	(6.684)	(13.853)
N	110	98	111	98	84
n	8	7	8	7	6
R^2	0.690	0.722	0.759	0.721	0.686

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.* 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

is more pronounced when Islamic countries are compared to the Buddhist countries or countries with diverse beliefs.

Table 8. *Continued*

Panel C. Four Islamic countries

Dependent variable: VA_t	(1)	(2)	(3)	(4)	(5)
Independent variables	Islam vs. polytheism	Islam vs. diverse beliefs	Islam vs. Buddhism	Islam vs. Christianity	Islam vs. Atheism
VA_{t-1}	0.427*	0.623***	0.891***	0.658*	1.082+
	(0.140)	(0.071)	(0.072)	(0.183)	(0.390)
$VA_{t-1} \times ISLAM$	0.043	−0.144	−0.381*	−0.202	−0.545
	(0.181)	(0.075)	(0.126)	(0.215)	(0.481)
Ln(GDP_{t-1})	−0.025	−0.000	−0.007	−0.058	−0.250
	(0.060)	(0.100)	(0.133)	(0.107)	(0.120)
$SCHOOL_{t-1}$	0.213**	0.065	0.112	0.362*	0.236**
	(0.042)	(0.114)	(0.080)	(0.092)	(0.033)
GAP_{t-1}	−0.123+	−0.038	−0.139*	−0.240*	−0.163**
	(0.060)	(0.065)	(0.050)	(0.061)	(0.031)
$URBAN_{t-1}$	3.410**	5.253**	3.870**	4.325***	1.932
	(0.657)	(0.973)	(0.812)	(0.299)	(1.314)
Ln(POP_{t-1})	−1.430***	−0.617	−0.825	−1.126	−1.565
	(0.189)	(0.391)	(0.752)	(0.634)	(0.784)
OIL	0.078+	0.181	0.115*	0.070	−0.064
	(0.032)	(0.119)	(0.042)	(0.053)	(0.092)
Constant	23.867***	6.760	12.488	16.858	29.371
	(3.618)	(7.694)	(14.112)	(12.354)	(14.851)
N	96	84	97	84	70
n	7	6	7	6	5
R^2	0.699	0.722	0.758	0.729	0.699

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

Additional tests: interactions

To sustain democratic development for Islamic countries in the future, a higher target level of democracy should accompany faster democratic adjustment. Otherwise, faster democratic adjustment can imply faster reversion to any originally low level of

Table 8. *Continued*

Panel D. Three Islamic countries

Dependent variable: VA_t	(1)	(2)	(3)	(4)	(5)
Independent variables	Islam vs. polytheism	Islam vs. diverse beliefs	Islam vs. Buddhism	Islam vs. Christianity	Islam vs. Atheism
VA_{t-1}	0.350	0.511***	0.880***	0.673*	0.879
	(0.184)	(0.044)	(0.091)	(0.214)	(0.473)
$VA_{t-1} \times ISLAM$	0.141	0.011	−0.326+	−0.208	−0.385
	(0.235)	(0.050)	(0.159)	(0.259)	(0.547)
Ln(GDP_{t-1})	0.066	0.015	0.107	−0.020	−0.337*
	(0.164)	(0.127)	(0.148)	(0.122)	(0.098)
$SCHOOL_{t-1}$	0.193*	0.028	0.129	0.387*	0.254*
	(0.055)	(0.128)	(0.077)	(0.106)	(0.053)
GAP_{t-1}	−0.130+	−0.034	−0.157*	−0.287**	−0.187*
	(0.063)	(0.055)	(0.049)	(0.059)	(0.037)
$URBAN_{t-1}$	2.708	8.819**	2.755	5.372**	−0.993
	(3.048)	(1.607)	(2.190)	(0.705)	(3.383)
Ln(POP_{t-1})	−1.515***	−0.596	−0.661	−1.197	−2.351*
	(0.198)	(0.447)	(0.864)	(0.770)	(0.471)
OIL	0.000	0.000	0.000	0.000	0.000
	(.)	(.)	(.)	(.)	(.)
Constant	24.998**	3.399	9.052	16.547	46.180*
	(3.646)	(8.496)	(15.855)	(14.759)	(8.504)
N	82	70	83	70	56
n	6	5	6	5	4
R^2	0.570	0.656	0.732	0.665	0.582

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

democracy for Islamic countries. To this end, the study further estimated the model by interacting the Islam dummy variable (*ISLAM*) with each benchmark determinant of democracy at a time to provide policy recommendations on how to reach a higher target level of democracy more effectively for Islamic countries as opposed to non-Islamic

countries. The corresponding coefficients are significant only when *ISLAM* interacts with $URBAN_{t-1}$. Table 9 presents the results in seven columns, where Columns 1 to 4 present the results based on the entire sample, whereas Columns 5 to 7 present the results based on the reduced sample. The results in Table 9 indicate that the coefficient on the interaction variable $URBAN_{t-1} \times ISLAM$ is significantly positive in all columns except Column 1 where the Islamic country group is the most comprehensive. Given that the coefficient on $URBAN_{t-1}$ is insignificant in all columns, the relationship between urbanization and democracy is measured as the coefficient on $URBAN_{t-1} \times ISLAM$ if a given country belongs to the Islamic country group and 0 otherwise. Therefore, results indicate a positive relationship between urbanization and democracy, suggesting that the target level of democracy is higher as the urbanization rate increases for Islamic countries only. Such results are robust to different coverages of Islamic countries and sample sizes; that is, the inclination of people to become increasingly receptive to different values and voices in urbanized society is verified for Islamic countries only.

Based on the results in Table 9, the level of democracy is generally higher when education improves, gender gap narrows, population growth is under control, or countries are oil exporters. However, we demonstrate a unique relationship of democracy to urbanization for Islamic countries compared to non-Islamic countries. That is, results suggest that to reach a higher level of democracy, they might also want to focus on furthering urban development; this approach has been found to be ineffective for non-Islamic countries. Although our results differ from those of Barro (1999) that indicate no significant effect of urbanization on democracy, the study results are in line with recent findings that the level of democracy increases with urbanization, as well as modernization that is conducive to urbanization (Ciftci, 2010; Inglehart and Welzel, 2010; Dima *et al.*, 2011). Thus, our results likewise support the modernization theory in explaining democracy, although such theory gains support for Islamic countries only. That is, social-economic development plays a crucial role in promoting democracy effectively (Wucherpfennig and Deutsch, 2009).

Overall, the current study indicates that Islamic countries are generally less democratic than non-Islamic countries. However, the low level of democracy prevailing in Islamic countries likely results from not only Islam but also other Islam-related factors, such as culture and colonial experience. This study contributes to the existing literature by demonstrating that democratic adjustment is faster in Islamic countries than in non-Islamic countries, thereby suggesting that Islamic countries exhibit the potential to achieve considerable progress in democracy in the future. This study concludes that the relationship between Islam and democratic development is neither negative nor negligible, as documented in the majority of previous studies; rather, the study challenges the conventional wisdom that Islam impedes democratic development by providing strong empirical evidence indicative of faster democratic adjustment for Islamic countries. This finding provides hope for other Middle East countries that are recently undergoing democratic reforms but experiencing a faltering democratic transition. However, the observed faster democratic adjustment will be meaningful

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Table 9. *Relationship between Islam and democratic adjustment – interactions*

Dependent variable: VA_{t-1}	Full sample				Reduced sample		
Independent variables	(1) All six Islamic countries included	(2) Malaysia excluded from Islamic countries	(3) Malaysia and Kuwait excluded	(4) Malaysia, Kuwait and Indonesia excluded	(5) Malaysia excl	(6) Malaysia and Kuwait excluded	(7) Malaysia, Kuwait and Indonesia excluded
VA_{t-1}	0.783***	0.723***	0.723***	0.776***	0.731***	0.723***	0.746***
	(0.067)	(0.088)	(0.088)	(0.063)	(0.088)	(0.094)	(0.095)
Ln(GDP_{t-1})	−0.030	−0.040	−0.040	−0.038	−0.040	−0.062	−0.058
	(0.052)	(0.056)	(0.056)	(0.051)	(0.055)	(0.056)	(0.062)
$SCHOOL_{t-1}$	0.113*	0.079+	0.079+	0.098+	0.076	0.078	0.069
	(0.045)	(0.044)	(0.044)	(0.049)	(0.045)	(0.048)	(0.053)
GAP_{t-1}	−0.079**	−0.065*	−0.065*	−0.077**	−0.062*	−0.062*	−0.065*
	(0.027)	(0.024)	(0.024)	(0.022)	(0.026)	(0.027)	(0.026)
$URBAN_{t-1}$	0.144	0.160	0.160	0.750	0.301	0.519	0.788
	(0.461)	(0.364)	(0.364)	(0.558)	(0.469)	(0.453)	(0.557)
Ln(POP_{t-1})	−0.315	−0.294	−0.294	−0.343	−0.275	−0.481+	−0.583+
	(0.198)	(0.218)	(0.218)	(0.234)	(0.219)	(0.249)	(0.291)
OIL	0.033	0.138**	0.138**	−0.017	0.137**	0.151*	
	(0.059)	(0.044)	(0.044)	(0.055)	(0.045)	(0.058)	

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Table 9. *Continued*

Dependent variable: VA_{t-1}	Full sample				Reduced sample		
Independent variables	(1) All six Islamic countries included	(2) Malaysia excluded from Islamic countries	(3) Malaysia and Kuwait excluded	(4) Malaysia, Kuwait and Indonesia excluded	(5) Malaysia excl	(6) Malaysia and Kuwait excluded	(7) Malaysia, Kuwait and Indonesia excluded
$URBAN_{t-1} \times ISLAM$	0.931	2.667**	2.667**	2.479*	2.506*	2.687*	3.938*
	(0.918)	(0.875)	(0.875)	(1.129)	(0.942)	(1.088)	(1.777)
Constant	5.057	4.569	4.725	5.297	4.185	8.150	9.780+
	(3.712)	(4.062)	(4.080)	(4.286)	(4.095)	(4.771)	(5.423)
N	235	235	235	235	221	207	193
n	17	17	17	17	16	15	14
R^2	0.728	0.736	0.736	0.730	0.735	0.735	0.719

Notes: Voice and accountability (*VA*) index is the proxy for democracy, ranging from −2.5 to 2.5 (Kaufmann *et al.*, 2011). Higher index values indicate higher level of democracy. *ISLAM* is the dummy variable that returns a value of 1 if a given country belongs to Islamic country group and 0 otherwise. *GDP* is per capita gross domestic product. *SCHOOL* is primary schooling (number of years). *GAP* is the gap between male and female primary education (number of years). *URBAN* is the urbanization rate. *POP* is population. *OIL* is the dummy variable that returns a value of 1 if a given country is a member of OPEC and 0 otherwise. In all columns, year dummies are included to capture year-specific effects, but the results are saved for brevity. *N* represents the number of firm-year observations; *n* stands for the number of countries. The numbers in the parentheses are cluster-robust standard errors. ***, **, *, and † indicates significance at .1, 1, 5, and 10% levels, respectively.

and constructive if Islamic countries simultaneously undertake actions to promote their target level of democracy. Otherwise, faster democratic adjustment can imply that Islamic countries can revert to any originally low level of democracy faster. The results further provide suggestions on how to effectively raise the target level of democracy for Islamic countries. Specifically, Islamic countries can release their democratic potential through urbanization to further promote democracy because results indicate a positive relationship between urbanization and the level of democracy for Islamic countries only, whereas no such relationship exists for non-Islamic countries.

5. Conclusion

Authoritarian governments have been successively overthrown and replaced by democratic regimes over the past few decades. In particular, Islamic countries that have been perennially regarded as undemocratic, such as those in the Arab world, recently launched a series of democratic revolutions. This move rekindled the democratic spirit and public awareness of democracy around the world. However, these Islamic countries may encounter difficulty in successfully developing democracy if their major belief, Islam, is truly undemocratic or anti-democratic in nature, as widely believed. Their democratic prospect is particularly challenging given that these Islamic countries are currently undergoing difficulties moving forward in democratization. Thus, this study primarily contributes to the existing literature by examining whether Islam hampers democratic development, as suggested by conventional wisdom. In contrast to previous research that is essentially retrospective and focuses on the static level of democracy in Islamic countries, this study looks into the future and adopts a dynamic approach by examining democratic adjustment speed in Islamic countries to provide a new insight into the perennially debated issue.

Using 17 Asian countries as the study sample, the results indicate that religion plays a role in determining democracy. Thus, future research on democracy should formally consider religion. Specifically, we demonstrate that the level of democracy in Islamic countries is lower than that in non-Islamic countries, consistent with the common belief and the findings of previous research. However, examining democracy from a dynamic perspective conveys an interesting story. Specifically, the level of democracy in Islamic countries exhibits an upward trend rather than a downward trend as observed for non-Islamic countries. Moreover, contrary to conventional wisdom that suggests the remarkable resilience of authoritarianism in Islamic countries, this study provides strong empirical evidence indicating that the democratic adjustment for Islamic countries is faster than that for non-Islamic countries, especially those with diverse beliefs and subscribing to Buddhism. Thus, the results refute conventional wisdom that Islam hinders democracy. Instead, Islamic countries are highly malleable and exhibit a potential for faster democratic development compared with non-Islamic countries. Given faster democratic adjustment, the level of democracy in Islamic countries should rapidly converge to that in other more democratic non-Islamic countries. In other words, if Islamic countries could accelerate their democratic momentum and continue

on their democratic path, they would rapidly catch up with non-Islamic countries with higher levels of democracy. However, Islamic countries should upgrade their target level of democracy, such that they will be able to promote democracy to a new higher level more rapidly; otherwise, they might end up with the originally low level of democracy faster with the higher speed of democratic adjustment. Moreover, the study results provide policy implications on effectively increasing the target level of democracy. In addition to measures such as improving education, minimizing the gender gap, and controlling population growth, we demonstrate that Islamic countries likely own a unique advantage in increasing the target level of democracy by promoting urbanization. By contrast, urbanization appears to be irrelevant to democracy for non-Islamic countries.

Although a battery of robustness tests are conducted to ensure the validity of the study results, we recognize some limitations in this study and provide directions for future research. First, results presented in the study are based on 17 Asian countries. It is worthwhile to conduct further research using a similar approach to see if the study results carry over to other countries. Second, the study provides strong evidence indicating faster democratic adjustment for Islamic countries. However, although lagged variables are used as determinants of democracy in estimating the model to infer causal relations, the results are interpreted conservatively because endogeneity may not be well controlled. To make more reliable inferences about the causal relations on how to promote democracy effectively, more sophisticated econometric models can be employed in the future related studies. Third, the determinants of democracy used in the study are similar to those in prior studies. To shed new light on this research question, future research can explore whether other variables can also shape democracy for Islamic countries.

About the authors

Naiwei Chen is currently a professor of finance at Jiangxi Normal University, China. His research interests include political economy, corporate governance, international finance, Islamic banking and finance, corporate social responsibility, welfare, trade, and economic growth. He has published papers in Applied Economics, Applied Financial Economics, Asia-Pacific Financial Markets, Corporate Governance: An International Review, Economics of Governance, Journal of International Development, among others.

Tsai-Chen Yang was a masters student at National Chung Cheng University, Taiwan, under the guidance of Naiwei Chen.

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Appendix A1. Panel data model specification

Assuming the target level of democracy (VA^*) is a function of country-specific factors (X), the following equation is specified:

$$VA^*_{it} = \alpha + \sum_j \gamma_j X_{jit} + e_{it} \tag{1}$$

where i refers to country i; j refers to the jth country-specific factor; t refers to year t; e_{it} refers to the error term for country i and year t. Further assume that countries are undergoing adjustment to reach their respective target level of democracy (VA^*) based on the following partial adjustment mechanism:

$$VA_{it} - VA_{i,t-1} = \rho\left(VA^*_{it} - VA_{i,t-1}\right) \tag{2}$$

where VA_{it} is the actual VA whereas VA^*_{it} is the target VA, which can be estimated based on the above-mentioned econometric model (equation (1)). ρ is the adjustment coefficient that measures how fast VA adjusts to its target level, ranging from 0 to 1. If $\rho = 0$, $VA_{it} = VA_{i,t-1}$, meaning that adjustment is costly and there is no way VA can revert to the target level. In contrast, if $\rho = 1$, $VA_{it} = VA^*_{it}$, meaning that the adjustment incurs no cost and is instantaneous. The above equation can be rewritten as follows:

$$VA_{it} = (1-\rho)\, VA_{i,t-1} + \rho VA^*_{it} \tag{3}$$

Substituting equation 1 into equation 3, we have:

$$VA_{it} = \delta VA_{i,t-1} + \omega + \sum_j \theta_j X_{jit} + \varepsilon_{it} \tag{4}$$

where $\delta = 1-\rho, \omega = p\alpha, \theta_j = \rho r_j$ and $\varepsilon_{it} = \rho e_{it}$. Hence, the higher the value of δ, the lower the value of ρ and the slower the adjustment. In addition, testing H2 translates into testing whether the coefficient on VA_{t-1} (δ) is smaller for Islamic countries than for non-Islamic countries.