The effect of religion on political attitude: Islam and democracy in the Middle East

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In the last fifty years or so, democratic values have been spreading all over the world and we have seen an increase in the democratization of states, adopting more and more democratic institutions. This is especially true if we look at the trend after the Second World War and also after the disintegration of the historical empires of the 19th century and more recently amongst the states formed consequently the process of decolonization. One of the areas that seem quite unaffected by this trend is the Arab world. With this phrase, I mean the countries with a majority of Arab population and that are located in the geographical area of the Middle East and North Africa.

Most of the Arab countries with the majority of Muslim population are not democratic (The Economist Intelligence Unit's Index of Democracy, 2008). This is not a recent phenomenon since these countries practically have never experienced democracy. According to the Arab Human Development report of the UNDP (2009), political participation in Arab countries is less advanced than in other part of the world and political system have not been opened up to all citizens.

My research question is whether or not there is a correlation between Islamic religiosity and the popular support for democracy in the Middle East and North Africa.
Because the countries of the Middle East are mainly both authoritarian as well as Muslim majority countries (at least the one in this research), there is the question of a possible incompatibility with Islam and democracy, and that the lasting of authoritarian regimes is due to the lack of popular support for an alternative and democratic system. In the public discourse in fact, Islam enters often the debate on how to properly govern the Arab/Islamic world (Ibrahim, 2006). Several opinions, especially within these countries, state that Islam is fundamentally

democratic, suggesting that the argument of the incompatibility between Islam and democracy is inaccurate (Fadl, 2004). Others say that Islam and economic development have nothing to do with the persistence of autocratic regimes in the Middle East and North Africa. The problem instead lies in the presence of the corrupted dictatorship regime: the autocratic leaders, because they fear loss of power, keep people subjugated and away from exposure to democracy. Another cause is the lack of a strong and effective political opposition, which would be able to offer an alternative to the present authoritarian regimes (Diamond et al., 2003). These analysis are more at the state level and do not focus much on the individual level of the population.

Among those who agree on the incompatibility of Islam and democracy there are the famous examples of the theories carried out by Huntington (1996) and Fukuyama (1992). They argue that Islamic society create an environment not suitable for democracy and democratic institutions, because according to Islam principles there is basically no division between church and state, and Islamic law is illiberal. Others simply think that the incompatibility lies in the fact that democracy may bring western values with it, undermining the Islamic ones (Esposito & Mogahed, 2007; Tessler, 2003).

Notwithstanding this, some recent research has found that popular support for democracy is very high in Arab and Muslim countries (Gao & Tessleer, 2005; Tessler, 2003; Inglehart et al. 2006; Inglehart et al, 2006). And this is true even if citizens have fundamentally no experience at all with democracy. In fact it has been argued that the importance of political liberalization is not foreign to the Arab and Muslim world, in fact several scholars have stressed the importance of this liberal and democratic values for the society. Tessler also argues that Islam has not much influence on the political attitude of people in the Arab/ Islamic world. In his study he challenges the opinion that Islam discourages the emerging of attitudes typical of democratic societies.

According to Tessler people with strong religious beliefs are not less supportive of democracy. (2003).

Most of the findings from an analysis of the Arab Barometer, a project based on a public opinion survey carried out in 2006-2007, are consistent with this latter literature (Jamal & Tessler, 2008). Arab Barometer is a survey conducted in seven Arab countries with a majority of citizens who are Muslim. The survey has been administrated in Algeria, Jordan, Morocco, Lebanon, Palestine, Kuwait and Yemen to 8,122 (sample size) people over the age of 18. All the countries are represented in equal measure except for Kuwait, in particular the sample size include 1, 143 people in Jordan, 1,270 in Palestine (West Bank and Gaza Strip), 1,300 in Algeria, 1,277 in Morocco, 750 in Kuwait (the smallest country), 1,200 in Lebanon, and 1,182 in Yemen (see table 1).

Considering the four stage of democratic transition (Epstein et al., 2006), most of the countries in the database fall in the undemocratic stage, with only Lebanon classified in the partial democratic stage, which is a middle range value.

The sample is a good representation of the population because includes about half man and half women and people of all education levels, including the illiterate and has some geographical variety (within the Middle East) because it includes people from different countries of the Arab Middle East. As far as democracy support is concerned, the Arab barometer survey shows a public support for democracy in absolute terms and, in fact 86% of the respondents said that a democratic system of government would be good for their countries.

My thesis is that there is a popular support of democracy amongst Muslim people in the Arab Middle Easter countries and there is no negative relationship between religiosity of the

citizens and their support for democratic institution. This research can contribute to the understanding of the perseverance of authoritarianism in countries with a devout Muslim population in this region.

I will analyze the dataset of the Arab Barometer, mentioned above, (retrieved from the Arab barometer web site) containing public opinion data collected in seven countries that are predominantly Muslim. I will examine the influence of Islam on the attitude toward democracy and see if my findings of correlation between support of democracy and Islam devotion are the same of the previous research (Jamal & Tessler, 2008). Data will be analyzed with the software Stata 11.

The aim of my research is to support previous research on the compatibility of Islam and democracy by defining as specifically as possible the variable of democracy and Islam to see if the results are consistent with this literature. If there is no correlation between the dependent variable, democracy, and the independent variable, Islam, the coefficient β is expected to be 0. If the coefficient is not zero and the correlation is either negative or positive, then I will reject my research hypothesis.

This study is based on a micro level analysis; in fact I am analyzing public opinion data to determine the support for democracy rather than countries as a whole or historical data. It can be considered an empirical analysis on how ordinary people in these countries feel about democracy and how their Islam devotion influences their political orientation. This personal level data analysis can accompany and complement other comparative research at state level that studies the democratization of Muslim countries.

 The dependent variable I am using is the attitude toward democracy, precisely the support of democracy at individual level, the index for this dependent variable is constructed

from the relative items (questions) in the database.

This indicator can be quite difficult to measure because, as previously said, people in these countries have basically never experienced democracy. Amongst Arab citizens there may be a difference in the view of democracy and a different definition for it. For this reason the variable of democracy include also support for institutions associated with a democratic government. One of these is the equality of civil and political rights. I will consider a series of question in the survey that convey the general idea of democracy. Assuming that some values such as competition of all parties in elections, equal political civil rights and elections are important in a democracy, I generated some variables from the survey that indicate support, or lack thereof, for democratic institutions and values.

Democracy is characterized by regular elections, equal rights and it is believed to foster social welfare and economic growth (Rodrik& Wacziarg, 2005; Sen, 1999). For this reason I have chosen the definition of my dependent variable accordingly. Moreover I choose the variables based on the questions in the survey that were asked in all the seven countries in the dataset in order not to bias the results and to include all the countries we have data for.

These items include the degree of which people think that democracy is: good for the economy, decisive and without quibbling, good at maintaining order, better than other forms of government. I also include in the variable democracy, the support for systems and values that are generally associated with democracy but that in the survey are asked without the term "democracy", so that we eliminate any possible bias from having this word in the question. The variables I generated from these questions are: the support in the country of the respondent for a

political system where public freedom, equal political and civil rights, balance of power, accountability and transparency are guaranteed. All these variables values range from 0 to 3 (highest support). I generated the variable democracy which ranges from 1 to 15 (highest support for democracy, democratic institutions and values) by summing up all the previous variables.

My independent variable is Islam religiosity of the respondents, measuring the degree to which they attach importance to Islam in their life. In order to generate the variable Islam, I first generated the variables measuring the frequency of reading the Quran, whether the respondents pray and whether the person considered themselves Muslim above all rather than Arab or citizen of their own country. Each of these represents a dichotomous variable, codified in 0 or 1. The variable Islam, which includes these four variables, ranges from 0 to 3 (with 3 being the highest importance given to Islam by the respondent). These variables are base on the questions pertaining Islam that the respondents were asked in the survey. I assume all the variables to be continuous.

The dependent and independent variables are then based on questions present in the survey. Some of the questions that would have been important to include in order to determine the support to democracy and to determine the Islam religiosity like whether the respondents identify themselves as Muslim, could not be included since they were not asked in all the seven countries of the dataset, and in my analysis I want to include all of them.

I employ the dependent variable of support for democracy and the independent variable of Islamic religiosity in an Ordinary Least Square regression, since the variables are not categorical and they can be considered continuous. This regression will estimate the effect of Islamic religiosity on the dependent variable, support for democracy.

By running the regression analysis I obtain the value of the coefficient of β= -.55. The standard error is σ = 0.05 and the t value is t= -11.63. The confidence interval at 95% is [-1.04, -.78]. This means that we can be 95% confident that the true value of β is in this interval, since the value of -.55 is an average (see graph 1). I set the interval at 99%, in order to have a smaller confidence interval and narrow the range of the possible coefficients. At this confidence interval I obtain [-.68, -.43] , therefore we can be 99% sure that the true value of the coefficient is in this interval and that by increasing the value of Islam religiosity by one unit, the support for democracy will decrease by a value that ranges from 0.43 to 0.68. The results are statistical significant since the P-value is 0.0 (the results are also statistically significant because the confidence interval does not include 0) (see tables 2 and 3).

This data regression results indicate that there is a negative relationship between democracy and Islam. This means that in my sample, the more people give importance to the values of Islamic religion, the less support they give to democracy, democratic values and institutions. For this reason I will have to reject my hypothesis of no correlation between the variables (with β=0)**.**

According to Jamal and Tessler (2008), the Arab barometer provides evidence that religiosity does not diminish the support for democracy among Muslims. She identifies the frequency of Koran reading a reliable measure for religiosity (independent variable) and the support for democracy (dependent variable) is measured with the variables associated with the question in the survey asking whether the respondents believe that democracy is the best political system. In fact if we ran a regression using as a independent variable only the frequency of Koran reading and as dependent variable only the opinion on democracy as a good political

system we have very different result from the previous one. In fact in this case the coefficient obtained is β =.17. This coefficient is very different from the one I obtained with my regression. First, it is positive, namely the slope has an inverted orientation, meaning that she finds a positive correlation between Islam and democracy, while in my regression the correlation is negative. Moreover my coefficient (β =-.55) is farther from 0, which indicates that is even farther from the null hypothesis of no correlation (β =0). This would suggest a slightly positive relationship between Islam religiosity and the support for a democratic government. The difference between this regression and mine is in the definition of the variables. In fact the problem may lie in a perception of democracy in the countries of the study that is different from the common definition and from the definition of democracy in the countries that actually are experiencing democracy. I have used different questions from the survey in order to define democracy such as this problem would be, at least partially, avoided. The definition of democracy in these countries, for the reason previously said, can be different from the one in Western Europe and United States for example. I decided therefore, to use categories that indicate a definition of democracy that is as close as possible as for countries that are considered democracies. As I described before, I included the opinion on the economic benefit of democracy, the ability of democracy at maintaining order and the decisiveness of democracy.

My analysis so far has evidenced different things. First that the way a variable is defined may change extensively the finding of a research and previous research on the correlation between Islam and support for democracy may not be 100% accurate. Secondly that it is likely that there is a negative correlation between the importance given to Islam religion (personal religiosity) and the support for democratic institution. Lastly we should note that the constant I obtained is Y=11 and the expected value of democracy support (Y) when the value of Islam (X)

is 3 (highest value) is 9.35 that means the value of the dependent variable democracy (which

ranges from 0 to 15) is expected to be 11 out of 15 when the independent variable is equal zero

(the person does not give importance to Islam/is not Muslim) and 9.35 out of 15 when the

independent variable is equal 3 (the person express the highest religiosity in the sample; see

graph 1).

In fact

$$Y= \beta_0 + \beta_1 x_1 \qquad\qquad Y=11+ (-.55)(3)=9.35$$

Appling this findings to the theory, I can conclude that the support for democracy is on

average expected to be 11 (on a scale from 0 to 15) when the Islam religiosity is at least and it is

expected on average to be 9.35 when the support for Islam is at highest. Both the values of 9.35

and 11 are middle/high range values (on a scale from 0 to 15) for this reason , although the

regression suggests that there is negative correlation, the support for democracy remain on

average high in these countries, even amongst people with high religiosity. Also, the mean value

for support of democracy, regardless of other factors, is 9.8 (see table 5).

In sum the finding of this research proves that is it likely in the Middle East that the

support for democracy is weaker amongst Muslims with a strong personal religiosity.

In order to confirm this theory one of the possible way could be to carry out the survey again in

countries that are democratic but that have a Muslim population minority and compare the

results. It will be interesting also to conduct a similar research in authoritarian countries where

Muslims are not the major population and record their opinion on democracy. In this way maybe

it is possible to confirm if the support (or lack thereof) is due to Islam religiosity. In addition,

because the countries in the study are all Arab majority countries, it would be interesting to

conduct a study in other countries with a majority of Muslims but non-Arab population and

verify if being Arab (having an Arab culture) has some influence of the support for democracy. The validity if this study can also be checked by comparing analyzing data from other dataset, such as from the Poll of the Muslim World of Gallup and Pew Global Attitudes Project.

I decided to chose Islam as an independent variable, as I said before, first because I wanted to look at the individual level of the support for democracy in countries of the Middle East and North Africa and also because I chose to consider the cultural and personal influence of this political attitude. Nevertheless there are other personal characteristics that can be correlated with the political regime preference. One of the main one is the level of education achieved.

There is a consistent social science literature about the relationship between education and support for democracy and political preferences in general (Evans and Rose, 2007; Farnen and Meloen, 2000). The increase of the level of education in fact is believed to have a positive effect on the support for democracy. Although it has been argued that Muslim countries may be an exception: the general positive correlation of education and democracy is not applicable to Muslim countries (Barro 1999; Ghalioun, 2004.) For this reason I am adding education as a control variable to the previous analysis, which indicates the education attainment of the respondent.

The respondents were asked about the level of education completed. This variable ranges from the "illiterate" level to the "Master degree and above" level, and has middle level values of education attainment: elementary, primary, secondary, college/two year diploma and Bachelor Degree. I generate the independent variable of education based on a question in the survey asking the education for the respondent, and assigned to it a value from 0 to 6 , where 0 indicates no education attainment, i.e. illiterate, and 6 the highest level of education present in the survey (Master and above). The database also presents the entry "not clear" which I coded as missing

value. After generating this variable I run again the regression, this time using democracy and Islam again as dependent and independent variable respectively, but also adding the independent variable of education as control variable. The aim is to find the influence of Islam religiosity on support for democracy, holding education level constant. In this way I eliminate the possibility that the increase (or decrease) of support for democracy can be a cause also of different level of education of the respondent.

The resulting coefficient of this last regression is $\beta = -.53$. The result is statistically significant, because again the p-value is 0. Again I chose a confidence interval of 99%, and the interval is [-.66, -.41], namely with 99% confidence the true value of the coefficient is between these interval (see table 6). Therefore we can conclude that, even holding education constant, there is still a negative effect on support for democracy as Muslims give more importance to their religion. In particular, keeping education constant, namely, at the same level of education, we can predict that an increase of one unit in the variable of Islam will cause a decrease in the support of democracy by an average of -.53. Our previous coefficient was -.55, which is very close to the one obtained with this other regression, when we control for education. This means that even considering education of the respondent, the previous results are basically unchanged and there is still a negative correlation between the independent variable of Islam and the dependent variable of democracy.

The dataset of the Arab Barometer is very large and contains an extensive amount of data. Therefore we can look closely to data, especially at each country level. By sorting the data by country and tabulate separately the support for democracy and the Islam religiosity, we have the mean values of these variables for each of the seven countries.

The mean values for the dependent variable of support for democracy, which again ranges from 0 to 15, are for Palestine 8.9, for Yemen and Algeria 9, for Jordan 9.3, for Kuwait 9.9, for Lebanon 10.6 and for Morocco 11.9.

For the independent variable of Islam devotion, instead, the mean values for each country are 1.5 for Lebanon, 1.7 for Morocco, 2.2 for Jordan, 2.3 for Algeria, 2.3 for Kuwait, and 2.4 for Yemen and Palestine, on a scale that ranges from 0 to 3.

Amongst the seven countries the lowest mean value for support for democracy is found in Palestine (8.9) while the highest is in Morocco (11.9). Again , as noted before on a scale that ranges from 0 to 15 for the dependent variable of support for democracy, this value are generally high, indicating that there is an overall medium to high support for democracy amongst the population of those countries, regardless of the population religious devotion. The overall attitude toward democracy is very positive, although it is noticeable a slightly difference across the countries (see tables 7 and 8).

Since data for each of the seven countries are available, I can consider separately each of them and make a country analysis. In fact the data available are cross-section data (cross countries) and allow us to run a fixed effects regression that holds constant the average effects for each country. In this way it is possible to obtain an intercept value for each country. Each country in fact can have some features that determine the support for democracy, such as the different relations with other democratic countries, the level of income and GPD or historical reasons such as the experience of colonization.

We can estimate the association between the countries and the support for democracy,

using all the seven countries in the database. I choose Morocco as a reference country because it

is the country that has the highest average support for democracy and a relative low mean of

Islam devotion compared to other countries, the support for democracy could be caused by the

several interactions and cooperation with Europe, and maybe to the presence of some institutions

as part of the colonial legacy, since Morocco is one of the countries in the dataset that has

experienced colonialism for the longest time. I will compare all the countries with Morocco.

First I create dummy variables for each country, by assigning a value of 1 if the

respondent is from that country and 0 otherwise. In order to estimate the association between the

country variable and the support for democracy, all these variables will be used in one regression

analysis.

I run the regression including the dependent variable of democracy, the independent

variable of Islam, the control variable of education and the dummy variables for the countries,

except Morocco which is the reference country. In fact in order to avoid a situation of perfect

collinearity, the regression has to include all the dummy variables but one.

The coefficient for the regression, controlling for education and countries, is -.11. This

means that there is a decrease of .11 in the support for democracy as the independent variable of

Islam religiosity increases by one unit, keeping constant the other factors (education and country

of the respondent). The analysis gives a constant term of 11.9. This is the value of support for

democracy of respondent from the reference country, Morocco whose level of education and

Islam religiosity are zero, meaning that they are illiterate and place the least importance to Islam.

In fact the constant represents the value of the dependent variable, support for democracy, when

all the dependent variables are zero, this also means that also the dummy variables are zero,

namely that the respondent does not belong to one of the countries of the dummy variables I included in the regression, therefore they must be from Morocco (see table 9).

The coefficients obtained for each country in the regression are the estimates of the difference in the support for democracy, when both independent variables of Islam and education are zero, between people in that country compared to Morocco.

All the results are significant because the p-value is well below 0.05, so the differential intercept coefficients are statistically significant which implies that the seven countries are heterogeneous and the correlation between support for democracy and Islam religiosity may be different from country to country.

We can now for example compare the political attitude of respondents from Morocco and Algeria. Algeria is geographically close to Morocco, they are both in North Africa and Algeria borders Morocco. The two countries have had similar colonial experiences, having been European colonies for an extensive period of time. As we look at the intercept values of the respective countries, we see that for Algeria this values is smaller by 3.2 compared to Morocco, therefore its value is 8.7 (that is 11.9-3.2). The intercept of Algeria, compared to other countries, is actually the one that differs most from the intercept of Morocco. This means that probably although the countries have several features to share, the political attitude of the population of the two countries is different.

In conclusion my analysis from the public opinion database of the Arab Barometer has given the result of a negative relationship between Islam devotion of the people in seven countries of the Middle East and North Africa and their support for a democratic regime and democratic values. This result become less robust when we control for education, but the relation is still negative. There is still some heterogeneity among the countries under consideration,

although again all the countries show a negative correlation between Islam and democracy.

As a concluding thought about studying the process of democratization and support for democracy, one thing to consider is the meaning of democracy itself and the one that is given by single people. Democracy is a complex concept. The public support for democracy may not be a sufficient element for starting the process of democratization. For example respondent who support democracy may not be necessarily democrats (Jamal & Tessler , 2008), they may lack a democratic political culture orientation, which includes interpersonal trust, support for gender equality, tolerance and civic engagement.

Jamal (2007) for example suggests that civil society engagement, interpersonal trust and political participation, all need a set of democratic institutions in order to function, foster and strengthen democracy. These elements may not be introduced at the same time, and in fact modern, Western democracies required a long process to be built. Most of the countries of the Middle East and North Africa (and other in the so called developing world) are new states, and have gained independence relatively recently, most of them after a long experience as colonized counties. With time, gradually those institutions and values could reinforce and perpetuate themselves giving origin to what in the western is represented by a democratic government.

Another issue to consider is in fact that democracy is a concept born in the West (Europe and North America), in fact when we refer to and study democracy, the "standard", the model adopted is the western democracy. In other contexts, as it may be the case of the Middle East, democratic values are maybe understood differently as they are instead in the present (western) democracies. As Anderson says, democratization has been treated as a Procrustean bed (Anderson, 2006), as a definition that scholar have forced in their theories. As she suggests, in order to study democratization in the Middle East, and I would add in order to study all the

political science issues in this region, we should get rid of all the academic biases in our paradigms and theory and adapt them to a different context, a different historical (and political) experience, such as the one that the Middle East has had. This difference can partially explain why the results of studies on popular support for democracy in this area have given so different results and also why the results in general could be misleading. Some qualitative research may be needed in order to interpret both the inconsistency of results and what precisely could induce more religious people to give more (or less) support to democracy.

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Appendices:
Tables, Graph and .do file

Table 1

. tab country

country	Freq.	Percent	Cum.
jordan	1,143	14.07	14.07
palestine	1,270	15.64	29.71
algeria	1,300	16.01	45.72
morocco	1,277	15.72	61.44
kuwait	750	9.23	70.67
lebanon	1,200	14.77	85.45
yemen	1,182	14.55	100.00
Total	8,122	100.00	

Table 2

. reg democracy Islam

Source	SS	df	MS		Number of obs	=	4648
					F(1, 4646)	=	135.24
Model	1005.26346	1	1005.26346		Prob > F	=	0.0000
Residual	34535.3415	4646	7.43334945		R-squared	=	0.0283
					Adj R-squared	=	0.0281
Total	35540.605	4647	7.6480751		Root MSE	=	2.7264

democracy	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Islam	-.5538216	.0476236	-11.63	0.000	-.6471865	-.4604568
_cons	11.07455	.1072066	103.30	0.000	10.86437	11.28472

Table 3

. reg democracy Islam, level (99)

Source	SS	df	MS		Number of obs	=	4648
					F(1, 4646)	=	135.24
Model	1005.26346	1	1005.26346		Prob > F	=	0.0000
Residual	34535.3415	4646	7.43334945		R-squared	=	0.0283
					Adj R-squared	=	0.0281
Total	35540.605	4647	7.6480751		Root MSE	=	2.7264

democracy	Coef.	Std. Err.	t	P>|t|	[99% Conf. Interval]	
Islam	-.5538216	.0476236	-11.63	0.000	-.6765423	-.4311009
_cons	11.07455	.1072066	103.30	0.000	10.79829	11.35081

Table 4

```
. reg q2324 q712

      Source |      SS        df       MS              Number of obs =    8060
-------------+------------------------------           F(  1,  8058) =   75.25
       Model | 64976.1291      1   64976.1291          Prob > F      =  0.0000
    Residual | 6957931.07   8058   863.481146          R-squared     =  0.0093
-------------+------------------------------           Adj R-squared =  0.0091
       Total | 7022907.2    8059   871.436556          Root MSE      =  29.385

-------------+----------------------------------------------------------------
       q2324 |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        q712 |  .1706521   .0196726     8.67   0.000     .1320888    .2092155
       _cons |  10.93788   .3457751    31.63   0.000     10.26007    11.61569
```

Table 5

```
. sum democracy

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
   democracy |      6334     9.82965    2.765114         0         15
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Table 6

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. reg democracy Islam education, level (99)

      Source |      SS        df       MS              Number of obs =    4642
-------------+------------------------------           F(  2,  4639) =   71.78
       Model | 1066.12895      2   533.064473          Prob > F      =  0.0000
    Residual | 34450.253    4639   7.42622397          R-squared     =  0.0300
-------------+------------------------------           Adj R-squared =  0.0296
       Total | 35516.3819   4641   7.65274336          Root MSE      =  2.7251

-------------+----------------------------------------------------------------
   democracy |     Coef.   Std. Err.      t    P>|t|     [99% Conf. Interval]
-------------+----------------------------------------------------------------
       Islam | -.5341836   .0480985   -11.11   0.000    -.6581281   -.4102391
   education | -.0693249   .0239231    -2.90   0.004    -.1309721   -.0076777
       _cons |  11.23165   .1200662    93.55   0.000     10.92226    11.54105
```

Table 7

```
. sort country

.
. by country: sum democracy
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-> country = jordan

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	867	9.257209	2.247822	1	15

-> country = palestin

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	1130	8.899115	2.309625	0	15

-> country = algeria

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	862	9.016241	2.857387	0	15

-> country = morocco

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	1009	11.89495	2.321155	1	15

-> country = kuwait

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	583	9.862779	2.570324	2	15

-> country = lebanon

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	1105	10.55204	2.737498	0	15

-> country = yemen

Variable	Obs	Mean	Std. Dev.	Min	Max
democracy	778	8.991003	2.820895	0	15

Table 8

```
. sort country

.
. by country: sum Islam
```

```
-> country = jordan
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	777	2.229086	.8504264	0	3

```
-> country = palestin
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	843	2.442467	.7162515	0	3

```
-> country = algeria
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	948	2.332278	.7935406	0	3

```
-> country = morocco
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	1013	1.718657	.843961	0	3

```
-> country = kuwait
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	569	2.251318	.6958902	0	3

```
-> country = lebanon
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	992	1.528226	.7068996	0	3

```
-> country = yemen
```

Variable	Obs	Mean	Std. Dev.	Min	Max
Islam	717	2.437936	.6191634	1	3

Table 9

```
. regress democracy Islam education kuwait lebanon palestine yemen jordan algeria
```

Source	SS	df	MS
Model	5604.78786	8	700.598483
Residual	29911.5941	4633	6.45620421
Total	35516.3819	4641	7.65274336

```
Number of obs =    4642
F(  8,  4633) =  108.52
Prob > F      =  0.0000
R-squared     =  0.1578
Adj R-squared =  0.1564
Root MSE      =  2.5409
```

democracy	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]
Islam	-.1105451	.0498079	-2.22	0.027	-.2081922	-.0128979
education	.1430316	.0254855	5.61	0.000	.0930679	.1929953
kuwait	-2.238955	.1531583	-14.62	0.000	-2.539218	-1.938692
lebanon	-1.584093	.133803	-11.84	0.000	-1.846411	-1.321775
palestine	-3.097366	.1376998	-22.49	0.000	-3.367323	-2.827409
yemen	-3.089336	.1584498	-19.50	0.000	-3.399973	-2.778699
jordan	-2.645507	.1441768	-18.35	0.000	-2.928163	-2.362852
algeria	-3.153382	.1523423	-20.70	0.000	-3.452045	-2.854718
_cons	11.8719	.1266136	93.76	0.000	11.62368	12.12012
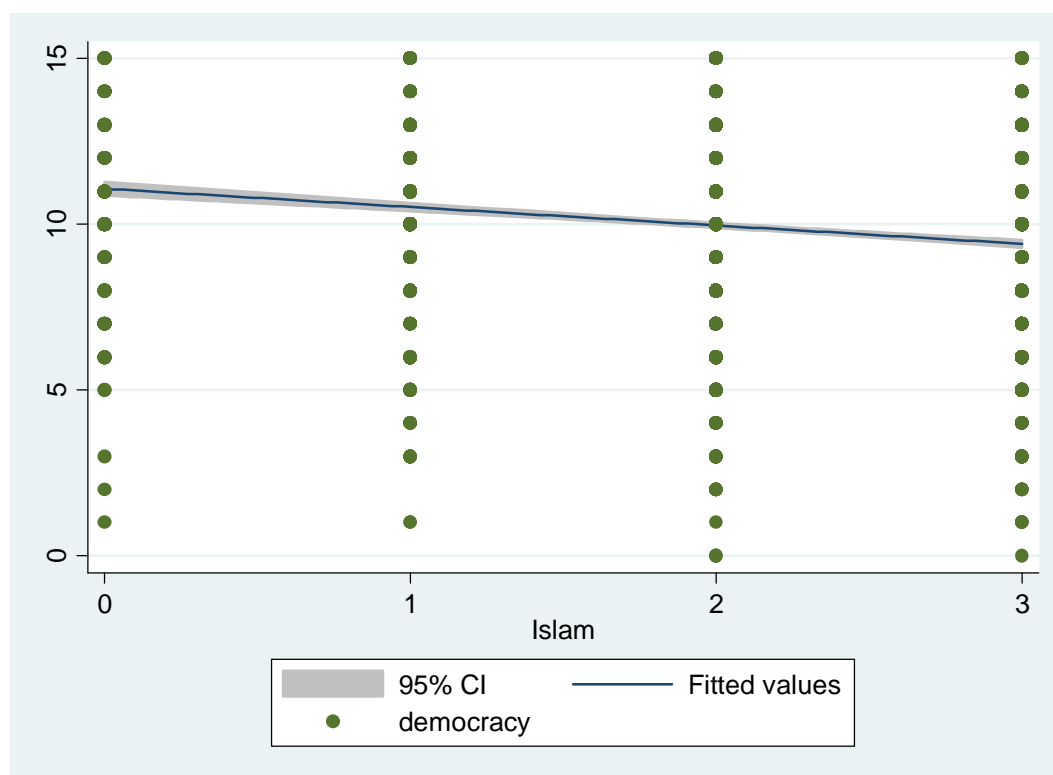
Graph 1

.do file

```
tab country


gen demecon=.

replace demecon =0 if q2321==1

replace demecon =1 if q2321==2

replace demecon =2 if q2321==3

replace demecon =3  if q2321==4


* in democracy econ does not run bad


gen demquib=.

replace demquib=0 if q2322==1

replace demquib=1 if q2322==2

replace demquib=2 if q2322==3

replace demquib=3  if q2322==4


* democ decisive and w/out  quibbling


gen demOrder =.

replace demOrder =0 if q2323==1

replace demOrder =1 if q2323==2

replace demOrder =2 if q2323==3

replace demOrder =3  if q2323==4


* democ is good at maintaining order


gen dembetter=.

replace dembetter =0 if q2324==4
```

```
replace dembetter =1 if q2324==3

replace dembetter =2 if q2324==2

replace dembetter =3 if q2324==1


*  democracy is better than other forms of govt


gen demeqrights=.

replace demeqrights =0 if q2451==4

replace demeqrights =1 if q2451==3

replace demeqrights =2 if q2451==2

replace demeqrights =3 if q2451==1


* political system (public freedom, equal political

*and civil rights, balance of power, accountability and

*transparency) as a good way of governing their country


gen democracy = (demecon+demquib+demOrder+dembetter+ demeqrights)


gen IslamQuran=.

replace IslamQuran =0 if q712==5

replace IslamQuran =0 if q712==4

replace IslamQuran =1 if q712==3

replace IslamQuran =1 if q712==2


* how often reading Quran


gen IslamPray=.

replace IslamPray =0 if q713==2

replace IslamPray =1 if q713==1


* if they pray
```

```
gen IslamDef=.

replace IslamDef=0 if q301==1

replace IslamDef=0 if q301==3

replace IslamDef=0 if q301==4

replace IslamDef=1 if q301==2


* define themselves above all as a Muslim (as opposed to nationality or Arab)


gen Islam = (IslamQuran+IslamPray+IslamDef)


* run the regression with democracy and Islam


reg democracy Islam


* now i run the same regression but with 99% CI


reg democracy Islam, level (99)


* run the regression  using as a IV
* only the frequency of Koran reading (question q712) and as
* DV  only the opinion on democracy as a good political system (question q2324)


reg q2324 q712


* mean for democracy,


sum democracy
* I generate and include include education (control variable)
*
```

```
gen education=q703

replace education=. if q703==97

replace education=education-1


reg democracy Islam education, level (99)
*
* I sort by country and tabulate support for democracy
*
sort country

by country: sum democracy
*
* sort by country and tabulate support for islam

sort country

by country: sum Islam
*
*


* These commands create dummy variables

* for country membership. 0 if the person

* is not from that country; 1 if they are
*
gen kuwait=0

replace kuwait=1 if country==5

gen lebanon=0

replace lebanon=1 if country==6

gen algeria=0

replace algeria=1 if country==3

gen jordan=0

replace jordan=1 if country==1

gen palestine=0

replace palestine=1 if country==2
```

```
gen morocco=0

replace morocco=1 if country==4

gen yemen=0

replace yemen=1 if country==7

***

* predicted values of y(democracy) for each observation for the model estimated

* of democracy on Islam

regress democracy Islam

predict predDem


* i generate the residuals

gen res=democracy-predDem

predict resid, residuals

gen residSQ=resid^2


* now i create the graph with the predicted values of democracy

graph twoway lfit democracy Islam, nodraw

*

*this is the graph showing the fitted values with a the 95%CI for the mean


graph twoway (lfitci  democracy  Islam) (scatter  democracy Islam)


*...another type of graph

graph twoway (scatter democracy Islam, jitter(2))(lfit democracy Islam),  nodraw


****

*regression with the dummies countries, excluding morocco, which is the reference country.

*in order to control & compare for countries

*

regress democracy Islam education kuwait lebanon palestine yemen jordan algeria
```