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DEBUNKING MYTH: ECONOMIC VALUES
IN THE ARAB WORLD THROUGH
THE PRISM OF OPINION POLLS

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Abstract

Using World Value Survey opinion poll data, we empirically characterize the economic values and norms held by individuals in the Arab world, in comparison to values held in the rest of the world. We find that, contrary to some common beliefs, there are many values that predispose citizens of Arab countries to be part of a market economy, including a high level of work-ethics, comfort with competition and the work of markets, and a high level of economic motivation. Moreover, it is unlikely that the fear of income redistribution has taxed investment, as opinions among Arab citizens tend to be against redistribution, compared to similar individuals in the rest of the world. However, we also find a few values that are inimical to the workings of a market-led economy, and in particular, low preference for thrift, low levels of acceptance of women's work outside home, and low trust in state institutions combined with a perception of high levels of corruption both in government and in business. We compare these preferences between citizens of Arab countries vs citizens of Muslimmajority countries, and of oil exporting countries, and find that these groups exhibit distinct preference maps. We also ask whether these values are distributed differently among different types of individuals (with differing education, age, gender, and religiosity) in the Arab world and in other countries around the world.

JEL Classification: H1, O1

Keywords: Arab, Islam, Oil, Economic Values, Opinion Polls

ملخص

باستخدام بيانات استطلاعات الرأي في استطلاع الرأي العالمي، نميز القيم والقيم الاقتصادية التي يحتفظ بها الأفراد في العالم العربي من الناحية التجريبية، مقارنة بالقيم التي يحتفظ بها في بقية العالم. ونجد أنه، خلافا لبعض المعتقدات المشتركة، هناك العديد من القيم التي تهيئ مواطني الدول العربية لتكون جزءا من اقتصاد السوق، بما في ذلك وجود مستوى عال من أخلاقيات العمل، والراحة مع المنافسة وأعمال الأسواق، ومستوى عال من الدافع الاقتصادي. وعلاوة على ذلك، فمن غير المرجح أن الخوف من إعادة توزيع الدخل فرض ضرائب على الاستثمار، حيث أن الأراء بين المواطنين العرب تميل إلى أن تكون ضد إعادة التوزيع، مقارنة بأفر اد مماثلين في بقية العالم. ومع ذلك، نجد أيضا بعض القيم التي لا تتناسب مع عمل الاقتصاد الذي يقوده السوق، وعلى وجه الخصوص، التفضيل المنخفض للادخار، وانخفاض مستويات قبول عمل المرأة خارج المنزل، وانخفاض الثقة في مؤسسات الدولة جنبا إلى جنب مع الاعتقاد بوجود مستويات فساد مرتفعة سواء في الحكومات أو في قطاع الأعمال. ونقارن هذه التفضيلات بين مواطني الدول العربية مقابل مواطني البلدان ذات الأغلبية المسلمة والبلدان المصدرة النفط، ونجد أن هذه المجموعات تظهر خرائط تفضيلية متميزة. كما نتساءل عما إذا كانت هذه القيم موزعة بشكل مختلف بين مختلف أنواع الأفراد (مع اختلاف التعليم والعمر والجنس والتدين) في العالم العربي وفي بلدان أخرى حول العالم.

1. Introduction

The central question why the Arab region has under-performed economically, after what looked on paper to be successful market reforms, has been debated for years. There are many possible culprits for this, including the influence of oil, political risk, the effects of wars, non-democratic regimes, and the development of a form of crony capitalism after the market reforms of the 1980s. There are however other more culturalist arguments that keep popping up in the literature to explain this under-performance. Three such views are particularly prominent - they can be termed the "excessive reliance on the state", "Islam is the problem", and "the fear of redistribution". But while such essentialist claims and others are debated extensively, these have tended to rely on speculation rather than empirical verification.

Because of a lack of data, it has been difficult so far to compare the opinions and values of Arabs against the views held in the rest of the world (ROW). However, new data from the World Value Survey (WVS) have been made available recently and can be used to fill this gap in ways that could not have been done before. The WVS questionnaire covers well individual values connected with economic values such as comfort with the work of markets and competition, attitudes towards work or thrift, and preferences for income redistribution. The recently released wave 6 (taken between 2011 and 2013) includes 14 Arab countries, while waves 4 and 5, taken around 2000 and 2008, covered only 5 Arab countries. Pooling waves 5 and 6 together gives us over 18,000 respondents from the Arab world, whose values can be compared with those of more than 100,000 individuals in 67 non-Arab countries.

In the paper, we characterize empirically a range of values, which are typically believed to foster good economic performance. With a few exceptions, we find that the negative views about the region's embrace of market economies do not sit comfortably with the data. Instead, opinion data reveals that the values held by citizens of Arab countries compare favorably with those of individuals around the world at comparable levels of development. More than others, Arabs are driven by a desire for the good life, support markets and competition, and hold high values of work-ethics. They also, more than others, oppose a large role for the state in the economy, and do not support income redistribution. On the negative side, we find that they hold some particular views that are inimical to a market economy, and in particular, low preference for thrift, opposition to female work outside the household, and low levels of trust in national institutions.

The paper is strictly interested in a comparative description of preferences, and does not attempt to test the relation between these preferences and economic growth. Instead, the discussion of possible relations between preferences and economic performance will be purely speculative. Our goal when it comes to growth is simply to dispel the view that culture is likely to be at the basis of underperformance, and to argue that other reasons for this underperformance need to be explored. Our work offers one such set of reasons, related to low trust in national institutions, a phenomenon that is more connected to political circumstances than to local culture per se.

The paper is organized as follows. Section two reviews critically the literature. Section three describes our econometric techniques. Section four presents the empirical results related to

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¹ The Arab countries covered in wave 6 are: Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestine, Qatar, Saudi-Arabia, Tunisia and Yemen. The five countries are covered in waves 4 and 5 are and Egypt, Iraq, Jordan, Morocco and Saudi Arabia.

² The Arab Barometer has rich Arab data, but these cannot be easily compared with other regions. Gallup covers more 22 countries of the region (starting from 2005) with large sample (about 2000 individuals per year per country). Gallup does not cover some of the issues covered by the WVS, but has questions on corruption as well as preference for work in the public sector – both are of interest in the context of this paper. For this study, we only had access to Gallup data for Arab countries, kindly provided by Silatech, and cannot therefore make international comparisons.

values to competition, work values, and opinions about the state. The concluding section summarizes and discusses the main findings.

2. What Are "Economic Values"?

That "culture", taken to mean a system of local preferences, can influence economic performance is an indisputable statement. Even before the rise in popularity of behavioral economics, it had long been recognized that economic outcomes are influenced by differences in preferences between current consumption vs. intergenerational equity, division of time between work and leisure, the organization of the family along small vs. large structures, and ethical views on inequality vs. personal opportunity.³ But it is also rightly accepted that to invoke culture in order to explain differences in performance across countries without solid empirical justification is a slippery slope.

An early question investigated by sociologists has been that of the relation between values and development – does culture change or evolve with circumstances, or are some of its elements more stable over the long term? One celebrated approach initiated by Ronald Inglehart and his colleagues under the umbrella of the World Value enterprise asserts that local cultures evolve with modernization (Inglehart and Welzel 2005, 2010). These writings describe how values move from survivalist to self-expressive, and from religious to secular, as individuals achieve higher levels of education, move to cities, and move to work in industry.

Others however believe that local culture does not get completely displaced by modernization. Gorodnichenko and Roland (2011) in particular take the view that culture persists and only changes very slowly. They define culture as a preference map over individualism/collectivism and find that Arab culture is mid-way between the Anglo-Saxon individualism and Asia collectivism. There is a trade-off between the innovation advantage of individualist culture giving social status rewards to innovators and the coordination advantage of collectivist culture where individuals internalize group interests to a greater extent. Their empirical results show that individualism has a dynamic advantage leading to a higher economic growth rate whereas collectivism leads only to static efficiency gains and can have only a level effect.

Attempts to link culture and economic performance have been especially controversial in the study of Arab or Muslim "civilizations". These negative views have been bolstered by an earlier literature with essentialist views based on stereotypes that Muslim or Arab cultures are immutable to change, and that these cultures are intrinsically anti-development.⁴ More serious studies have looked at whether Muslim-majority countries form a "civilization" with a preference map that is distinct from that of other cultures. Esmer (2003) argues that Islam represents a distinct civilization in that the values held by Muslim individuals tend to be different from those held by individuals of other religions in significant ways. Other studies have looked at particular aspects of values held by citizens of Muslim-majority countries. The differences found have been related to core tenets of Islam that may have shaped social norms and affected preferences in several domains such as the fear of "fitna" (discord) exacerbating the fear of chaos (Platteau 2011), the deference to the communal goals of the "umma" (nation) reducing the appeal of individualism (Bayat 1992), and the value of self-

³ More broadly, the existence of different varieties of capitalism observed around the world tends to be attributed in parts to differences in preferences, for example over economic growth versus economic volatility (Hall and Soskice 2001).

⁴ Some of the often-quoted studies that are based on particularly dubious historical-literary methods include those by Patai (1973), Lewis (1991), and Huntington (2000).

help reducing the appeal of redistributive policies in favor of more structured forms of solidarity such as Zakat (Rodinson 1966, Al-Gamal 2015).⁵

There is a confusion of genre in much of this literature, which tends to assume that Arab culture can be reduced to its Islamic content. Whether this is a true representation of reality remains an open empirical question, which we want to address in this paper for the domain of economic values and preferences.⁶ Our motivation is that there are historical dissimilarities between the Islam of the Middle East and that of other regions, which could have influenced social norms. One such difference is the rise and fall of the Ottoman Empire and, earlier, the spread of Islam in the 8th century. This has colored beliefs and social norms in ways that have been possibly different from those in areas in Asia or Africa that converted later (and in different ways). Thus, the type of Islam in one region may be different from that in another region (Chaney 2012). Maxine Rodinson has argued that Islamic traditions in the Arab region includes centuries of unfettered market economies, which has positively shaped economic culture and social norms towards pro-capitalistic values (Rodinson 1966).

Despite some obvious differences in terms of economic wealth, ethnic diversity, or political system, one is led to investigate Arab countries as one entity with a relatively homogeneous economic culture. On the cultural side, the region shares one language. The rise of a regional Arab media and the movement of migrants throughout the region have facilitated the spread of ideas. On the political front, "presidents for life" have entrenched autocratic regimes in all countries, save Lebanon (Owen, 2014). This has constituted an important difference with the rest of the world after the spread of the third democratization wave in Africa, Latin America, and Asia. Finally, the economies of Arab countries have been dominated by the logic of rents extraction and distribution - oil, geopolitical, and regulatory. This has fostered crony relations between power and business, taxed growth, impeded global integration, and generated similar social and economic frustrations among the population of the region. These similarities have revealed themselves most starkly during 2011, when protests in Tunisia led quickly to protests across the Arab world, led by similar political demands for more freedoms, dignity, and economic opportunities (Cammett et al, 2013). Opinion polls give us a valuable tool to look into these issues in a systematic manner.

3. Data and Methods

We now summarize our data and econometric strategy. On the data side, we pool the last two waves of the WVS in order to increase the number of countries covered – the 5th wave had many European countries, which were not covered in the 6th wave. Together, the two waves cover 81 countries, of which 14 are from the Arab region. We also use (to a much lesser extent) Gallup data – we have access to individual level data for the 22 Arab countries over the period 2005-2010, but we only have country averages for the rest of the world.

We characterize the preferences of citizens of Arab countries in five broad domains of economic values, which are:

- 1. Pro-market sentiments
- 2. Economic motivation and thrift
- 3. Attitudes towards work (work ethics, gender and work, preference for the public sector)
- 4. Fear of income redistribution, and
- 5. Confidence in institutions and perception of corruption.

⁵ Timur Kuran has studied many factors that weaken economic growth in Muslim societies, but he relates those largely to institutions shaped by historical and political forces rather than to culture (Kuran 004, 2012).

⁶ A thin literature has debated whether low performance is a characteristic of Arab or Muslim-majority countries (Stepan and Robertson 2003).

In each domain, we look at several variables, including some indexes we construct, based on responses to questions asked in the WVS (and in some cases Gallup).⁷ Each variable is described in tandem with results below, and the precise questions from WVS and the Gallup World polls are listed in the Annex.

To characterize how Arab values compare to those held in the rest of the world, we use a battery of comparator groups by grouping countries represented in the opinion polls we use in various ways: the rest of the world (ROW) (all countries minus the Arab countries), middle income countries (MICs – all MICs minus the Arab MICs), Muslim-majority countries, oil producing countries, and world geographical areas. We take Middle Income countries (MICs) as countries whose GDP per capita exceeds \$1000 on a 2010 PPP basis (the WVS data covers 36 such countries, see annex). We also group countries along main geographical regions (Arab; the former Soviet states; Europe; Sub-Saharan Africa; East and South Asia; Latin America; and Muslim-majority countries, excluding the Arab countries). We define countries as Muslim-majority if more than 50% of the WVS sample affiliates with this religious denomination. We use the World Bank Indicators to identify oil-producers as countries with more than \$400 of oil rents per capita in 2011. Separating effects between Arab, Muslim, and oil producers is possible because we have sufficiently large sets of countries in each category.

In terms of statistical analysis, we use our comparators groups in various ways:

- We start by comparing the mean and coefficient of variation of values in the Arab world with values in MICs (Table 1)
- We then graph values for various groupings of the world
- We finally use regression analysis to compare values held in the Arab region with values held in the ROW, as well as in Muslim-majority countries, and in oil producing countries.

The regression model we use probe further into differences in values among various groups of countries by accounting for demographic and level of development differences that are likely to influence culture in ways that may bias the inferences. We run Ordinary Least Squares though our dependent variables are ordinal and Probit techniques would have been more appropriate. Our experimentation showed that the results are broadly similar, and the results from OLS are easier to interpret. All regressions use standardized data and thus produce beta coefficients. The regressions adjust the error terms by clustering standard errors at the country level. The regression models are of the form:

LHS
$$(i, j, t) = a C (j,t) + b I (i, j, t) + c (j) + d (T) + e (i, j, t)$$
, where:

- The LHS denotes the economic cultural values of interest
- C (j,t) are characteristics of country j at time t
- I (i,j,t) characteristics of individual i, in country j, at time t
- T: time dummies, including specific to Arab countries (5 countries have 2 points).

The independent variables are defined as follows. Besides dummy variables to describe various groups of countries (Arab, Muslim-majority, Oil producers), we also control for

⁷ For the variables that have been created by combining several questions, factor analysis is used to ensure that they for a well-defined index.

⁸ In order to explore further the effect of religion as culture, we also ask if the extent of religiosity affects opinions, given that it is well known that Muslim societies tend to be more pious (Heine and Spielhaus 2009).

⁹ Based on self-declared religion in World Value, which asks the religious denomination of the respondent.

¹⁰ In our sample we have 23 Muslim-majority countries, and 21 oil producers. These are widely distributed in and out of the Arab region: 23 out of 80 countries have predominantly Muslim population of which 12 located in the Arab region, and 9 outside it (8 in Asia, 1 in Sub-Saharan Africa). Out of 21 oil producers, 8 are located in the Arab region (5 in Latin America, 3 in Asia, 2 in the West).

levels of development, which we measure by the logarithmic value of country per capita GDP in PPP (constant 2005 international \$) in the year when the survey was conducted (from WBI). The individual characteristics are:

- Age, which we measure as a continuous variable between 15-99
- Education, which we measured in levels it takes the values of 1 for individuals with no education, 2 for those who have completed primary, 3 for those who have more than primary but less than tertiary, and 4 for those who have at least started a university program
- Gender, as a dummy variable, with female taking the value of 1, and 0 for male (omitted)
- Income, measured as a dummy variable for income quartiles identifying the poor (inc1), the lower middle class (inc2), the upper middle class (inc3) all relative to the richest 25% (omitted)
- Religiosity, measured as a dummy variable with 1 representing a positive answer to the question about whether "religious faith is an important child quality", and zero otherwise.

We sequentially develop four models to describe the preferences of citizens from Arab countries:

- A first model (Table 2) explores whether there is an Arab "exception" relatively to the rest of the world, using a dummy Arab variable in a fixed effect model (the reference being the ROW).
- The second model (Table 3) investigates whether there are differences between Arab countries, Muslim-majority countries, and oil producing countries, again using a fixed effect dummy variables for each of these groups of countries.
- The third model (Table 4) breaks up the Arab group into its constituent countries to see whether there are significant differences across countries.
- While these three models focus on fixed-effects differences, the fourth model (Table 5) asks whether there are slope differences between the Arab world vs the ROW, in the sense that age, education, gender, and religiosity affect values differently in these two groups.

4. Differences in Values between the Arab World and Other Regions

In this section, we report our main results, and discuss their significance, for each of the five domains listed above.

4.1 Pro-market sentiments

In order to assess opinions of individual Arabs about the core value of capitalism, including private property, markets, and competition, we construct an index of "Pro-market" values by averaging responses to three WVS questions: (i) "Private ownership of business and industry should be increased OR government ownership of business and industry should be increased"; (ii) "Competition is good, it stimulates people to work hard and develop new ideas OR competition is harmful. It brings out the worst in people"; and (iii) "People can only get rich at the expense of others OR wealth can grow so there's enough for everyone". We arrange the index so that higher values indicate a more pro-market tendency.

The examination of this pro-market index is graphed in Figure 1, which shows the average rating in various regions of the world over 3 waves of the WVS. The figure shows that in the last wave (WVS wave 6) around 2012, pro-market values in all regions have converged. It is interesting to observe that while the Arab region scores slightly above all the others, the non-Arab Muslim-majority countries group scores the lowest. The relative advantage of the Arab region can also be seen in Table 1 (first column) where the mean of the variable "promarkets" is higher in the Arab region (6.69) than in the MICs (6.41), with a similar standard

deviation. Thus, Arabs seem to be on average as comfortable with markets and competition, and not looking for a larger role for the state, as anywhere in the world.

Interestingly, the Arab region had the lowest score on this value compared to the other regions around 2000 (WVS wave 4), but the score has risen over waves 5 and 6. This is in contrast to other regions where pro-market sentiments have fallen, for example in Sub-Saharan Africa (SAFR) and Eastern Europe (CIS). This may indicate that the improved promarket sentiment was associated with the liberalization of markets and the rollback of the state experienced in much of the region during the 1990s. In this view, rather than a pushback, liberalization seems to have elicited popular approval, at least over time.

Regression analysis shows that the Arab premium relative to the rest of the world (ROW) is positive but not significant (Table 2, column 1). Digging deeper however, it appears that the individuals in Arab countries differ from those of other Muslim-majority countries (as already suggested by Figure 1). When we also control for being in a Muslim-majority country in Table 3 (which now includes both the countries of the region, and other Muslim-majority countries around the world), we find that there is a negative (and small) Muslim-majority countries effect, and a positive Arab specific fixed effect. ¹² This means that the Arab region resemble the ROW, it is also more pro-capitalistic than other Muslim-majority countries around the world.

Looking at the effects of individual characteristics tell us a bit more about the Arab region specificities. When interacting the Arab dummy with the various individual characteristics, it appears that two individual characteristics translate differently to pro-capitalistic values in the Arab world *vs.* the ROW: religiosity, and low incomes (Table 5, first column). The Arab specific slope for religiosity is positive, implying that more religious people have larger promarket values in the Arab world than in the ROW. Religiosity has also a positive impact of pro-market value in the rest of the world, but the total effect in the Arab region is much larger (more than double at 10% *vs.* 4%). In addition, the poorest part of the population in the Arab world (relative to the rich) is not as anti-markets as it is in the rest of the world, the reference group (0 *vs.* -3%).

Individuals in Egypt, Libya and Yemen, countries with a recent socialist past, are especially supportive of markets (Table 4, first column), perhaps in reaction against economic policies in the past. Individuals in GCC countries on the other hand tend to be less pro-markets, perhaps reflecting a rentier mentality that favors distribution of the oil rent over market engagement (Beblawi and Luciani 1987) – but it is also apparent in Table 3 that this is not a characteristic of all oil-exporting countries around the world.

The results depict a subtle difference between Arab Islamism, and Islam in the rest of the world. Not only are citizens of Arab countries pro-market compared to non-Arab Muslimmajority countries, but moreover, the more pious amongst them are even more pro-market. This suggests that the particular form of Islam in the Arab region is particularly pro-markets, as suggested by Azm (2013), perhaps because of its cultural inheritance - the prophet himself was a trader, and the various regimes that reigned in the region, until the Ottoman, were also relatively pro-market – a point stressed forcefully by Rodinson (1966).

¹² To get the net Arab slope for a particular characteristic (e.g. education), one needs to add the global and Arab specific slopes. The size of the slopes should be interpreted as the share of one standard deviation of the global distribution of this variable.

¹¹ One important caveat here is that the Arab country sample is smaller in waves 4 and 5, and so the trend may hide a compositional effect

4.2 Economic motivation and thrift

Two important values of capitalism are, first, an economic motivation to generate more income and, second, the virtue of thrift that provides self-insurance to households while supporting investment and accumulation over time.

These two values are at face value contradictory, yet both are necessary for a well-functioning market economy. Societies deal with this contradiction in various ways, from exalting the value of savings to instituting systems of forced savings – such as compulsory social insurance. In the classical exposition of the Protestant ethics, Weber ([1930] 2002) argues that the early settlers in the US resolved the dilemma by resorting to a view, from Protestant theology, that success in business was a reflection of divine grace, and that it should not be pursued for the benefit of consumption, resulting in a situation of fast accumulation of capital. The traditional Muslim religious values stress the need for self-sufficiency as a way of not being a weight on the *umma*, exhorting the value of gainfully earned wealth as a base for *zakat* taxation, but at the same time, equating excessive consumption with moral corruption (Bayat 1992).

To measure economic motivation, we have constructed an index derived from four WVS questions to measure the degree to which respondents look forward to making money, "spoiling" themselves, being successful in life and having an exciting life (see Annex).

Following Esmer (2003), who was first to note a Muslim-country deficit on this value, the value of "thrift" is constructed from two answers to a question that ask respondents to choose from a pre-set menu, qualities that children should be encouraged to learn at home. We code an answer as high when the choice include (i) thrift, saving money, and/or (ii) determination and perseverance.

On economic motivation, the Arab region scores substantially above the ROW countries (6.39 vs. 5.46 - Table 1). And it has a much lower coefficient of variation suggesting more homogeneity within the Arab countries than with the MICs. It is also on the high side when compared with other regions, but at about the same level as non-Arab Muslim-majority countries (Figure 2).

Regression analysis reveals additional information. The Arab premium is measured at 14% relative to the rest of the world (ROW) – see Table 2, column 2. Table 3 reveals however that here the Arab effect is largely a positive Muslim-majority countries effect, and not specificity an Arab countries effect. Economic motivation is especially strong in the richer countries of the GCC (Table 4, column 2), a possible aspect of a "rentier" mentality that overvalues economic wellbeing. On the other hand, this effect is lacking in two of the countries with socialist regimes in the past, Egypt and Yemen,

When we look at the impact of individual characteristics on economic motivation, three main differences between the Arab region and the rest of the world emerge (Table 5, column 2). First, while in the rest of the world, the youth tend to have a higher economic motivation compared to the old, these generational differences are attenuated among Arabs, probably a reflection of the patriarchal family structure that tends to pool family incomes.

Second, the effect of education on economic motivation tends to be negative in the rest of the world (-6%) suggesting more education leads to less economic motivation. However, it is positive and large in the Arab region (+17% = 0.23% - 0.06%). It is as if educated Arabs perceive education as a ticket to the "good life", while in the rest of the world more education generates aspirations that are not economic in nature (e.g. appreciation for knowledge).

Third, there is also an Arab region religiosity effect (-7%) that is not found in the rest of the world. Thus, more religious people are less motivated economically and are seemingly more

ascetic in the Arab world compared to religious people elsewhere. Our findings on economic motivation as they relate to religious culture are thus also quite subtle, as in the case of promarket values. Muslim majority countries, including Arab countries, favor self-gratification more than other countries around the world, but more religious Arabs are less motivated on the economic front.

So Arabs seem highly motivated to earn income, but are they also motivated to save? Esmer (2003) had found that the "Muslim civilization" was characterized by low values of thrift. A comparison of mean values reveals that the Arab average is quite lower than that in the MICs (3.96 *vs.* 5.08 with a much smaller coefficient of variation: Table 1). We have also graphed the components of this index among the major regions of the world (Figure 4 below) – it is apparent that the Arab region scores very low on both dimensions of the index, unlike the non-Arab Muslim countries, which score quite high (as high as Asia), seemingly contradicting Esmer's result (Esmer 2003). ¹³

Regression analysis confirms the existence of a large Arab gap regarding the value of thrift (of -10%, see Table 2, column 3). Further analysis reveals that this gap is the result of an Arab deficit (of -13%) and a Muslim-majority country *surplus* (of +5% - see Table 3). Thus, this is a trait particular to the Arab region and not of other Muslim countries outside the Arab region. This gap is particularly marked in the Middle East (Jordan, Lebanon and Egypt) followed by the oil countries (Table 4).

Looking at individual characteristics, it appears that the effect of religiosity is similar in the Arab region and in the ROW - negative and large (at -13% for religious people compared with those that are not religious). Thus, while we had found that religiosity reduces economic motivation in Arab countries, it also appears that it does not play a particular role in raising thrift. More likely, the religious restraints on self-gratification are related to ascetic tendencies that perceive over-consumption as a form of moral corruption, as opposed to the saving motive, which is specific to Protestant ethics.

In sum, our results reveal that Arab countries score high on the values of economic motivation, but low on thrift. But while the first of these characteristics is also a Muslimmajority country characteristic, we have found that our more recent data does not support the conclusion that "Muslim civilization" more generally is characterized by low values of thrift.

4.3 Attitudes to Work

We now look at the values attached to work from three different perspectives. First, whether there is an intrinsic drive for hard work as a key to success; second, how women's work is viewed; and, third, the preference for work in the private sector *vs.* the public sector.

Work Ethics

The precise WVS question we look at relating to the value of "hard work" reads: "Hard work doesn't generally bring success—it's more a matter of luck/connections *vs.* in the long run, hard work usually brings a better life". By construction, high values for this variable mean a stronger belief in the positive value of work.

The average for this variable are 7.48 for the Arab countries vs. 6.75 for the MICs, with the former having practically the same coefficient of variation (Table 1). A visual presentation of how this variable differs across regions (and age) is shown in Figure 3.

The Arab region scores above all regions of the world, including non-Arab Muslim majority countries, and this is true for all age groups. The high value of work ethics tends to also be a

¹³ The low value on thrift can be related to the pooling of income in large family structures, and can also explain why the region has relatively low saving rates, at about 16% GDP (in 2014), compared to 22% in middle-income countries on average.

characteristic of poorer countries, which are driven by survival motives, as reflected in the high score for Sub-Saharan Africa. On the other hand, in richer countries, people tend to have post-modern values that do not favor hard work as much once basic needs have been satisfied, as reflected in the low score for Europe (Inglehart and Welzel 2010).

Regression analysis confirms and enriches this core result. When controlling for personal and country characteristics, we find in Table 2 (column 4) that there is an Arab surplus on the value of hard work compared to the ROW (of 7%). Table 3 demonstrates that this surplus is specific to the Arab region, and does not extend more broadly to Muslim majority countries or to oil producing countries. Finally, looking at individual characteristics (Table 5), we find that this value is influenced positively by faith in the Arab region, as in the ROW, but with a much stronger intensity (at twice the rate experienced in the rest of the world 10% vs. 5%).

These are rich results, which suggest that what Bayat (1992) calls a Muslim ethics of work is in fact a Muslim-Arab value that does not extend to Muslim-majority countries outside the Arab region. Moreover, this value rises with religiosity. So here again, we encounter a value that is similar in some ways to Protestant capitalistic ethics. In Bayat's description however, the drive for hard work rests on different principles. Protestant work ethics is driven by a desire to earn income in order to save and reinvest. Drawing on theological writings, Bayat argues that Islam encourages people to work hard in order to be self-sufficient and avoid being a weight on their community - presumably especially so in Arab form of Islam. Besides supporting economic gratification then, hard work is also seen as a personal contribution to social peace in the *umma*, which may explain its particularly high level in the region.

The results so far are summarized in Figure 4 that include the so-called four main tenets of Protestant ethics (see Petterson and Esmer 2008). These are thrift, perseverance, competition, and hard work 4. The graph clearly shows that compared to other regions of the world, the Arab region does quite well on the latter two values, competition and hard work. But it lags behind the rest of the world in the former two, thrift and perseverance. It is also evident that that the values held high in the Arab group are quite differently from those that are strong in the non-Arab Muslim-majority group.

Gender and Work

Labor force participation remains low in the region compared to other regions of the world, but it has being increasing over time, albeit slowly. Men participate as much as elsewhere in the world, except in the GCC countries where their participation is low (ILO/UNDP 2013). But Arab women participate in the labor markets much less than in the rest of the world --only 1 in 4 Arab women work outside the home, compared to a global average of 51 percent. The low participation rate of women has been connected to structural effects such as the lack of development of manufacturing, a sector which, in the rest of the world tends to employ women disproportionately (Moghaddam 1999; Ross 2012;) and to the roll-back of the state, a traditional employer of women, after the reforms of the 1990s (Tzannatos et al 2016). Also, Arab countries are predominantly middle-income ones and a developmental pattern is that female labor force participation rates dip as countries move out of low-income status and rise again when they transit into high-income status.

In some studies, the low female labor force participation has also been related to culture, and in particular, to patriarchal norms, which engender the workplace and keep women employed mainly within the household, possible as a substitute coping mechanism to deal with the lack of public provision of social insurance (Alesina and Giuliano 2007). These patriarchal structures seem to relate more closely to some religions compared to others. Female labor force participation rates have been found to be particularly low in predominantly Muslim countries (Psacharopoulos and Tzannatos 1991; Tzannatos, 1999). A recent study shows that

patriarchal values strongly correlate with low female labor force participation, and that country norms matter more than individual norms (Diwan and Vartanova 2016).

To illustrate the specificity of the Arab region, we focus on one question from the WVS: "when jobs are scarce, men should have the priority" – where higher values indicate more opposition to women's work. A comparison of the averages of this variable shows an extremely large gap between the Arab region and the MICs (7.92 vs. 5.17) with a much smaller coefficient of variation within Arab region that suggests a high degree of uniformity (Table 1). A full 75 percent of the Arab population believes that men should be given priority when jobs are scarce, while the average in the global sample is 41 percent. There are other apparently patriarchal regions but are still far behind the Arab region, namely South Asia (55%), East Asia and the Pacific (45%) and Europe and Central Asia (41%).

Regressions results confirm this large the gap of the order of 20% for the Arab region (Table 2, column 5). However, this appears to be a worldwide Muslim-majority countries phenomenon (+18% relative to non-Muslim countries), and also an oil producers' effect (+6% compared to non-oil producing countries). Since Islam and oil are two characteristics that the Arab region cumulates, these effects explain its high score on patriarchal work values (Table 3). Indeed, once one controls for these two groups of countries, there is little remaining Arab specific effect.

Table 4 shows that there is also some regional variation along these highly patriarchal values, with the highest values in Arab countries mainly in the Mashrek (such as Jordan, Egypt, Qatar, Libya, and Kuwait) and less so in the Maghreb (Algeria, Morocco and Tunisia). The results on individual characteristics are revealing (Table 5). There are two specificities of the Arab region when compared with the rest of the world: more religious people, as well as *more* educated people tend to favor women staying at home more often. The effects are particularly large: education makes people less patriarchal in the ROW (-10%), but *more* patriarchal (in the sense of our variable) in the Arab region (-10%+6%=4%). More religious people are more patriarchal in all regions, but with higher intensity in the Arab region (7%+6+=13%) compared to the ROW (+7%). It is also noteworthy that women support patriarchal value much less than men (-9%).

Preference for Work in the Public Sector

Unemployment is high in the Arab region, more than double in the rest of the world and this applies to all groups such as men and women, adults and youth – and more so in the case of women and youth. One explanation that is often offered is that wait unemployment is high among women and the educated youth, who prefer to queue until they can get a public sector job, rather than accept a job in the private sector at inferior working conditions and wages. While this characterization seems reasonable for the case of the GCC countries, it is harder to believe that this is the case in the poorer parts of the Arab world, where the civil service wage bill have been shrinking since the 1980s (Diwan and Akin 2014). Given that unemployment is largely a macroeconomic issue, it is more likely that unemployment in the Arab region is mainly due to low aggregate demand and therefore involuntary to a large extent.

Examining opinions regarding preferences for work in the public *vs.* the private sectors can help discriminate between these two hypotheses. As the WVS does not have a question on this issue, we utilize relevant questions from Gallup in its 2010 wave. The question asked to over 64,000 respondents in 22 Arab countries (but not in other countries) is "would you prefer to work for the public or private sector, at similar conditions?"

The responses are summarized in Figure 5 below. On average, only 25% of respondents prefer to work for the private sector, and the proportion is below 15% in Yemen, Bahrain,

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¹⁴ Women support this value less than men (-9%).

Algeria, and Egypt, Qatar, Iraq and Kuwait. Admittedly, it is not clear that they prove much for the Arab region as there is no comparable information in other parts of the world. Moreover, the insertion of the word "similar conditions" makes it hard to understand what exactly is being measured.

We can look at variations within the Arab region in order to learn what types of individuals prefer to work in the public *vs.* private sectors. We are interested in whether the youth are different from their parents who grew up at a time when the public sector was a ticket to success; whether the educated have a higher preference for the public sector than the non-educated as the wait unemployment hypothesis would imply; and whether women prefer public sector work.

Table 6 (column 2) presents the results of the regression of preference for work in private sector in Arab countries on personal characteristics. The negative and large coefficient on women (-21%) suggests that Arab women have a strong preference for work in the public sector. This is also the case among poorer individuals as the positive coefficient on incomes implies that it is better of people who prefer job in the private sector. This applies to more religious people who have a negative and large coefficient regarding work in the private sector (-23%). However, young people prefer to work in the private sector (the coefficient of age is negative, meaning that older people dislike working in the private sector). More educated individuals also prefer to work in the private sector, more so when they have university education – the effect is almost double that for secondary school graduates (23% vs. 13%).

These results suggest that educated youth are not likely to line up for work in the public sector, at least outside the GCC countries that still enjoy a large public sector wage premium. Indeed, this premium has disappeared in the poorer Arab countries in recent years, and certainly so at the skilled end of the civil service (Tzannatos et al, 2016).

4.4 Fear of income equality and redistribution

Some authors have claimed that one reason for the low "supply response" after structural adjustment reforms since the 1990s has been the fear, among economic elites of a future of socialist-type responses and expropriation (Noland and Pack 2012). As markets were liberalized, there was, it is sometimes claimed, a lingering fear among potential investors that the population remained committed to income redistribution, and that as a result, democracy could usher a rise in socialism or return to populist strategies that support high taxation of the rich and redistribution to the poor.

Several authors have recently stressed the move to the "left" in Muslim-majority countries (El-Gamal 2016), and in Egypt and Morocco (Massoud 2013, UNDP 2016). *A priori*, it is hard to "guess" whether this also applies more generally across the Arab region. Household surveys do not reveal high levels of inequality of consumption (Bibi and Nabli, 2010; Belhaj 2012). But these measures have been contested as the surveys miss out the very rich, as well as the rise of various forms of inequality of opportunities, both of which are suspected to have risen with economic liberalization and the roll back of the state. ¹⁵ Corroborative evidence for this comes from macro data that indicate clearly that the share both of wages and consumption declined significantly across the Arab region since the 1990s¹⁶.

In order to evaluate the desire for redistribution in the Arab region, we construct an index "preference for income equality" from two WVS questions that ask whether "incomes should

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¹⁵ On the rollback of the state, see Diwan and Akin 2014; on the rise of inequalities of opportunity, see Assaad et al. (2012) in the case of child health, El Enbaby and Galal (2015) in the case of consumption and wages, Salehi-Isfahani et al. (2012) in the case of Education Achievement and Assaad et al. (2016).

¹⁶ ILO/UNDP(2012), Al-Nashif and Tzannatos (1013).

be made more equal vs. we need larger income differences as incentives for individual effort" and whether "Government should take more responsibility to ensure that everyone is provided for" vs. "People should take more responsibility to provide for themselves." A higher index indicates a larger desire for income equality and for redistribution (i.e. values on the "left").

Regional averages in Table 1 reveal that the Arab region tends to be on the "right" compared to the MIC group. The average of the index stands at 4.81 in the Arab countries compared to 5.42 for the MICs. However, the coefficient of variation among Arab countries is higher than in the MICs (64% vs. 54%) suggesting great heterogeneity across the Arab region.

Figure 6 shows that redistributive policies are less popular in the Arab region than in all the other regions of the world - the educated in the region are the group least in favor or redistribution, while the least educated are more in favor. Asians and Africans tend to also be on the "right", while Europeans and Latin Americans are on the "left".

The results from regression analysis reveal more detail. Arabs are to the "right" of the ROW, (Table 2, column 8).¹⁷ On the other hand, Muslim majority countries, and oil-dominated countries behave just like the ROW (Table 3) - another area where Arabs and Non-Arab Muslim countries diverge in their preferences. Morocco and Iraq are more to the "left" than the regional average (and in sync with the ROW – see Table 4, Column 6).

In terms of individual characteristics (Table 5), the old in the region are more to the "right" compared to the youth – the opposite holds in the ROW, perhaps a reflection of the fear of the type of socialism they experienced in their youth. The educated Arab citizens are more to the right (+13%), compared to the educated in the ROW (zero effect), reflecting perhaps the unequal distribution of education opportunities in the region. Finally, the upper middle class in the Arab region (income 3) is also more anti-redistribution, compared to the reference group (which is the top 25% richest individuals).

In sum, Arab populations are not particularly keen on redistribution. This sheds serious doubt on the hypothesis that the fear of redistribution is the culprit for low economic dynamism.

4.5 Confidence in institutions and perception of corruption

Institutions play a crucial role in the workings of markets. The liberalization policies since the 1990s ushered more active markets, but market institutions have been slow to develop. More centrally, the lack of political liberalization, and the rise of opposition, which was met with rising political repression, meant that governments remained wary of the emergence of autonomous economic powers that could threaten their economic interests and translate into rising political opposition. This has tended to foster the rise of a large crony private sector, reducing competition and growth (Cammett et al. 2015, Diwan et al 2014 for Egypt, Diwan and Haidar 2016 on Lebanon). The question before us is therefore whether this state of affairs has also been reflected in a low level of trust for state institutions.

In order to ascertain whether national institutional are perceived as untrustworthy, we constructed an index of "confidence in national institutions" using WVS questions relating to trust in the armed forces, the police, the courts, the government, parliament and the civil service. In Table 1, we see that the Arab average is effectively equal to the MICs average, but the Arab coefficient of variation is larger than in the MICs (52% vs. 44%).

Regression analysis yields more contrasted results. Table 2 (column 7) shows that Arab countries have as much confidence in their institutions are the ROW - the respective coefficient is small and statistically insignificant. However, Table 3 reveals that this is the combined effect of two opposing forces. Muslim-majority countries have a high confidence

¹⁷ But with a slight movement "to the left" between from wave 5 (2008) to wave 6 (2012) – just after the Uprisings.

in their institutions (+18%) relative to the ROW compared to Arab countries that now appear to have a large confidence deficit (-12%). This contrast between Arab and Muslim-majority countries is noteworthy: It seems it is Islam that pushes towards trusting institutions (fear of *fitna*) but the realities of the Arab region push in the opposite direction, resulting in a net wash relative to the ROW.

Table 4 reveals that within the Arab region, Yemen and Tunisia trail the pack, followed by Libya, Iraq, and Lebanon. However, some other Arab countries do well, such as Qatar, Jordan, Bahrain, and Kuwait, all of which are monarchies. Finally, Table 5 shows that the only individual characteristic that plays a role that is different from the ROW is age, with younger Arabs showing exceptionally low respect for national institutions.

The lack of trust in institutions parallels high levels of concern about corruption. Again, the WVS does ask direct questions related to corruption. However, Gallup has several questions, including two questions about the perceived level of corruption in government and business. We had access to country averages for all the countries covered by the survey that are shown in Figure 7. There is a strong correlation, an almost linear one, between corruption in government and in business. Some Arab countries have high levels of perceived corruption – Lebanon, Morocco, Iraq, Algeria, and Egypt being among the highest.

Grouping the national averages into regional ones reveals that perceived corruption in government in the Arab region is high below only former socialist states (Eastern Europe and the Former Soviet Union) and Southern Europe. In the table below, the level of corruption in the above group of countries is more than 80 percent, that is, double that in Western European countries (42%: Column 1). This is not the case with respect to perceived corruption in the private sector. The GCC have the lowest reported rates of perceived corruption (33%) and the other Arab countries have higher rates only compared to high-incomes countries (Western Europe, Canada and USA: Column 2). There are generally small differences between perceived corruption in the public sector and private sector, although there is a tendency to see more corruption to the private sector. A notable exception is the GCC where the difference is in the opposite direction (and quite large).

The Gallup dataset included micro-data only for the Arab region. Besides comparing regional averages, the best we can do is to examine correlation between individual characteristics and values in the 22 Arab countries covered by Gallup. We focus here on three questions: perceived corruption in government, and in business; and respect for entrepreneurs and (Table 6). It appears that there is large variation in perceptions. Males, and the urban population, evaluate corruption more highly than females and rural populations. Richer people see more corruption in business, while poorer people as well as more educated people see more corruption in government. Richer and more educated individuals show more respect for entrepreneurs. The youth have less respect for entrepreneurs.

In sum, the data analyzed here suggests that perceptions of corruption may have had an important impact on social behavior, dividing the population in multiple ways, and generally, undermining the legitimacy of entrepreneurship and the private sector among large parts of the population (religious people, the youth, and the poor in particular).

5. Discussion and Concluding Remarks

When it comes to *economic culture* and its relation to Arab economic performance that is the focus of this paper, the literature can be grouped into three broad rubrics: "too much reliance on the state", "Islam is the problem", and "fear of income redistribution".

The first view maintains that the Arab region is not ready for a dynamic private sector because most of the population has been socialized in an era where state-led growth was the norm. As a result, it is alleged that people are not motivated to work hard or do not rely on

their own efforts to ensure a good life. This view underpins the belief by many economists that market reforms did not go far enough in the region out of the fear of a violent reaction by the street (Noland and Pack 2007). It is also related to notions of "rentier" mentality that apply to oil producing countries, where state patronage may have reduced the incentives of individuals for hard work and self-sustaining activities (Beblawi and Luciani 1987; Ross 2012).

The second more essentialist view regards Islam as inimical to private sector development, whether in relation to entrepreneurial values (especially in relation to private property), antimarket behavior (especially in relation to credit), or patriarchal practices that preclude wider participation of women in the labor market (Kuran 2004, 2012; Norris and Inglehart 2003).

The third view holds that the main problem lies in the leftist tendency of the population. Some authors maintain that a fear of income redistribution among economic elites creates political risk and reduce incentives to invest in long-term projects (Noland and Pack 2007). Political risk is also sometimes connected to the fear of change to an Islamist regime (Lust-Okar 2004).

The first hypothesis would suggest that citizens of Arab countries wish to have an interventionist state, expect to be hired in the public sector and, generally, are not comfortable with the principles of economic self-reliance and market competition. We have found that regional norms are in fact quite contrary to all these hypotheses, when compared to norms of countries at similar levels of development. We have also found that there are several important values that predispose Arabs to a market economy, such as their high work ethics, comfort with competition and the workings of markets as well as high economic motivation. We also found that younger and more educated Arabs prefer to work in the private sector. On the negative side, we found two values that are inimical to economic performance - low values for thrift and an opposition to female work outside the home. We have found little evidence of a rentier mentality in oil producing countries around the world, although Arab oil producers were found to be less pro-market, more motivated to spend, and less motivated to save than the rest of the Arab region.

The second hypothesis can also be dismissed. While we had not much to say about the past, the findings of this paper suggest that it is unlikely that the fear of income redistribution is holding back investment in recent years. The surveys suggest less desire for redistribution than in other regions of the world.

With respect to the third main issue ("is Islam the problem?"), our work has started to unbundle values held high in Arab countries vs. non-Arab Muslim-majority countries. Our results show that values in these two groups of countries intersect in some areas but deviate in others. They are similar with respect to high economic motivation, which are above those values of the ROW. There are domains of values where Arabs, but not Muslim-majority countries, are different from the ROW – more pro-market sentiments, belief in hard work, and lack of preference for income equality. There are areas where one group is above and the other below the global average – these are the values of thrift, and of respect for institutions. Finally, there are instances where more religious Arabs deviate from values in Muslim-majority countries, suggesting that Arab Islam holds in some cases values that are different from those held by African or Asian Islam. These results suggest that economic culture is not exclusively shaped by religious affiliation.

We have found little evidence to back that Islam might "be the problem". This was most evident when we compared countries. While the views on female labor is clearly a weakness

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¹⁸ This view was bolstered by the bread riots that followed the first attempts at reform in the early 1980s, and the rise of the Islamic opposition once leftist parties decayed.

shared by Arab and other Muslim countries, the Arab region can gain from sharing the values of non-Arab Muslim countries such as on thrift, or, when the time comes, respect for institutions. Moreover, there are important values in which the region differs from non-Arab Muslim countries that should help on economic development, such as being more pro-market and more inclined towards hard work.

Another way to approach the question of religion is to ask whether religiosity, a value held high in Arab countries, helps or hurts the cause of economic development. Here the results were more mixed -- religiosity actually helps in some ways (it increases the comfort with markets, improves work-ethics, and boosts confidence in state institutions) but not in others (more opposition to women working, less economic motivation, less respect for entrepreneurs). The net effect of religiosity on development is thus hard to evaluate, but clearly, religiosity cannot be described as an overly negative force when it comes to the economy.

At the end, our results point towards a fourth factor as being at the heart of the Arab malaise – the lack of trust in the state. Indeed, differences with the ROW and other Muslim-majority countries were most evident when it comes to trusting state institutions. There is a surplus among non-Arab Muslim countries with regards to trust in institutions, but a deficit in Arab countries. This suggests that institutions must be particularly non-trustable in Arab countries in order to elicit such strong feelings, in spite of religious injunctions, steeped in orthodoxy, not to oppose the state. We have also found that within the Arab region, there are important concerns about corruption in government and in the private sector, which must affect both trust in the state, and respect for entrepreneurs. Unlike culture, these constraints are manmade and can be changed by better policies. The emerging picture at the end, from this *tour d'horizon* of globally comparable opinion surveys, is one that does not support the view that the reasons behind the slow growth of the economy lies in some intrinsic anti-market economy values held by Arab population.

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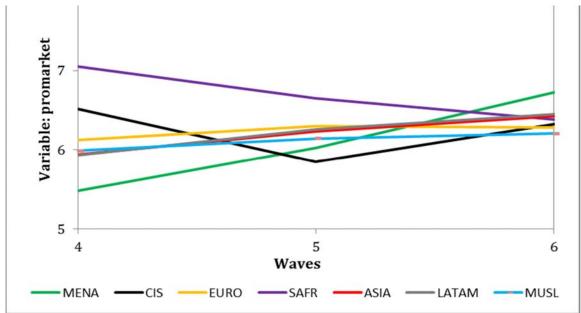
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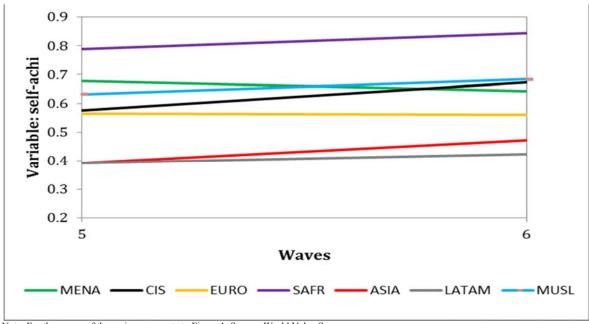
- Yates, Miranda and James Youniss (ed). 1998. Roots of Civic Identity: International Perspectives on Community Service and Activism in Youth.
- Weber, Max "The Protestant Ethic and The Spirit of Capitalism" (Penguin Books, 2002) translated by Peter Baehr and Gordon C. Wells

Figure 1: Pro-market Values over Time by Region (higher values indicate more comfort with markets and competition)



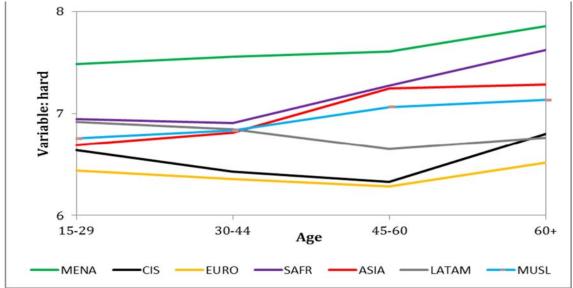
Source: WVS, waves 4 to 6. Note: MENA refers to the 12 Arab countries in the sample; CIS to the Commonwealth of Independents States; EURO to Europe; SAFR to Sub-Sahara Africa; ASIA to East and South Asia; LATAM to Latin America; MUSL to all Muslim-majority countries, excluding the Arab countries.

Figure 2: Economic Motivation by Region (Higher Values Indicated More Motivation)



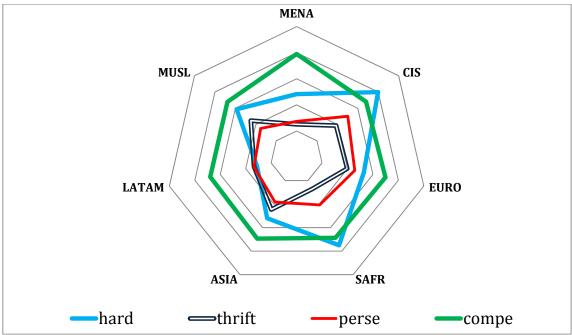
Note: For the names of the regions, see note to Figure 1. Source: World Value Survey.

Figure 3: Hard Work Brings Success by Region and Age (Higher Values Indicate Greater Belief in The Value Of Work)



Note: For the names of the regions, see note to Figure 1. Source: WVS, waves 5 and 6.

Figure 4: Capitalistic Values, Various Regions

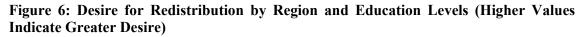


Notes: (1) For the names of the regions, see note to Figure 1; (2) Hard" stands for Hard Work; ""Perse" for Perseverance, and "comp" for Competition. Source: WVS, waves 5 and 6."

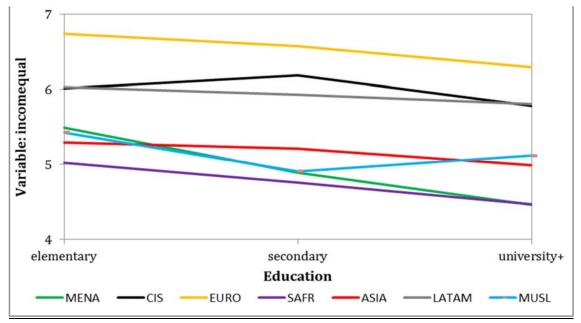
Place to work: Gov=0, Private Sector=1
.1 .2 .3 .4

Figure 5: Ratio of Respondents Who Prefer to Work in the Private Sector

Source: Gallup 2010



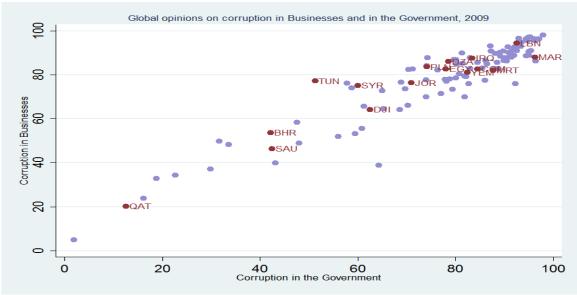
YEM BHR ARE EGY QAT IRQ KWT OMN TUN JOR SYR DZA PSE SAU LBN MAR SDN



Note: For the names of the regions, see note to Figure 1.

Source: WVS waves 5 and 6.

Figure 7: Corruption in Government and in Business



Source. Gallup, 2012

Opinions on Gender Differences in Various Parts of The World

Region	% of those who agree with statement: When jobs are scarce, men should have the priority					
	Female	Male	Average			
Middle East and North Africa	68	82	75			
South Asia	45	63	55			
East Asia and Pacific	42	48	45			
World	36	46	41			
Europe and Central Asia	40	45	42			
Latin America and the Caribbean	21	27	24			

Source: World Value Survey waves 5 and 6.

Perception of Corruption around the World

<u>-</u>	Corruption in government	Corruption in business
Eastern Europe	88.1	91.9
Southern Europe	84.5	87.7
Former Soviet Union	83.8	85.9
Arab Region excluding GCC	81.1	78.1
Asia	78.8	78.9
Latin America and the Caribbean	78.6	78.3
Sub-Saharan Africa	76.6	80.4
Arab Region	74.9	73.8
US and Canada	55.9	51.9
GCC	46.9	33.1
Rest of Europe	42.4	48.1

Source Gallup, 2012

Annex. Definition of Dependent Variables

- **1. Preference for Markets:** Higher value stands for higher preference for competition and market activities. Index of the average of 3 questions: "Private ownership of business and industry should be increased" *vs.* Government ownership of business and industry should be increased". (ii) "Competition is good. It stimulates people to work hard and develop new ideas *vs.* Competition is harmful. It brings out the worst in people". (iii) "People can only get rich at the expense of others" *vs.* Wealth can grow so there's enough for everyone". Source: World Value Survey.
- **2. Economic Motivations**: Higher value means higher desire for self-achievement. Index averages answers to 4 questions: (i) "It is important to this person to be rich; to have a lot of money and expensive things. (ii) "It is important to have a good time, to "spoil" oneself"." (iii) "Being very successful is important, to have people recognize one's achievements. (iv) "Adventure and taking risks are important, to have an exciting life". Source: World Value Survey.
- **3. Thrift**: Higher value stands higher preference for thrift. The index is constructed as an average of the following: Here is a list of qualities that children can be encouraged to learn at home. Do you consider the following to be especially important? (i) Thrift, saving money and things; (ii) Determination and perseverance". Source: World Value Survey.
- **4. Hard Work Brings Success:** Higher value means more belief in hard work. "In the long run, hard work usually brings a better life *vs.* Hard work doesn't generally bring success, it's more a matter of luck and connections". Source: World Value Survey.
- **5. Female job:** Higher value means more patriarchy. "Do you agree, disagree or neither agree nor disagree with the following statements? When jobs are scarce, men should have more right to a job than women." Source: World Value Survey.
- **6. Work in the public sector.** "At equal conditions, do you prefer to work in the public or in the private sector?" Source: Gallup
- **7. Income Equality:** Higher value means more preference for equality. Average of 2 questions: How would you place your views on this scale? "Incomes should be made more equal" *vs.* "We need larger income differences as incentives for individual effort". "Government should take more responsibility to ensure that everyone is provided for" *vs.* "People should take more responsibility to provide for themselves". Source: World Value Survey.
- **8.** Confidence in Institutions: Higher value means higher confidence levels. Average of 3 questions: "I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: The government; Parliament; The Civil service". Source: World Value Survey.
- **9. Corruption in government**. Is corruption widespread throughout the government or not? Source: Gallup
- **10. Corruption in business**. Is corruption widespread within businesses, or not? Source: Gallup
- **11. Respect for entrepreneurs**. How much respect do you have for entrepreneurs? Source: Gallup

Table 1: Summary Statistics (not standardized), World Value Survey, waves 5 and 6 Arab countries (13 countries with 18,243 observations)

	Mean	Std.Dev	Coeff. of Variation	Min	Max
Pro-market	6.69	1.64	25%	1	10
Economic motivation	6.39	2.01	31%	1	10
Thrift and perseverance	3.96	2.38	60%	1	10
Hard work brings success	7.48	2.90	39%	1	10
Female-job	7.92	3.34	42%	1	10
Income equality	4.81	3.07	64%	1	10
Confidence in institutions	5.20	2.70	52%	1	10
age	38.13	14.07	37%	15	99
education	2.68	1.03	38%	1	4
female	0.51	0.50	98%	0	1
religiosity	0.75	0.43	57%	0	1

Middle Income Countries (MICs: 37 middle-Income countries with 83,830 observations)

	Mean	Std.Dev	Coeff. of Variation	Min	Max
Pro-market	6.41	1.61	25%	1	10
Economic motivation	5.46	2.09	38%	1	10
Thrift and perseverance	5.08	2.63	52%	1	10
Hard work brings success	6.75	2.76	41%	1	10
Female-job	5.17	3.69	71%	1	10
Income equality	5.42	2.92	54%	1	10
Confidence in institutions	5.22	2.30	44%	1	10
age	42.26	16.70	40%	15	99
education	3.01	0.74	25%	1	4
female	0.52	0.50	96%	0	1
religiosity	0.35	0.48	137%	0	1

Notes: Arab countries include: Algeria, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Palestine, Qatar, Tunisia, Saudi Arabia, and Yemen. Middle Income countries (MIC) include: Albania, Angola, Azerbaijan, Argentina, Armenia, Brazil, Belize, Bulgaria, Belarus, China, Colombia, Ecuador, Georgia, Ghana, Guatemala, India, Indonesia, Iran, Kazakhstan, Kyrgyz, Macedonia, Malaysia, Mexico, Moldova, Nigeria, Pakistan, Peru, Philippines, Romania, Vietnam, South Africa, Thailand, Turkey, Ukraine, Uzbekistan, Venezuela, Zambia, Serbia.

Table 2: Regressions with a fixed Arab Effect

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pro-	Economic	Thrift	Hard-	Female	Income	Confidence
	Market	Motivation		work	job	Equality	Institution
Age	0.03*	-0.25***	0.07***	0.02	0.02	0.02*	0.01
Education	0.06***	-0.02	-0.02	0.01	-0.08***	-0.05***	-0.05**
Female	-0.03***	-0.09***	-0.01	-0.02***	-0.10***	0.02***	0.01
Religiosity	0.05***	0.02	-0.13***	0.07***	0.09***	-0.06***	-0.02
Income1	-0.02	-0.09***	0.00	0.00	0.04***	0.08***	-0.04***
Income2	-0.02	-0.08***	-0.00	-0.00	0.02*	0.08***	-0.03
Income3	-0.01	-0.07***	-0.00	-0.01	0.00	0.05***	-0.03**
lngdpc	-0.04	-0.11***	-0.10***	-0.09***	-0.14***	0.10***	-0.03
Arab country	0.05	0.14***	-0.10***	0.07*	0.20***	-0.10***	0.03
Wave 6	-0.05**	0.10***	0.02	-0.02	0.17***	0.07**	-0.01
w6*ARB	0.02	-0.05**	-0.02**	0.01	-0.01	0.07*	-0.08**
N	123803	123803	123803	123803	123803	123803	123803
countries	57	58	58	58	58	58	58
R^2	0.02	0.14	0.05	0.02	0.14	0.04	0.01
adj. R^2	0.01	0.14	0.05	0.02	0.14	0.04	0.01
F	11.74	65.82	20.83	6.439	53.52	17.85	2.969

Source: World Value Survey, waves 5 and 6. Notes. Ordinary least squares. Standardized beta coefficients, * p<0.10, *** p<0.05, *** p<0.010.

Table 3: Arab, Muslim-Majority, or Oil Country Fixed Effects

	(1) Pro- Market	(2) Economic Motivation	(3) Thrift	(4) Hard- work	(5) Female job	(6) Income Equality	(7) Confidence Institution
Ingdpc	-0.03	-0.13***	-0.10***	-0.07***	-0.12**	0.11***	-0.06
Arab Country	0.08**	0.06	-0.13***	0.09**	0.09*	-0.09**	-0.12**
Muslim Country	-0.01	0.06*	0.06**	0.02	0.20***	0.02	0.17***
Ingdpc	-0.04	-0.12***	-0.10***	-0.09***	-0.16***	0.10***	-0.04
Arab Country	0.04	0.13***	-0.12***	0.06	0.16**	-0.10***	0.02
Oil country	0.03	0.02	0.05*	0.04	0.10**	0.00	0.03
Ingdpc	-0.03	-0.13***	-0.10***	-0.08***	-0.13***	0.11***	-0.06
ARB	0.07**	0.06	-0.13***	0.08**	0.08	-0.09*	-0.12**
Muslim country	-0.02	0.06*	0.05*	0.00	0.18***	0.02	0.18***
Oil country	0.03	-0.00	0.03	0.04	0.06*	0.00	-0.02
N	121833	121833	121833	121833	121833	121833	121833

Notes: Ordinary least squares. Standardized beta coefficients, * p<0.10, ** p<0.05, *** p<0.010. Includes all variables from Table 2 (not shown)

Source: World Value Survey, waves 5 and 6.

Table 4: Regressions with Individual Arab Country Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pro-		Thrift	Thrift Hard-	Female	Income	Confidence
	Market	Motivation		work	job	Equality	Institution
Age	0.02	-0.25***	0.07***	0.02	0.02	0.02*	0.01
Education	0.06***	-0.03*	-0.01	0.00	-0.08***	-0.03**	-0.05**
Female	-0.03***	-0.09***	-0.01	-0.02***	-0.10***	0.02***	0.01
Religiosity	0.05**	0.02	-0.13***	0.06***	0.07***	-0.06***	-0.03
Income1	-0.02	-0.09***	0.00	-0.00	0.03***	0.08***	-0.05***
Income2	-0.02*	-0.09***	-0.00	-0.01	0.00	0.08***	-0.03*
Income3	-0.01	-0.07***	-0.00	-0.01	0.00	0.05***	-0.03**
InGDPcapita	-0.03	-0.15***	-0.10***	-0.08***	-0.14**	0.12***	-0.08
Jordan	0.00	0.10***	-0.05***	0.01**	0.11***	-0.05***	0.04***
Morocco	0.00	-0.02**	-0.03***	-0.01*	0.01	0.03***	-0.01
Egypt	0.07***	0.00	-0.07***	0.10***	0.16***	-0.01	-0.00
Lebanon	-0.01***	0.06***	-0.05***	-0.00	0.03***	-0.01***	-0.04***
Qatar	0.00	0.09***	-0.01	-0.01	0.10***	-0.06***	0.13***
Tunisia	0.02***	0.04***	-0.02***	0.02***	0.06***	-0.01	-0.07***
Libya	0.06***	0.04***	-0.04***	0.05***	0.09***	-0.05***	-0.05***
Yemen	0.05***	-0.03***	-0.03***	0.05***	0.04***	-0.00	-0.07***
Iraq	0.02***	0.04***	-0.02***	0.03***	0.05***	0.02***	-0.04***
Algeria	-0.00	0.04***	-0.02***	0.00	0.04***	-0.02***	-0.02***
Kuwait	0.01	0.08***	0.01	0.02***	0.08***	-0.04***	0.05***
Bahrain	-0.06***	0.08***	-0.04***	-0.05***	-0.00	-0.04***	0.06***
N	123803	123803	123803	123803	123803	123803	123803
R^2	0.02	0.16	0.05	0.04	0.13	0.04	0.04
adj. R^2	0.02	0.16	0.05	0.04	0.13	0.04	0.04

Source: World Value Survey, waves 5 and 6. Notes. Ordinary least squares. Standardized beta coefficients, * p<0.10, ** p<0.05, *** p<0.010.

Table 5: Regressions with Arab Specific Slope Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pro-	Economic	Thrift	Hard-	Female	Income	Confidence
	Market	Motivation		work	job	Equality	Institution
Age	0.03	-0.27***	0.07***	0.02	0.02	0.03**	-0.00
Education	0.07***	-0.06***	-0.02	0.00	-0.10***	-0.03	-0.06**
Female	-0.03***	-0.09***	-0.01	-0.02***	-0.09***	0.02***	0.01
Religiosity	0.04**	0.03	-0.13***	0.05***	0.07***	-0.06***	-0.02
Income1	-0.03**	-0.10***	0.01	-0.00	0.03***	0.08***	-0.05***
Income2	-0.03*	-0.09***	-0.01	-0.01	0.00	0.08***	-0.04*
Income3	-0.01	-0.07***	-0.00	-0.01	-0.00	0.06***	-0.04**
Ingdpcapita	-0.04	-0.11***	-0.10***	-0.09***	-0.15***	0.10***	-0.03
Arab country	0.00	-0.19***	-0.05	-0.04	-0.03	0.10	-0.19*
Wave6	-0.04**	0.10***	0.02	-0.02	0.17***	0.07**	-0.01
Wave6*Arab	0.01	-0.05**	-0.03**	0.01	-0.01	0.07*	-0.08**
Age*ARB	0.00	0.14***	-0.04**	0.03	0.03	-0.07**	0.08***
Education*ARB	-0.02	0.23***	0.01	0.04	0.14***	-0.13*	0.10
Female*ARB	0.00	0.01	-0.01**	-0.01	-0.02	-0.01*	0.01
Religiosity*ARB	0.06**	-0.07***	0.01	0.05*	0.06*	-0.01	0.02
incom1*ARB	0.03*	0.01	-0.02**	0.02	0.02**	-0.00	0.02
income2*ARB	0.02	0.02	0.00	0.01	0.04***	-0.01	0.03
income3*ARB	0.00	0.02	-0.01*	0.00	0.02**	-0.02**	0.02
N	123803	123803	123803	123803	123803	123803	123803
R^2	0.02	0.15	0.05	0.02	0.14	0.04	0.01
adj. R^2	0.02	0.15	0.05	0.02	0.14	0.04	0.01
F	10.16	59.55	23.21	12.73	171.5	39.16	6.514

Notes. Ordinary least squares. Standardized beta coefficients, * p < 0.10, ** p < 0.05, *** p < 0.010.

Source: World Value Survey, waves 5 and 6

Table 6: Corruption and Attitudes to Business: Gallup, Arab Countries Sample

Variables	Prefers to Work in the Private sector	Believes Businesses Corrupt	Believes Government Corrupt	Respects Entrepreneurs
Female	-0.212***	-0.0641**	-0.100**	0.103***
Age	-0.00763***	-0.000554	-0.000243	0.00374***
Urban	0.0312	0.153***	0.128***	-0.0178
Ln of income	0.0139**	0.0228***	-0.0177**	0.0110***
Employed	0.0980**	0.00916	0.0278	0.0174
Business owner	0.174***	-0.00625	-0.0356	0.295***
Religiosity	-0.232***	0.0413	0.101	-0.104***
Secondary (rel to primary)	0.133***	-0.0351	-0.0645	0.0747***
University (rel to primary)	0.229***	-0.0198	0.00980	0.223***
Constant	-2.488***	-1.224***	0.993***	1.521***
Observations	26,270	44,603	29,124	64,171

Source: Gallup, 2009-2012. OLS, 22 Arab countries. Includes wave fixed effects.