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**Doctoral Thesis**

**Essays on Islamic Law and  
Female Economic Status**

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# **Essays on Islamic Law and Female Economic Status**

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# Abstract

## Essays on Islamic Law and Female Economic Status

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This analysis examines whether Islam has direct relationship through Sharia law with Muslim women's work behaviors based on quantitative methodology. The study begins with a worldwide approach by using cross country analysis shows that lower degree of female development differs by the degree of Islamic legislation. Then, by using 2001 IPUMS individual survey data this paper highlights that if there is any type of Islamic legislation, strict Islamic legislation exerts the same pattern of lower female labor participation of Muslim majority countries in United Kingdom for Muslim females. Finally by examining the influence of Islamic conservatism on labor force participation decisions of women in Turkey by using Demographic and Health Survey dataset, this paper shows that conservatism derived from Islamic culture exerts the same pattern of lower female labor participation for younger generations who lives in the relatively conservative part of Turkey which is a secular Islam country.

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**Keywords:** female labor force participation, Sharia Law, Muslim majority societies, United Kingdom, regional conservatism, Turkey  
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# **Essays on Islamic Law and Female Economic Status**

## **1. Introduction**

In some countries, men's and women's roles are more interchangeable, but in many others, such as in Muslim societies, rigid gender roles determine the social rights, laws, resources and power of women. In the early 7th century, Islam granted women some protection that did not exist in many other societies at that time. However, women still cannot exercise some of their fundamental rights and face serious religion based inequalities in social life within the majority of Muslim countries and international women movements, projects of official bodies, and conflict zones with ongoing impact of Islamic State (known as ISIL or ISIS) have made the world realize that studies of women under Islamic law are still the most needed topic to examine further in modern world.

Until now many scholars have analyzed the topics of religion, gender inequality or women rights, however there is a less consensus about what it is related to Islam in economics literature. Prior research has mostly associated with focusing on Christian societies. Yet recently a growing body of literature documents that Islam has widespread effects on the economic and demographic behavior of individuals especially women. However it is not the purpose of this study to undertake a general review of women's status in Islam or the degree of religiosity of Muslim societies. Source of religiosity is also a topic of sociology not economics and this analysis has no intention to characterize the extent of religiosity and faith for any society. This paper simply probes overall levels of

labor status of Muslim women and suggests that the economic role and social development of Muslim women is heavily influenced by existence of strict Islamic laws. On the other hand, there are an estimated 1.7 billion Muslims amongst the world's population today and the reality of Muslim populations in Muslim majority countries and in the Western countries can be the topics of two different research field.

In spite of the difficulties in obtaining data with strict Muslim societies and the conceptual problems with Islamic law in non-Islam countries, this study is embarked on to doing a worldwide research with the most recent available data. I developed a new set of data on Islamic family law index focusing on the effect of Islam on family law. Adding this index into analysis shows that countries with higher scores on Islamic family law index tend to have lower female education enrollment, economic participation, and overall lower female development. In order to examine how individual level support for Islamic norms and traditional ideas affect support for Islamic legislation in Muslim societies, World Value Survey (WVS) is used and findings reported in this paper address, first time in all literature, some answers for level of Islam in family law legislation and female development in terms of economic participation, educational attainment and life expectancy.

The total number of Muslims in Europe in 2012 is estimated at 44 million people. Muslims are now a permanent part of Western societies and Islam is the second largest faith group in the United Kingdom; the total number of Muslims in 2011 is almost 2.71 million with 47% of them are UK-born. Despite the growing body of public and political debates, an indeterminate number of Sharia courts are currently working in the UK. Therefore, third chapter addresses issues on women's economic participation and Islam in the Western

world by focusing on Muslim diaspora in UK. I suggested that the economic role of Muslim women is also heavily influenced by Islamic laws and values in non-Muslim developed countries as well. It is proven that migrant women face a double battle; first to integrate in host country, and then to overcome the gender bias in the social life, yet I investigated whether Muslim females have to face not double but triple battle being immigrant, women and also Muslim in Western countries. The results of this chapter showed that Islam exerts a negative influence on women's labor force participation also in non-Muslim Western countries if any type of existence of Islamic legislation is in question or Muslim women who live close to active Sharia courts in UK are less likely to join the economic life.

After comparing Muslim majority countries with non-Muslim countries in a large scale cross country analysis followed by a study focusing on a unique case of UK for Muslim diaspora, in the fourth chapter I wanted to mention about Turkey which is a modern Muslim majority country with a unique democratic secular constitution first time among all Muslim majority countries. Turkish republic, introduced legalization of polygamy and the establishment of equality in divorce, and women's right to vote. Today, Turkish laws grant women many freedoms but traditional attitudes about women still prevail, particularly in Eastern regions and the expected economic benefits of women have remained low. This chapter assumes that the environment plays a major role in the decision-making process of women, using difference-in-difference framework and 'Demographic and Health Survey' data of Hacettepe University, I found that women from young birth cohorts in traditionally conservative areas are less likely participating labor force in Turkey. Urbanization has also been increasing its speed and women's labor force participation rates in urban areas



have been diminished dramatically and even though education has little impact on labor force participation in rural areas, migrant families experienced how important it is in urban areas since most of migrant women had to work in low paying jobs with no social security. Therefore it is natural to expect a rising trend for younger generations for educational and employment statistics. However, an entire generation has passed, which is sufficient time to give women the opportunity to be integrated into the urban labor market, women are becoming more educated; and fertility rates are declining yet, the participation of women in the labor force has seen a declining trend in Turkey. Today, Turkey has a sizable highly educated and economically active middle class population which enjoys the modernization process. However, there is a large group of uneducated women in the countryside who are still heavily under the influence of traditional values. That's why this chapter focuses on regional conservative differences instead of urban-rural specification and presents a new concept by showing that living in traditionally conservative areas of Turkey have a negative effect on younger generation regardless of education level.

The research is presented as follows. Section 2 by giving a brief description about what is Islamic Sharia law and why it matters for family law and women's social status uses cross country analysis approach and gender based development data and Islamic family law index along with micro level analysis by using World Value Survey results. Section 3 lays out the difference-in-difference approach focusing on the Muslim women in UK and shows that living close to active Sharia courts even in a non-Muslim western country has a negative effect on women's labor participation. Section 4 presents the regression results under regional conservatism for younger women in Turkey. Section 6 summarizes and suggests avenues for future research.



# **Family Law, Development and Economic Performance of Muslim Females: A Cross-National Study**

Gozde Gozlet<sup>1</sup>

## **Abstract**

This analysis examines whether Islam has direct relationship through Sharia law with Muslim women's social and work behaviors based on quantitative methodology. At first, I examine the extent to how Islamic law influence gender based development all around the world, then an Islamic family law data set has been used to show that countries with higher scores on Islamic family law tend to have lower female development. To examine which individual level factors caused the support to Islam related restrictive ideas, World Value Survey has been used at the final stage. This paper by using cross country analysis shows that lower degree of female development differs by the degree of Islamic legislation and individual decisions to support this lower status of females may deserve more attention than the country level variables.

Keywords: female labor force participation, family law, Sharia Law, development index, Muslim majority societies, Islamic legislation

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## **I. Introduction**

Religion is a prominent dimension of culture; and even though the social scientists believed that industrialization would lead to a gradual decrease in its influence, today overall religiosity is increasing. People live with insecure conditions tend to be mistrustful of rapid change, emphasizing the communal ties derived from religion (Norris& Inglehart, 2003). Many scholars have analyzed religion, however there is a less consensus about what it is related to Islam that matters for women or why and how it matters for the economic performance of entire country.

This paper suggests that the economic and social development of women in Muslim majority countries is heavily influenced by Islamic family laws. Why do some countries protect women's rights while others do not? Does Islamic law have the potential to influence economic performance of entire female population in a country? This study analyzes the effects of Islamic law provisions on development of Muslim women to provide some answers to these questions. However it is not the purpose of this study to undertake a general review of women's status in Islam or the degree of religiosity or faith for any society. Even though gender equality is one of the fundamental human rights providing equal opportunities, it is not the main discussion of this analysis either. This paper simply probes overall levels of national developments for females and males separately.

In spite of the difficulties in obtaining data with Muslim societies, this study is embarked on to doing cross-country analysis by using the most recent available data. The same idea with three dimension human development index of UN is adopted with health, education, and economics for each sex separately. These female and male development indexes exhibit a general

picture about the development yet do not answer all questions that this paper is seeking for. Then, a new set of data on Islamic family law index is calculated by adopting Mala Htun and Laurel Weldon's family law index. Adding this index into analysis shows that countries with higher scores on Islamic family law index tend to have lower female education enrollment and economic participation. In order to examine how individual level support for Islamic norms and traditional ideas affect support for Islamic legislation, World Value Survey is used as the final approach of the analysis. The results show that single, higher educated and employed people are less supportive to the Islam related restrictive ideas for women.

The findings reported in this paper address, first time in all literature, some answers for level of Islam in family law legislation and female development. The research is presented as follows. Section 2 discusses the mainstream literature on the female role in economics and social life under religious legislation. Section 3 gives a brief description about what is Islamic Sharia law and why it matters for family law. Section 4 lays out the cross country analysis approach, presents the gender based development data and Islamic family law index along with micro level analysis by using World Value Survey. Section 5 presents the regression results. Section 6 summarizes and suggests avenues for future research.

## **II. Literature Review**

According to Morrison and Jutting (2005), the economic role of women is affected by three factors; social institutions, women's access to resources, and the level of development of the country. Social institutions as religion and law can be the driving force for the public opinion, affecting the

access the resources and the economic development of an entire country. The neoclassical approach holds that gender inequalities caused by these social norms are likely to decline as country develops. Using the World Values Survey data over 80 countries, Norris and Inglehart (2004) present the empirical evidence that trending away from religiosity was generally true for advanced industrial societies, but we may not say the same for developing countries. It was obvious that the economic growth alone was not enough to solve all inequalities against women. Kuwait, Saudi Arabia and Qatar, for example, are as rich as Sweden or Norway in per capita GDP, but women in these countries are usually restricted whereas conditions for women are more favorable in some poorer countries such as Ireland and Estonia (Forsythe, Korzeniewicz and Durrant).

By the end of the 1980s, some scholars have analyzed the variation in women's rights in restrictive family law (Moghadam 2003; Musawah 2009), but little research has attempted a global approach for religion especially for Islam. Later, at the end of the century many other scholars have emphasized the role that religion plays in family law (Moghadam 2009; Razavi and Jenichen 2010). Some scholars working with broad cross-national perspective focused on all religions together or connected degree of religiosity of a society to gender inequality, state or just the law (Alexander and Welzel 2009; Cherif 2010, Donno and Russett 2004).

In 1990s, considerable human rights literature has begun to focus only on Muslim societies. Many scholars have studied democratization in terms of human rights across the Muslim countries (Moaddel, 2006; Tessler and Altinoglu, 2004). They have found that democratization is deeply related with the cultural background and political stability of a country. As Inglehart and

Norris (2003) argue that the core clash between the Islamic world and the Western world centers on issues concerning gender equality rather than democratic governance. Syed, Ozbilgin, Torunoglu and Ali (2009) examined the status of gender equality at the interface of religious ideologies in economic environment only in two Muslim majority countries, Turkey as a secular state and Pakistan as a Islamic republic. They have found that women's participation in technical and professional jobs is low in both countries regardless of their democratic or secular statements: 26% in Pakistan and 30% in Turkey.

Majority of scholars agree that education can change women's behaviors and their preferences ranging from fertility to labor decisions (Cannonier and Mocan 2012, Lavy and Zablotsky 2011, Heath and Jayachandran, 2016). Especially in Muslim majority countries, to avoid early fertility which may end up with maternal mortality, female education may be the key element to break the vicious cycle of society's religious traditions for women. Other studies show that when women have an independent source of income, they tend to gain more influence within the family (Iverson and Rosenbluth 2006).

Despite all different approaches it can be concluded as; traditions, religion, and law have huge influence on female education and labor force participation in developing countries. By Norris and Inglehart 2004, it is assumed that culture matters but it remains unclear how much it matters as compared to over all levels of social development and legal structures; and in this paper, I will try to find some empirical evidence on this debate.

### **III. Family Law, Sharia, and Its Regulations**

The family law exists in many forms, such as civil code in Europe,

common law of the United States, or Islamic law throughout the Middle East and South Asia. Such laws contain the rules of marriage and divorce; respective rights, and capacities of spouses; marital property; child custody; and inheritance arrangements.

Sharia is the general term used for entire Islamic legal system. It is derived from in order of priority, Quran, Sunnah (decisions and sayings of Prophet Muhammad, peace be upon him), reasoning by Islamic scholars from principles by Quran and Sunnah; and lastly, the consensus of the legal community. According to Islam, every word of Quran is perceived as divine and cannot be challenged. Neither Prophet Muhammad nor any other human being had any influence over the divine book. However, Quran is not a legal code; out of 6237 of its verses, only 190 of them contain legal provisions and the rest covers the religious duties and obligations. By tenth century A.D., the legal community of Islam concluded that it is not possible to have any further improvement of divine law, due to respect to early scholars. This event, known as "the closing of the door of '*ijtihad*' (independent reasoning)," froze the divine law at that point. Since then, Sharia judges are forbidden to change, modify, or extend the law (Coulson, 1978).

Under the Sharia law, a wife must obey their husbands and she needs her husband's permission to work, travel and to leave the house. If she is not married then the father or the eldest son of the family holds the parental power over minor children and all females living in that household. A son inherits twice as much as a daughter does, and a widower has far more rights to the deceased spouse's possessions than does a widow (Sura 4:7–11, 12). In courts male witnesses count twice as much as female witnesses which is allowed only in property cases. Sharia law states that a man can have up to four wives without



any limitation on the other hand a non-Muslim man who marries a Muslim woman can be punishable by death. A man can unilaterally divorce his wife however a woman needs her husband's consent or the court's approval about if he is insane or he fails to maintain her, deserts her, or treats her cruelly.

Today, only few countries in the world are ruled by only the Islamic law. Aayesha Rafiq introduces three groups: in the first, Islam is legally the State religion and Sharia is usually given a major place in legislation such as Bahrain, Egypt, Morocco, Saudi Arabia, Iran and Afghanistan. In the second group Islam is not the official religion but the personal law for Muslims is generally drawn from Sharia such as Indonesia and Nigeria. In the last group there is no legally recognized religion and no Islam based law such as Kazakhstan, Turkey and Albania.

## **IV. Data and Estimation Methods; Quantifying Islam**

The analysis is based on quantitative methodology and proceeds as three approaches. The first set of analysis examines whether the pattern of gender based indexes differ between Islamic law. The second approach uses an Islamic family law data set which is specifically estimated for this study while the final set uses World Value Survey to examine the effects of individual level factors.

### **IV.1 Development Index**

The development indexes measure gender inequalities in achievement in three basic dimensions of human development: health, education, and economics. Female and Male Development Indexes are the geometric mean of

normalizes indexes of these three dimensions.

[Figure 1 Here]

[Figure 2 Here]

The country groups are classified according to the principles of Aayesha Rafiq: the first group is named as ‘Sharia’ and the second group as ‘Sharia Personal Law’, then the third one as ‘No Sharia- Islam’ and lastly the fourth group is named as ‘No Islam’ (Appendix Table.A1). Figure (1) and (2) show the difference of Female and Male Development index under Islam related country groups.

To be included, a country must have data available for a minimum of 4 indicators out of the 8 and nearly 160 countries were ultimately covered in here. Missing data is marked on each relevant Country Profile in Appendix, Table.A4. It can be said that the analysis here uses the entire universe of cases, instead of a sample from a population. This means any difference found here, are real differences. The following variables make up the development index data sets:

Keeping girls at home after puberty is typical for Muslim countries. Public activities are easily linked with dishonored behavior and decreases marriage chances. Even without any suspicious act, continued education of women after their teens will still mean a delay in marriage and birth. Education Index is calculated with mean years of schooling, adult literacy, net primary, net secondary and gross tertiary enrollment rates. First minimum and maximum values are set according to Human Development Index’s standardization. Second, dimension indexes are calculated for each indicator separately then the arithmetic mean of the five resulting indexes is taken. For both sexes, the index

is calculated separately (Appendix Table.A2).

The economic role of women is very difficult to measure so labor force participation rate and the estimated earned income are used together. Estimated earned income and labor force participation rate for males and females are transformed into dimension indexes, according to UN's defined minimum and maximum values. Then, the arithmetic mean of the two resulting indexes is taken.

According to the UNDP, the life-expectancy ratio at birth primarily measures differences in the access to health services over lifetime of an individual. Some scholars used total fertility rate and the percentage of women's access to birth control to analyze women's status (Morrison and Jutting). The comparison of female and male has been intended in this analysis that's why only life expectancy ratio is used for health index. By using defined minimum and maximum values according to UN, dimension indexes are calculated. Since there is only one variable, the calculated dimension index automatically becomes the final health index. The descriptive statistics are summarized in Table (1) and Table (2).

[Table 1 Here]

[Table 2 Here]

First regressions for gender related development indexes are run to obtain correlations to understand how estimated gender based indexes co-varies with country level explanatory variables. To evaluate the cross national relationships, I first calculated the model as follows:

$$Y_i = \delta_1 + \delta_2 law + \beta_1 lgdppercap + \beta_2 politicalstability + \beta_3 lgpop + \beta_4 urban + \beta_5 region + u_i$$

where  $i=1,2,...,I$  stands for the country, *lgdppercap* is the log of GDP per capita, *urban* is the urbanization rate as a percentage of total population, *politicalstability* is the composite index of political stability indicators from World Bank, *lgpop* is the share of the log population in million, *law* is a dummy variable for the presence/level of Sharia law, *region* is a fixed effect for region which are classified by World Bank, and  $u_i$  is the idiosyncratic error term that represents unobserved factors that affect  $Y_i$ . The model with each of the individual components of FDI and MDI are all run as dependent variable to evaluate whether one of the components were driving the larger relationship between indexes and country level variables on the basis of religious legislation.

#### **IV.2 Islamic Family Law Index**

In order to examine how countries' Sharia implementations affect development of females, the new data set of Islam and family law provisions are used. Islamic Family Law Index is an adaptation from Mala Htun and S. Laurel Weldon's 'Religious Power, the State, Women's Right and Family Law', which was also adapted from the Jonathan Fox's Religion and State database.

Since this study is essentially focusing on female development under Sharia law, Htun & Weldon's index is modified by excluding five elements that are related to both men and women and including two new variables, Polygamy and Testimony. In total it assesses formal legal equality in ten areas and coded in dichotomy with 1 = Yes, 0 = No. Unlike Htun & Weldon, only Islam related limitations are taken into account. The countries that comprise this data set are

the same ones from development index analysis to show some connected outcomes. The minimum score indicates that a country's family laws are free from Islamic Law while the maximum score means that a country discriminates women. Htun & Weldon's Family Law Indicators Chronbach's alpha is .91, and the indicators are similar to theirs, it is simply assumed that the sets of items in this study also have relatively high internal consistency. Each element of the Islamic Family Law Index is weighed equally because of simplicity and transparency. (Appendix Table.A5 and Table.A6)

***Islamic Family Law Index Indicators***

- Inheritance
- Spousal rights and duties
- Guardianship
- Right to work
- Minimum marriage age
- Divorce
- Custody after divorce
- Property after divorce
- Polygamy
- Testimony

[Table 3 Here]

Table (3) presents a comparison between Sharia law based country groups on Islamic Family Law Index and its components while Figure (3) shows the difference of Islamic Family Law Index among country groups. Some

components such as Inheritance, Guardianship or Property after divorce, they are relatively higher while Divorce and Minimum age of marriage are low for every country group. However, as expected, Sharia group has the highest Islamic family law index points and it is getting lower as the effect of Sharia is lessened for each group.

[Figure 3 Here]

$$Y_i = \delta_1 + \delta_2 FLI + \beta_1 lgdppercap + \beta_2 politicalstability + \beta_3 lgpoppop + \beta_4 urban + u_i$$

The model for the second approach of the analysis is estimated as similar with the previous one but the Islamic law dummies and region dummies are not used to keep the Islamic law effect only on Islamic Family Law Index. Similarly with the previous analysis, regressions for gender related development indexes has run first as dependent variable later for each of the individual components of indexes to evaluate whether one of the components were driving the larger relationship. Lastly, in the second part of Islamic Family Law analysis, instead of Islamic family law index, the index components are added into the model separately as dummy variable to evaluate the direct relationship between the development indexes and the law in question.

### **IV.3 World Value Survey and Some Further Comments**

Inglehart and Norris, 2003 argued that where traditional values prevail, women are not only limited by society, but also choose to limit themselves. Then it is natural to ask what individual factors explain support for gender

inequality under Sharia? In order to examine, World Values Survey is used which evaluates attitudes, beliefs and their effects on social lives across the world.

The sixth wave of the WVS is analyzed which was conducted between 2010 and 2014. All countries available in the Wave 6 were included which is in total 59 (more information <http://www.worldvaluessurvey.org>). The total number of respondents surveyed was 68,166, 35,643 of them were female, and 32,523 were male. The dependent variables are measured in dichotomy by the questions which are related with the individual opinions for economic activity, education (Appendix Table A7). The individual variables age, income, education, and employment status have been used as independent variables. Age square is also added to model the effect a differing ages, rather than assuming the effect is linear for all ages.

$$Y_i = \delta_1 + \delta_2 law + \beta_1 age + \beta_2 age^2 + \beta_3 marital + \beta_4 edu + \beta_5 emp + \beta_6 income + u_i$$

Level of education, *edu* is an indicator of socioeconomic status that was measured as a dummy variable. Income level, *income*, and employment status, *emp*, which are proxy for resources are also measured as dummy variables. To test whether the effects of marital status, *marital*, on views of gender role differ, marital status is also added as dummy variable and the analysis has been run separately for males and females (Appendix, World Value Survey).

## V. Estimation Results

In order to facilitate a review of all findings, results will be discusses in

the following order; (a) cross-sectional patterns in women's and men's development based on country groups categorized by Sharia law imposition, (b) examining effects of Islamic family law over development, and (c) finally individual level factors is analyzed by using survey results from WVS.

### **V.1 Comparing Female and Male Development- Cross Country Analysis**

The model is run for female development index first and the results showing statistical significance at the .001 level for *law* dummies Sharia and NoSharia\_Islam whereas .005 level for Sharia\_PersonalLaw with the negative parameter estimates. It can be said that strict Muslim countries are more likely to show lower levels of development for women. Also *lgdppercap*, *politicalstability*, and *lgpop* were statistically significant at the .001 level of significance for female development all with positive parameters. Middle East& North Africa, South Asia and Sub-Saharan Africa regions show statistical significance with negative parameter estimates. On the other hand, male development index results give only meaningful result for *lgdppercap*, *politicalstability*, and *lgpop* with positive parameter variables. The results show that under the Islamic legislation, women are more likely to show lower development regardless of the region. While GDP, urbanization and political stability have positive effects on both sexes, females from Middle East& North Africa, South Asia and Sub-Saharan Africa have relatively lower development levels than females from the rest of the world.

Then, model has run with each of the three dimensions of the FDI and MDI as dependent variable to evaluate whether one of them was driving larger relationship between development and degree of Sharia law legislation. First of all strong statistical relationship is found between the Islamic legal form and



both women's and men's education index with negative parameters. While economics index shows statistical significance at .001 for women in Sharia law category, only .01 has found for male results in Sharia\_PersonalLaw group (Table (4) and (5)).

[Table 4 Here]

[Table 5 Here]

Even though there is a strong tradition of women's activity in agriculture in Africa and Southeast Asia, female economics index gives significance in region level for only Middle East& North Africa group at .005 and for Latin America at .01 with negative sign which means women from those areas have significantly lower levels of economic development than the rest of the world. Any kind of employment mean bigger chance to access to better health and education resources for women, but working in family business or on agricultural field usually are not included in national statistics even today in most of the countries. This means we need a closer look into index indicators separately. That's why as the final stage of this data set, the model is run for individual data indicators. The relevance of additional indicators is assessed in the subsequent models presented in Table (6) and (7).

[Table 6 Here]

[Table 7 Here]

Among female education index indicators, mean years of schooling is statistically significant for all law groups. Adult literacy rate, secondary

enrolment and tertiary enrollment variables show some statistical significance for different groups with the negative parameters at the different level of significance. However labor force participation shows a larger and more explanatory relationship than estimated income and education indicators for religions based country groups. The significance is at the level .001 for Sharia and Sharia Personal Law groups and all coefficients are negative. It means being employed is the main problem for females in ‘most’ Muslim countries rather than the income inequality. While female index parameters are negative, economics index indicators of males are positive and statistically significant.

In short, the cross-sectional model for this data set suggests that the level of Sharia law legislation shows significance in shaping education and economics dimensions for female and such relationship is linear and negative. The comparison is also supporting the argument about unequal treatment between men and women by Sharia. However all these results show similar findings with the literature reviewed earlier. It does not evaluate how Sharia ‘legislation’ predicts the relationship between development and economic performance of women.

In 1978, Beck and Keddie argued that among Muslim societies, those that are the ‘most’ Muslim, in the sense of enforcing traditional restrictions on women, will have the lowest rated of female education and employment. The data provided supporting results with their argument which means not so many things has changed in those countries for females since 1970s.

## **V.2 Assessing Islamic Family Law Index**

A new independent variable, Islamic family law index, is calculated to examine the characteristics of Sharia law for each country. The ultimate interest

is in tracing changes in female development linked to Islamic family law through to changes in educational and economic development. The same model with the previous analysis is used except law dummies. The analysis reveals considerable support for hypothesis regarding variation in degree of Sharia in family law. Despite the limitations accessing constitution or family law documents, the results are still relevant and important. Coefficients represent the average effect of Islamic family law index on the each development index and as Figure (4) and (5) show countries with higher scores on Islamic family law index tend to have lower degree of development for females.

[Figure 4 Here]

All of the coefficients for female indexes are negative and showing statistical significance at the .001 level for female development and education index whereas, .005 level for economics index and .01 for health index (Table (8)). Family law classified as strict Sharia legislation is more likely to have negative effect on levels of development for women regardless of the official religion of the country. On the other hand, only economics and education indexes of males give statistical significance at the .001 level. While female economics index coefficient is negative, male index coefficient is positive and even though both education indexes estimate negative coefficients with the same statistical significance, the female education index parameter is lower than the male variable. These results support the argument that the Islamic family law supports women less than it does for men on educational attainment and economic activities.

[Figure 5 Here]

[Table 8 Here]

Later, the model is run for each data indicator that used to calculate index dimensions. The relevance of additional indicators is assessed in the subsequent models presented in Table (9). Among female index indicators, except log of estimated earned income (GNI), all of the coefficients show statistical significance at the level .001. Similarly, male index indicators also show significance except primary enrollment rate but while male coefficient is positive, female parameter is negative which proves the different Islamic law effect on economic activities for women and men. Especially labor force participation shows a larger relationship than the rest of the indicators for both sexes. In case of criticisms about having Islamic Family Law Index for non-Muslim countries, the same regression has been run for a sample that narrowed down only Islam countries. The results are similar with the global sample analysis and are also presented in Appendix C.

[Table 9 Here]

At the third stage of analysis for Islamic family law index, the Islamic family law index indicators are used individually to examine the each law effect deeper. The results of Islamic family law indicators are presented in Table (10) and (11). The results showing statistical significance at the level .001 for all law index indicators except *minimum age of marriage*. While female education index shows statistical significance at the level .001 for all ten indicators, economics index shows at the level .005 for *inheritance*, *guardianship*, *divorce*,

*property after divorce*, and *polygamy*. On the other hand, male development and health indexes indicate no statistical significance for any of the indicator yet all coefficients for male economics index are positive and statistically significant.

[Table 10 Here]

[Table 11 Here]

### **V.3 Predicting Support for Gender Equality**

Table (12) presents summary statistics on social opinions about role of women. In terms of similarities, male respondents overwhelmingly considered their role over women in terms of economic and social activities. Whether a country is Muslim or not, men always agreed with passive role of women but when the country is enforcing the Islamic restrictions more strictly, women also agreed with passive role of women at higher rates. Another interesting similarity is that agreement with necessity of ‘university education for only boys’ is lower than other questions. This means that higher education for females are no longer a taboo even in strict Sharia countries. However as expected, majority of people whether male or female (almost 80%) believed that women are supposed stay at home without any economic activity in the ‘most’ strict Muslim societies whereas this rate is around 50% for non-Muslim countries.

[Table 12 Here]

For the regression results, on the Sharia based country groups all question dummies show statistical significance at the level .001 with positive

coefficients which supports the idea that compared with the non-Muslim countries, in Muslim societies, the effect of gender inequality for division of social roles are deeper for both sexes (Table (13) and (14))

[Table 13 Here]

For Question 1, ‘when jobs are scarce, men should have more right to a job than women’ single and divorced female coefficients show statistical significance at the level .001 with negative parameters. Similarly, when the level of education is getting higher females less likely believe this statement than females with no education. Regardless of full time or part time, being employment is also significant for females. For Question 2, ‘when mother works for pay, the children suffer’ both age and age square coefficients show statistical significance at the level .001, positive for age and negative for age square. This means as people get older the effect of age is lessened, in our case the support for this argument from older females is getting lower. Single and divorced coefficients also show statistical significance, with negative parameters which means single and divorced females are less likely to agree with this general role of women and her decision of working outside. Females living in low income level are also more supportive to this inequality compared with higher income level groups.

For third question dummy ‘A university education is more important for a boy than for a girl’, coefficients show statistical significance at the level .001 for single and .005 for the divorce group with negative parameters. The education dummy coefficients support the argument similar to previous two regressions. Unemployed group also shows significance whereas employed

group shows no significant relation. Low income level coefficient is significant similar to question 2 which means females with lower income believe that university education is more important and necessary for boys. For Question 4, ‘men make better business than women do’ all but two coefficients show statistical significance at the level .001. The model presented a similar picture for all four question dummies for female respondents; single or divorced people are less supportive the social inequality between men and women, or higher education and low income level have a positive effect on females on deciding their place in economic activities.

[Table 14 Here]

Norris and Inglehart (2003) stated that men are slightly more conservative than women, clearest among Muslims, those with a university education, and the under thirty age group. The results of male respondents are also supporting this statement by showing statistical significance with positive coefficients (Table (14)).

For Question 1, male results show statistical significance for all coefficients except unemployed category. Single and divorced males are more likely against to support inequality against females for economic activity. Similar pattern can be seen for level of education as men with higher education are getting less supportive to this argument whereas being employed is also significant for males with negative coefficient. For Question 2, divorced males are less likely to support lower status of women in family and society than married and single groups. The coefficients of education level show similar results with previous regression on the other hand unemployed male

respondents are most likely to support for passive role of women.

For third question dummy of male respondents, coefficients show statistical significance at the level .001 for single, primary education, secondary education, university education and unemployed groups. Single, unemployed or males with lower income believe that university education is more necessary for boys. For Question 4, similar to female results, all coefficient show statistical significance, except unemployed group (Table (13)).

## **VI. Concluding Remarks**

Usually the gender equality related literature touches mainly social norms, yet this study emphasizes specifically the role of Islam on family law affecting the female development and social position. Three important results emerge.

First, the cross-sectional analysis results suggest that the level of Islamic law legislation shows significance in shaping education and economics dimensions for females. Also, depending on the region and political environment, Islamic countries from the same denomination may behave differently such as Afghanistan and Turkmenistan or Algeria and Tunisia. While cross-county regressions can highlight some factors that are statistically correlated with Islam related legislation, a better understanding of dynamics and the degree of the Islamic legislation at the country level is needed and that is why a new data set; Islamic family law index is coded.

Second, while Htun and Weldon stated religious is important to understanding sex discrimination in family law for all societies, in this paper, the key factor associated with unequal family law is not any other religion but Islam in Muslim majority countries. Islamic family law index is modified to demonstrate position of woman in society and it assesses legal equality in ten



areas to indicate whether or not the each element disadvantages women according to Islam law. The family law classified as strict Sharia legislation is more likely to have negative effect on levels of development for women regardless of the official religion of the country. The results support the argument that when Islamic family law legislation are fused, especially in highly devout Muslim societies, it is more difficult for females to access fundamental rights and resources than males. The regression results lend support to the argument that strict Islamic family law is a hurdle to overcome in order to improve the status of women especially in educational and economic involvement.

Third, according to the hypothesis that support for Islam influenced family laws might vary with the effects of individual variables which are shaped by social norms and traditions over centuries. Then the socioeconomic individual variables are checked by using questionnaire from World Value Survey. The regression coefficients for males and females almost for each question dummy presented that single and divorced people are less supportive to the inequality between men and women, higher education has a positive effect on both sexes when deciding the place of women in society, and men are decisively believe that it is enough for women staying at home, and raising children without any economic participation. In summary; 1) in the Muslim societies, respondents were overwhelmingly supportive to bigger roles for men in society and the more a country's legislation is Islam base, the more respondents agree with gender inequality in economic activities; 2) non-Muslim or not all populations had attitudes that are supportive for higher education of males and also females; 3) yet regardless of the degree Islamic legislation, majority of respondent agreed with sentiments that support some aspect of gender inequality in

economic life. Despite the final statement of Htun and Weldon; it is the state, not the religion, thwarts advances in women's rights; yet my third approach results showed that a social and individual framework hinders female development because of the traditional Islam effect and the socioeconomic positions of the population. In other words not only states but also people support, believe and even defend some of the inequalities in family law legislation. Surprisingly, serious amount of females in Muslim majority societies agree with the idea of 'lower status and labor participation for women'.

This paper's findings simply suggest two broader conclusions relevant to female and overall social development. One is that strengthening the Islamic legislation on family law can reduce female educational attainment and economic participation in Muslim majority countries. Although some scholars have already showed similar results on this, this paper takes these topics one step further, and indicated that lower degree of female development differs by the degree of Islamic legislation of that country. The other one is that individual decisions to support of traditional gender division and lower status of females may deserve more attention than the country level variables. Countries which are now experiencing rapid increase in wealth owing to the exploitation of oil proved that there is something more effective than just GDP per capita to change the status of women in Muslim majority societies. The key to further advanced research in this area lies in better understanding the ways and the context of these social attitudes and the state's decisions of Islamic family law legislations in Muslim majority countries.

## Appendix

### A. Data

**Table.A1 Country Groups Categorized by Islamic Law**

<i>Law</i>	<i>Country</i>
<b><i>Sharia</i></b>	<u>Afghanistan</u> , <u>Iran</u> , <u>Iraq</u> , <u>Mauritania</u> , <u>Pakistan</u> , <u>Saudi Arabia</u> , <u>Sudan</u> , <u>Yemen</u>
<b><i>Sharia-Personal Law</i></b>	<u>Algeria</u> , <u>Bahrain</u> , <u>Bangladesh</u> , <u>Brunei</u> , <u>Comoros</u> , <u>Djibouti</u> , <u>Egypt</u> , <u>Gambia</u> , <u>Indonesia</u> , <u>Jordan</u> , <u>Kuwait</u> , <u>Lebanon</u> , <u>Libya</u> , <u>Maldives</u> , <u>Mauritius</u> , <u>Morocco</u> , <u>Nigeria</u> , <u>Oman</u> , <u>Palestine</u> , <u>Philippines</u> , <u>Qatar</u> , <u>Syria</u> , <u>United Arab Emirates</u> ,
<b><i>No Sharia-Islam</i></b>	<u>Albania</u> , <u>Azerbaijan</u> , <u>Bosnia-Herzegovina</u> , <u>Burkina Faso</u> , <u>Chad</u> , <u>Guinea</u> , <u>Kazakhstan</u> , <u>Kyrgyzstan</u> , <u>Mali</u> , <u>Niger</u> , <u>Senegal</u> , <u>Sierra Leone</u> , <u>Tajikistan</u> , <u>Tunisia</u> , <u>Turkey</u> , <u>Uzbekistan</u>
<b><i>No Islam</i></b>	<u>Angola</u> , <u>Argentina</u> , <u>Armenia</u> , <u>Australia</u> , <u>Barbados</u> , <u>Belarus</u> , <u>Belgium</u> , <u>Belize</u> , <u>Benin</u> , <u>Bhutan</u> , <u>Bolivia</u> , <u>Botswana</u> , <u>Brazil</u> , <u>Bulgaria</u> , <u>Burma (Myanmar)</u> , <u>Burundi</u> , <u>Cambodia</u> , <u>Cameroon</u> , <u>Canada</u> , <u>Cape Verde</u> , <u>Central African Republic</u> , <u>Chile</u> , <u>China</u> , <u>Colombia</u> , <u>Congo</u> , <u>Costa Rica</u> , <u>Croatia</u> , <u>Cuba</u> , <u>Cyprus</u> , <u>Democratic Republic of Congo</u> , <u>Denmark</u> , <u>Dominican Republic</u> , <u>Ecuador</u> , <u>El Salvador</u> , <u>Equatorial Guinea</u> , <u>Eritrea</u> , <u>Estonia</u> , <u>Ethiopia</u> , <u>Fiji</u> ,

	<u>Finland</u> , <u>France</u> , <u>Georgia</u> , <u>Ghana</u> , <u>Greece</u> , <u>Guatemala</u> , <u>Guyana</u> , <u>Honduras</u> , <u>Hong Kong</u> , <u>Hungary</u> , <u>Iceland</u> , <u>India</u> , <u>Ireland</u> , <u>Israel</u> , <u>Italy</u> , <u>Ivory</u> <u>Coast</u> , <u>Jamaica</u> , <u>Japan</u> , <u>Kenya</u> , <u>Laos</u> , <u>Latvia</u> , <u>Lesotho</u> , <u>Liberia</u> , <u>Lithuania</u> , <u>Luxembourg</u> , <u>Macedonia</u> , <u>Madagascar</u> , <u>Malawi</u> , <u>Malta</u> , <u>Mexico</u> , <u>Moldova</u> , <u>Mongolia</u> , <u>Montenegro</u> , <u>Mozambique</u> , <u>Namibia</u> , <u>Nepal</u> , <u>Netherlands</u> , <u>New Zealand</u> , <u>Nicaragua</u> , <u>Norway</u> , <u>Panama</u> , <u>Papua New Guinea</u> , <u>Paraguay</u> , <u>Peru</u> , <u>Poland</u> , <u>Portugal</u> , <u>Romania</u> , <u>Russia</u> , <u>Rwanda</u> , <u>St. Lucia</u> , <u>Samoa</u> , <u>São Tomé and Príncipe</u> , <u>Serbia</u> , <u>Slovenia</u> , <u>South Africa</u> , <u>South Korea</u> , <u>Spain</u> , <u>Sri Lanka</u> , <u>Suriname</u> , <u>Swaziland</u> , <u>Sweden</u> , <u>Switzerland</u> , <u>Tanzania</u> , <u>Thailand</u> , <u>Timor-Leste</u> , <u>Togo</u> , <u>Tonga</u> , <u>Trinidad and Tobago</u> , <u>Uganda</u> , <u>Ukraine</u> , <u>United Kingdom</u> , <u>United States</u> , <u>Uruguay</u> , <u>Vanuatu</u> , <u>Venezuela</u> , <u>Zambia</u> , <u>Zimbabwe</u>
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## Source of Data

### Country Level Variables;

GDP (current US\$): The World Bank (2014) GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Dollar figures for GDP are converted from domestic currencies using single year official exchange

rates.

Urbanization: Urban population (% of total), refers to people living in urban areas as defined by national statistical offices. It is calculated using World Bank population estimates and urban ratios from the United Nations World Urbanization Prospects.

Political Stability: Points, 2014; The World Bank; data are available for: Political stability. The index reflect the likelihood of a disorderly transfer of government power, armed conflict, violent demonstrations, social unrest, international tensions, terrorism, as well as ethnic, religious or regional conflicts. The average for 2014 was -0.04 points. The highest value is in Liechtenstein: 1.48 points and the lowest value is in Syria: -2.76 points.

Population: in total, million, 2015; based on the de facto definition of population, which counts all residents regardless of legal status or citizenship. The World Bank, United Nations Population Division. World Population Prospects, Census reports and other statistical publications from national statistical offices, Eurostat: Demographic Statistics, United Nations Statistical Division. Population and Vital Statistics Report, U.S. Census Bureau: International Database, and Secretariat of the Pacific Community: Statistics and Demography Programme.

### ***Development Index***

Life expectancy at birth: UNDESA (2015).

Mean years of schooling for adults ages 25 and older: Barro and Lee (2014), UNESCO Institute for Statistics (2015) and Human Development Report Office updates based on UNESCO Institute for Statistics (2015).

Adult Literacy rate: UNESCO Institute for Statistics (2015) and Human

Development Report Office updates based on UNESCO Institute for Statistics (2015).

Net Primary Enrollment rate: UNESCO Institute for Statistics (2015) and Human Development Report Office updates based on UNESCO Institute for Statistics (2015).

Net Secondary Enrollment rate: UNESCO Institute for Statistics (2015) and Human Development Report Office updates based on UNESCO Institute for Statistics (2015).

Gross Tertiary Enrollment rate: UNESCO Institute for Statistics (2015) and Human Development Report Office updates based on UNESCO Institute for Statistics (2015).

GNI per capita: World Bank (2015), IMF (2015) and UNSD (2015).

Estimated earned income: Human Development Report Office estimates based on female and male shares of economically active population, ratio of female to male wage in all sectors and gross national income in 2011 purchasing power parity (PPP) terms for female and male populations from ILO (2015), IMF (2015), UNDESA (2013) and World Bank (2015).

Labor Force Participation rate age15+: World Bank (2015)

***Table.A2 Development Index Indicators***

<b>Index Dimension</b>	<b>Indicator</b>
Health Index	Life expectancy at birth (years)
Education	Mean years of schooling
	Adult Literacy rate (% , 2015)
	Net Primary Enrollment rate (% ,

	2014)
	Net Secondary Enrollment rate (%, 2014)
	Gross Tertiary Enrollment rate (%, 2014)
Economics	GNI per capita (2011 PPP \$)
	Labor force participation

### Calculation of Estimated Earned Income

-First we estimated female and male **earned incomes**. The **share of the wage bill** is calculated for each gender. The **female share of the wage bill ( $S_f$ )** is calculated as follows:

$$S_f = \frac{W_f / W_m \cdot EA_f}{W_f / W_m \cdot EA_f + EA_m}$$

where  $W_f / W_m$  is the ratio of **female to male wage**,  $EA_f$  is the **female share of the economically active population** and  $EA_m$  is the **male share of the economically active population**. Then the **male share of the wage bill** is calculated as:

$$S_m = 1 - S_f$$

**Estimated female earned income per capita ( $GNIpc_f$ )** is obtained from GNI per capita ( $GNIpc$ ), first by multiplying it by the female share of the wage bill,  $S_f$ , and then rescaling it by the female **share of the population**,  $P_f = N_f / N$ :

$$GNIpc_f = GNIpc \cdot S_f / P_f$$

### Calculation of Development Indexes

-First minimum and maximum values (goalposts) are set in order to transform

the indicators expressed in different units into indices between 0 and 1. These goalposts act as the ‘natural zeros’ and ‘aspirational goals’, respectively, from which component indicators are standardized.

***Table.A3 Minimum and Maximum Values of Index Indicators***

<b>Indicator</b>	<b>Minimum</b>	<b>Maximum</b>
Mean years of schooling	0	15
Estimated earned income (2011 PPP \$)	100	75,000
Life expectancy at birth (years)		
Female	22.5	87.5
Male	17.7	82.5

-Societies can subsist without formal education, justifying the education minimum of 0 years. The maximum for mean years of schooling for adults, 15, is the projected maximum of this indicator for 2025. The other four Education Index indicator data are percentage ratios so, 100, is the projected maximum of all four indicators whereas the minimum is simply taken as 0.

-First indicator of Economics Index is labor force participation ratio and the maximum, 100, is the projected maximum whereas the minimum is simply taken as 0.

-The minimum value for gross national income (GNI) per capita, \$100, is justified by the considerable amount of unmeasured subsistence and nonmarket production in economies close to the minimum, which is not captured in the



official data. The maximum is set at \$75,000 per capita by the same assumption from Human Development Report of United Nations.

-As second step all indicators estimated for males and females, are transformed into indices, and then taken dimension indices for each sex separately.

-Having defined the minimum and maximum values, the dimension indices are calculated as:

$$\text{Dimension index} = \frac{\text{actual value} - \text{minimum value}}{\text{maximum value} - \text{minimum value}}$$

-For the Economics Index, after calculating estimated earned income per capita for each sex is calculated, dimension indexes are taken for each of the two indicators, and then the arithmetic mean of the two resulting indices is taken. Similarly, for the Education Index, after dimension indexes for each indicator, then the arithmetic mean of the five resulting indices is taken.

The FDI and MDI are the geometric mean of the three dimensional indices:

$$FDI = (\text{IHealthf} \cdot \text{IEducationf} \cdot \text{IEconomicsf})^{1/3}$$

$$MDI = (\text{IHealthm} \cdot \text{IEducationm} \cdot \text{IEconomicism})^{1/3}$$

-World Bank's 2015 World Development Indicators database contains estimates of GNI per capita in 2011 PPP terms for many countries. For countries missing this indicator (entirely or partly), Human Development Report Office calculates it by converting GNI from current to constant terms. The data set is taken from Human Development Report Office.

-To obtain the income value for 2014, International Monetary Fund (IMF)–

projected real GDP growth rates are applied to the most recent GNI values in constant PPP terms. The IMF-projected growth rates are calculated based on local currency terms and constant prices rather than in PPP terms. This avoids mixing the effects of the PPP conversion with those of real growth of the economy.

-For a small number of countries missing indicators, the Human Development Report Office has estimated the missing values using cross-country regression models. The details of the models used are available at <http://hdr.undp.org>. The estimations of Human Development Office are taken directly for all missing variables.

***Table.A4 Country Profiles for Missing Data***

Country	Me an mal e	Mea n fem ale	Liter acy Male	Liter acy Fem ale	Prim ary Male	Prim ary Fema le	Second ary Male	Second ary Female	Lab or mal e	Labo r fem ale	Tot al
<u>Afghanis tan</u>					x	X					2
<u>Algeria</u>							X	x			2
<u>Angola</u>	x	X									2
<u>Australia</u>			x	X							2
<u>Barbado s</u>			X	x							2
<u>Belgium</u>			x	X							2
<u>Bosnia- Herzego vina</u>							X	X			2
<u>Brunei</u>					x	X					2
<u>Canada</u>			X	x			X	X			4

<u>Cape Verde</u>	X	x									2
<u>China</u>					x	X	X	X			4
<u>Congo</u>							X	X			2
Democr atic Republic of Congo							X	X			2
<u>Denmark</u>			x	X							2
<u>Djibouti</u>	x	X	X	x							4
<u>Eritrea</u>	X	x									2
<u>Fiji</u>			x	X							2
<u>Finland</u>			X	x							2
<u>France</u>			x	X							2
<u>Gambia</u>							X	X			2
<u>Hong Kong</u>			X	x							2
<u>Iceland</u>			x	X							2
<u>Ireland</u>			X	x							2
<u>Israel</u>			x	X							2
<u>Ivory Coast</u>							X	X			2
<u>Japan</u>			X	x							2
<u>Liberia</u>							X	X			2
<u>Libya</u>					x	X	X	X			4
<u>Luxembourg</u>			x	X							2
<u>Montenegro</u>							X	X			2
<u>Netherlands</u>			X	x							2

<u>nds</u>											
<u>New Zealand</u>			x	X							2
<u>Nigeria</u>							X	X			2
<u>Norway</u>			X	x							2
<u>Palestine</u>									x	x	2
<u>Papua New Guinea</u>							X	X			2
<u>Russia</u>							X	X			2
<u>Rwanda</u>							X	X			2
<u>St. Lucia</u>			x	X							2
<u>Sudan</u>							X	X			2
<u>Sweden</u>			X	x							2
<u>Switzerland</u>			x	X							2
<u>Tanzania</u>							X	X			2
<u>Tunisia</u>							X	X			2
<u>United Kingdom</u>			X	x							2
<u>United States</u>			x	x							2
<u>Uzbekistan</u>							X	X			2
<u>Zambia</u>							x	X			2

## *Islamic Family Law Index*

**Table.A5 Index Components**

Inheritance - Men(sons, brothers, widowers) inherit more than women of equal status – the Quaranic share of a daughter is one-half the estate of her parents	1 = Yes, 0 = No
Spousal rights and duties - Men have more power over women; the law stipulates, for example, that wives must obey their husbands	1 = Yes, 0 = No
Guardianship - The father or the eldest son of the family holds and/or exercises parental power and/or legal guardianship over minor children/ females	1 = Yes, 0 = No
Right to work - Wives need their husband's permission to work and/or husbands can legally prevent their wives from working	1 = Yes, 0 = No
Minimum marriage age - No minimum age of marriage or different minimum age for women and men - Where there is no legal age for marriage, girls are often married in the late childhood.	1 = Yes, 0 = No
Divorce - Men and women do not have equal rights to divorce or the country does not permit to divorce	1 = Yes, 0 = No
Custody after divorce - The law gives fathers guardianship or custody of children following divorce, even if the mother has temporary custody	1 = Yes, 0 = No
Property after divorce – The division of property after divorce favors the man, for example, by presuming that he	1 = Yes, 0 = No

will keep common property such as the marital home, even if the wife keeps her own property	
Testimony – Testimony of 1 woman is equal to ½ man	1 = Yes, 0 = No
Polygamy – Men can marry more than one woman	1 = Yes, 0 = No

**Table.A6 Islamic Family Law Index Scores**

<i>Cou ntry</i>	<i>Inhe ritan ce</i>	<i>Spo usal right s</i>	<i>Gua rdia nshi p</i>	<i>Righ t to Wor k</i>	<i>Min. Mar riag e Age</i>	<i>Divo rce</i>	<i>Cust ody</i>	<i>Prop erty Afte r Divo rce</i>	<i>Poly gam y</i>	<i>Test imo ny</i>	<i>Fam ily Law Inde x</i>
<u>Afgh anis tan</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Alba nia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Alge ria</u>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>6</i>
<u>Ang ola</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Arg enti na</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Arm enia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Aust ralia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Azer</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>

<u>baija</u> <u>n</u>											
<u>Bah</u> <u>rain</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>9</i>
<u>Ban</u> <u>glad</u> <u>esh</u>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>7</i>
<u>Bar</u> <u>bad</u> <u>os</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bela</u> <u>rus</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Belg</u> <u>ium</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Beli</u> <u>ze</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Beni</u> <u>n</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bhut</u> <u>an</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Boli</u> <u>via</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bos</u> <u>nia-</u> <u>Her</u> <u>zego</u> <u>vina</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bots</u> <u>wan</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Braz</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

<u>il</u>											
<u>Bru</u> <u>nei</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Bulg</u> <u>aria</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bur</u> <u>kina</u> <u>Fas</u> <u>o</u>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>5</i>
<u>Bur</u> <u>ma</u> <u>(My</u> <u>anm</u> <u>ar)</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Bur</u> <u>undi</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cam</u> <u>bodi</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cam</u> <u>eroo</u> <u>n</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Can</u> <u>ada</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cap</u> <u>e</u> <u>Ver</u> <u>de</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cent</u> <u>ral</u> <u>Afri</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>



<u>can</u> <u>Rep</u> <u>ubli</u> <u>c</u>											
<u>Cha</u> <u>d</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>7</i>
<u>Chil</u> <u>e</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Chin</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Colo</u> <u>mbia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Com</u> <u>oros</u>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>3</i>
<u>Con</u> <u>go</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cost</u> <u>a</u> <u>Rica</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cro</u> <u>atia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cub</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Cyp</u> <u>rus</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Dem ocra tic Rep ubli c of	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

Con go											
<u>Den</u> <u>mar</u> <u>k</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Djib</u> <u>outi</u>	1	1	1	0	0	1	1	1	1	0	7
<u>Dom</u> <u>inica</u> <u>n</u> <u>Rep</u> <u>ubli</u> <u>c</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Ecu</u> <u>ador</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Egy</u> <u>pt</u>	1	0	1	0	0	0	0	1	1	1	5
<u>El</u> <u>Salv</u> <u>ador</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Equ</u> <u>atori</u> <u>al</u> <u>Guin</u> <u>ea</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Eritr</u> <u>ea</u>	1	0	0	0	0	0	1	0	1	0	3
<u>Esto</u> <u>nia</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Ethi</u>	1	1	1	1	1	0	1	1	0	0	7

<u>opia</u>											
<u>Fiji</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Finl</u>	0	0	0	0	0	0	0	0	0	0	0
<u>and</u>											
<u>Fran</u>	0	0	0	0	0	0	0	0	0	0	0
<u>ce</u>											
<u>Gam</u>	1	1	1	1	1	1	0	1	1	1	9
<u>bia</u>											
<u>Geo</u>	0	0	0	0	0	0	0	0	0	0	0
<u>rgia</u>											
<u>Gha</u>	0	0	0	0	0	0	0	0	0	0	0
<u>na</u>											
<u>Gre</u>	0	0	0	0	0	0	0	0	0	0	0
<u>ece</u>											
<u>Guat</u>	0	0	0	0	0	0	0	0	0	0	0
<u>emal</u>											
<u>a</u>											
<u>Guin</u>	1	1	1	1	1	1	1	1	1	0	9
<u>ea</u>											
<u>Guy</u>	0	0	0	0	0	0	0	0	0	0	0
<u>ana</u>											
<u>Hon</u>	0	0	0	0	0	0	0	0	0	0	0
<u>dura</u>											
<u>s</u>											
<u>Hon</u>	0	0	0	0	0	0	0	0	0	0	0
<u>g</u>											
<u>Kon</u>											
<u>g</u>											
<u>Hun</u>	0	0	0	0	0	0	0	0	0	0	0
<u>gary</u>											
<u>Icel</u>	0	0	0	0	0	0	0	0	0	0	0

<u>and</u>											
<u>Indi</u> <u>a</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Indo</u> <u>nesi</u> <u>a</u>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>8</i>
<u>Iran</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>9</i>
<u>Iraq</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>6</i>
<u>Irela</u> <u>nd</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Isra</u> <u>el</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Italy</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Ivor</u> <u>y</u> <u>Coa</u> <u>st</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>7</i>
<u>Jam</u> <u>aica</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Japa</u> <u>n</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Jord</u> <u>an</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>8</i>
<u>Kaz</u> <u>akhs</u> <u>tan</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Ken</u> <u>ya</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Kuw</u> <u>ait</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Kyr</u>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>

<u>gyzs</u> <u>tan</u>											
<u>Lao</u> <u>s</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Latv</u> <u>ia</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Leb</u> <u>ano</u> <u>n</u>	1	1	1	0	1	1	0	1	1	0	7
<u>Les</u> <u>otho</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Libe</u> <u>ria</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Liby</u> <u>a</u>	1	1	1	1	0	1	0	1	1	1	8
<u>Lith</u> <u>uani</u> <u>a</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Lux</u> <u>emb</u> <u>ourg</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Mac</u> <u>edo</u> <u>nia</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Mad</u> <u>agas</u> <u>car</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Mal</u> <u>awi</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Mal</u> <u>dive</u>	1	1	1	1	0	1	1	1	1	1	9

<u>s</u>											
<u>Mali</u>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>7</i>
<u>Malt</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mau</u> <u>ritan</u> <u>ia</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>8</i>
<u>Mau</u> <u>ritiu</u> <u>s</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mex</u> <u>ico</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mol</u> <u>dov</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mon</u> <u>goli</u> <u>a</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mon</u> <u>tene</u> <u>gro</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Mor</u> <u>occo</u>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>6</i>
<u>Moz</u> <u>ambi</u> <u>que</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Nam</u> <u>ibia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Nep</u> <u>al</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

<u>Net</u> <u>herl</u> <u>ands</u>	0	0	0	0	0	0	0	0	0	0	0
<u>New</u> <u>Zeal</u> <u>and</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Nica</u> <u>ragu</u> <u>a</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Nige</u> <u>r</u>	0	1	1	1	1	1	1	0	1	0	7
<u>Nige</u> <u>ria</u>	1	1	1	1	1	1	1	1	1	1	10
<u>Nor</u> <u>way</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Oma</u> <u>n</u>	1	1	1	1	0	1	0	1	1	0	7
<u>Paki</u> <u>stan</u>	1	1	1	1	1	1	1	1	1	1	10
<u>Pale</u> <u>stin</u> <u>e</u>	1	1	1	1	1	1	1	1	1	1	10
<u>Pan</u> <u>ama</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Pap</u> <u>ua</u> <u>New</u> <u>Guin</u> <u>ea</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Para</u> <u>gua</u>	0	0	0	0	0	0	0	0	0	0	0

<u>Y</u>											
<u>Peru</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Philippines</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>8</i>
<u>Poland</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Portugal</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Qatar</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Romania</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Russia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Rwanda</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>St. Lucia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Samoa</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>São Tomé and Príncipe</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Saudi Arabia</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>



<u>bia</u>											
<u>Sen</u> <u>egal</u>	<i>0</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>7</i>
<u>Serb</u> <u>ia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Sier</u> <u>ra</u> <u>Leo</u> <u>ne</u>											<i>2</i>
<u>Slov</u> <u>enia</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Sout</u> <u>h</u> <u>Afri</u> <u>ca</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Sout</u> <u>h</u> <u>Kor</u> <u>ea</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Spai</u> <u>n</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Sri</u> <u>Lan</u> <u>ka</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Sud</u> <u>an</u>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>1</i>	<i>10</i>
<u>Suri</u> <u>nam</u> <u>e</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
<u>Swa</u> <u>zilan</u>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>

<u>d</u>											
<u>Swe</u> <u>den</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Swit</u> <u>zerl</u> <u>and</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Syri</u> <u>a</u>	1	1	1	1	1	1	1	1	1	1	10
<u>Taji</u> <u>kist</u> <u>an</u>	0	0	0	0	0	0	0	1	0	0	1
<u>Tan</u> <u>zani</u> <u>a</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Thai</u> <u>land</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Tim</u> <u>or-</u> <u>Lest</u> <u>e</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Tog</u> <u>o</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Ton</u> <u>ga</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Trin</u> <u>idad</u> <u>and</u> <u>Tob</u> <u>ago</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Tuni</u> <u>sia</u>	1	0	0	0	0	0	0	0	0	0	1

<u>Tur</u> <u>key</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Uga</u> <u>nda</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Ukr</u> <u>aine</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Unit</u> <u>ed</u> <u>Ara</u> <u>b</u> <u>Emir</u> <u>ates</u>	1	1	1	0	0	1	1	0	1	1	7
<u>Unit</u> <u>ed</u> <u>King</u> <u>dom</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Unit</u> <u>ed</u> <u>Stat</u> <u>es</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Uru</u> <u>gua</u> <u>y</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Uzb</u> <u>ekis</u> <u>tan</u>	0	0	1	0	1	0	0	1	0	0	3
<u>Van</u> <u>uatu</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Ven</u> <u>ezue</u> <u>la</u>	0	0	0	0	0	0	0	0	0	0	0

<u>Yemen</u>	1	1	1	1	0	1	1	1	1	1	9
<u>Zambia</u>	0	0	0	0	0	0	0	0	0	0	0
<u>Zimbabwe</u>	0	0	0	0	0	0	0	0	0	0	0

### ***World Value Survey***

-All sample of Vave-6 has been used for the individuals of age 20-59 except 9556 respondent in Question1 because our coding in dichotomy 1=Agree and 0=Disagree. 9556 respondent's 'Neither' simply have been dropped.

***Table.A7 Question Dummies***

Question 1 (V.45) - When jobs are scarce, men should have more right to a job than women	1= Agree and 0=Disagree. Total respondents: 55,291 as 29,261 female and 26,030 male.
Question 2 (V.50) - When mother works for pay, the children suffer	1= Agree and 0=Disagree. Total respondents: 68,166 as 35,643 female and 32,523 male.
Question 3 (V.52) - A university education is more important for a boy than for a girl	1= Agree and 0=Disagree. Total respondents: 68,166 as 35,643 female and 32,523 male.
Question 4 (V.53) - Men make better business than women do	1= Agree and 0=Disagree. Total respondents: 68,166 as 35,643 female and 32,523 male.

-Marital Status has been classified as 6 groups in World Value Survey and coded in WVS; 1- Married, 2- Living Together, 3- Divorced, 4- Separated, 5- Widowed and 6- Single. To create a simpler data set I recoded these 6 responses in 3 subgroups as it is shown in table.

**Table.A8 Marital Status Classification**

Married	1- Married
Living Together, Single, Separated, Widowed	2- Single
Divorced	3- Divorced

-Education Level; 1-No formal education, 2-Incomplete primary education, 3-Complete primary education, 4-Incomplete secondary education, 5-Complete secondary education, 6-Incomplete secondary(university type) education, 7-Complete secondary(university type) education, 8-Some university level without degree, 9-University degree in WVS. I recoded them as;

**Table.A9 Education Level Classification**

No Education	1- No Education
Incomplete Primary, Complete Primary	2- Primary Education
Incomplete Secondary, Complete Secondary, Incomplete Secondary(Uni. Type), Complete Secondary(Uni. Type)	3- Secondary Education
Some university level without degree, University degree	4- University Education

-Employment Status has 8 responses in the WVS as 1-Full time (weekly more than 30 hours), 2-Part time (weekly less than 30 hours), 3- Self-employed, 4-

Retired, 5- Housewife, 6- Student, 7- Unemployed, and 8- Others. I recoded them simply in three subgroups.

***Table.A10 Employment Status Classification***

Full time, Part time, Self-employed, Retired	1- Employed
Housewife, Unemployed, Others	2- Unemployed
Student	3- Student

-Income Level has been described as a scale from 1 to 10 as 1 represents the Lowest whereas 10 the Highest. I recoded the all responses to make a simple comparison between the low level income group and others. Here, there is no middle or high income group because it is assumed that after some level of income it is not as hard as to reach some opportunities. WVS's income scale has been coded as;

***Table.A11 Income Level Classification***

1- 2- 3	1- Low Income
4- 5- 6- 7- 8- 9- 10	2- Mid-High Income

**Table 1. Summary Statistics, Development Index and Index Indicators**

	<i>Female</i>						<i>Male</i>					
	All Countries	Sharia	Sharia Personal Law	No Sharia_Islam	No Islam		All Countries	Sharia	Sharia Personal Law	No Sharia_Islam	No Islam	
<i>Development Index</i>	0.54	0.13	0.35	0.49	0.47	0.58	0.64	0.12	0.59	0.65	0.56	0.65
<i>Economics Index</i>	0.34	0.12	0.14	0.27	0.30	0.37	0.51	0.16	0.51	0.59	0.44	0.50
<i>Labor Force Participation</i>	0.53	0.17	0.22	0.39	0.54	0.57	0.75	0.09	0.77	0.78	0.76	0.74
<i>GNI Index</i>	0.15	0.16	0.06	0.16	0.06	0.17	0.28	0.30	0.26	0.42	0.12	0.27
<i>Education Index</i>	0.65	0.20	0.45	0.62	0.53	0.69	0.66	0.16	0.55	0.63	0.58	0.69
<i>Mean Years Schooling</i>	0.51	0.23	0.26	0.45	0.37	0.56	0.56	0.19	0.41	0.51	0.46	0.60
<i>Primary Enrolment</i>	0.89	0.13	0.80	0.87	0.83	0.91	0.90	0.11	0.84	0.88	0.87	0.91
<i>Secondary Enrolment</i>	0.69	0.26	0.47	0.71	0.50	0.72	0.68	0.24	0.56	0.69	0.55	0.70
<i>Tertiary Enrolment</i>	0.40	0.32	0.22	0.33	0.26	0.44	0.32	0.24	0.26	0.25	0.25	0.35
<i>Adult Literacy Rate</i>	0.80	0.22	0.58	0.83	0.66	0.84	0.87	0.15	0.76	0.90	0.76	0.89
<i>Health Index (Life Expectancy)</i>	0.78	0.14	0.71	0.79	0.71	0.79	0.79	0.12	0.74	0.80	0.72	0.79

*Note: The table above shows the sample mean and standard deviations for all countries and only sample means for other religious based country groups.*

**Table 2. Summary Statistics, Country Level Variables**

	All Countries		Sharia	Sharia Personal Law	No Sharia_Islam	No Islam
<b>Panel A: Independent Variables</b>						
<i>lnGdp</i>	9.09	1.22	8.79	9.36	8.30	9.17
<i>lnUrban</i>	3.91	0.51	3.79	4.11	3.66	3.92
<i>lnPop</i>	2.19	1.77	3.57	2.06	2.51	2.08
<i>Political Stability Index</i>	-0.16	0.95	-1.75	-0.52	-0.65	0.09
<b>Panel B: Region Effects</b>						
<i>East Asia&amp;Pacific</i>	0.12	0.33	0.00	0.13	0.00	0.15
<i>Europe&amp; Central Asia</i>	0.26	0.44	0.00	0.00	0.50	0.30
<i>Latin America</i>	0.16	0.37	0.00	0.00	0.00	0.22
<i>Middle East&amp; NorthAfrica</i>	0.13	0.34	0.50	0.61	0.06	0.02
<i>North America</i>	0.01	0.11	0.00	0.00	0.00	0.02
<i>South Asia</i>	0.05	0.22	0.25	0.09	0.00	0.03
<i>Sub-Saharan Africa</i>	0.26	0.44	0.25	0.17	0.44	0.26

*Note: The table above shows the sample mean and standard deviations for all countries and only sample means for religious based country groups.*



**Table 3. Summary Statistics, Family Law Index**

	All Countries		Sharia	Sharia Personal Law	No Sharia_ Islam	No Islam
<b>Panel A: Family Law Index</b>						
<i>Family Law Index</i>	1.99	█ (3.508)	9.00	7.57	3.19	0.23
<b>Panel B: Components of Family Law Index</b>						
<i>Inheritance</i>	0.23	█ (0.424)	1.00	0.91	0.31	0.03
<i>Spousal Rights</i>	0.20	█ (0.398)	1.00	0.74	0.25	0.03
<i>Guardianship</i>	0.25	█ (0.432)	1.00	0.91	0.50	0.03
<i>Right to Work</i>	0.18	█ (0.389)	1.00	0.61	0.31	0.03
<i>Minimum Marriage Age</i>	0.16	█ (0.367)	0.63	0.52	0.44	0.02
<i>Divorce</i>	0.20	█ (0.398)	0.75	0.87	0.25	0.02
<i>Child Custody</i>	0.16	█ (0.367)	0.75	0.52	0.31	0.03
<i>Property After Divorce</i>	0.23	█ (0.420)	1.00	0.83	0.44	0.03
<i>Polygamy</i>	0.23	█ (0.424)	0.88	0.96	0.38	0.03
<i>Testimony</i>	0.15	█ (0.361)	1.00	0.70	0.00	0.01

*Note: The table above shows the sample mean and standard deviations for all countries (standard deviations reported in parantheses) and sample means for religious based country groups.*

**Table 4. Cross-Country Estimation Results for Religious Dummies FEMALE**

<i>Key Control</i>	(1) Development Index	(2) Economics Index	(3) Education Index	(4) Health Index
<i>Sharia</i>	-0.1137*** (0.0235)	-0.1381*** (0.0366)	-0.1163*** (0.0391)	-0.0084 (0.0290)
<i>Sharia_PersonalLaw</i>	-0.0349** (0.0164)	-0.0419 (0.0255)	-.0433 (0.0273)	-0.0003 (0.0203)
<i>NoSharia_Islam</i>	-0.0464*** (0.0151)	-0.0354 (0.0234)	-0.0711*** (0.0250)	-0.0163 (0.0186)
<i>lnGdp</i>	0.0543*** (0.0071)	0.0506*** (0.0110)	0.0678*** (0.0117)	0.0196** (0.0087)
<i>lnUrban</i>	0.0004 (0.0128)	-0.0235 (0.0198)	0.0212 (0.0212)	0.0267* (0.0157)
<i>Political Stability Index</i>	0.0346*** (0.0078)	0.0319*** (0.0121)	0.0232* (0.0130)	0.0369*** (0.0096)
<i>lnPop</i>	0.0078*** (0.0029)	0.0082* (0.0046)	0.0055 (0.0049)	0.0063* (0.0036)
<i>East Asia&amp;Pacific</i>	-0.0543 (0.0401)	-0.0767 (0.0623)	-0.0456 (0.0666)	-0.0165 (0.0494)
<i>Europe&amp;Central Asia</i>	-0.0143 (0.0388)	-0.0743 (0.0603)	0.0545 (0.0644)	0.0238 (0.0478)
<i>Latin America</i>	-0.0618 (0.0400)	-0.1138* (0.0622)	-0.0352 (0.0664)	0.0040 (0.0493)
<i>MiddleEast&amp;North Africa</i>	-0.1030** (0.0428)	-0.1347** (0.0665)	-0.0624 (0.0711)	0.0016 (0.0528)
<i>South Asia</i>	-0.1000** (0.0442)	-0.0976 (0.0686)	-0.1463** (0.0733)	-0.0344 (0.0545)
<i>Sub-Saharan Africa</i>	-0.0876** (0.0410)	0.0070 (0.0637)	-0.1837*** (0.0681)	-0.1762*** (0.0506)
<i>Adj. R<sup>2</sup></i>	0.85	0.56	0.84	0.81
<i>Observations</i>	160.00	160.00	160.00	160.00

*Note 1: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.*

*Note 2: For all models the religious reference group is 'No Religion' and for Region fixed effects; North America.*

**Table 5. Cross-Country Estimation Results for Religious Dummies MALE**

<i>Key Control</i>	(1) Development Index	(2) Economics Index	(3) Education Index	(4) Health Index
<i>Sharia</i>	-0.0044 (0.0199)	0.0415 (0.0426)	-0.0699** (0.0309)	0.0134 (0.0281)
<i>Sharia_PersonalLaw</i>	-0.0012 (0.0139)	0.0572* (0.0297)	-0.0552** (0.0216)	-0.0001 (0.0196)
<i>NoSharia_Islam</i>	-0.0089 (0.0127)	0.0361 (0.0273)	-0.0514** (0.0198)	-0.0046 (0.0180)
<i>lnGdp</i>	0.0628*** (0.0060)	0.1073*** (0.0128)	0.0469*** (0.0093)	0.0206** (0.0084)
<i>lnUrban</i>	0.0086 (0.0108)	-0.0264 (0.0231)	0.0306* (0.0168)	0.0265* (0.0153)
<i>Political Stability Index</i>	0.0290*** (0.0066)	0.0336** (0.0141)	0.0105 (0.0103)	0.0462*** (0.0093)
<i>lnPop</i>	0.0093*** (0.0025)	0.0094* (0.0053)	0.0092** (0.0039)	0.0066* (0.0035)
<i>East Asia&amp;Pacific</i>	-0.0161 (0.0338)	-0.0232 (0.0726)	0.0050 (0.0527)	-0.0210 (0.0479)
<i>Europe&amp;Central Asia</i>	-0.0057 (0.0327)	-0.0691 (0.0702)	0.0815 (0.0510)	-0.0029 (0.0464)
<i>Latin America</i>	-0.0276 (0.0338)	-0.0371 (0.0724)	-0.0254 (0.0526)	-0.0097 (0.0478)
<i>MiddleEast&amp;North Africa</i>	0.0149 (0.0361)	0.0436 (0.0775)	-0.0059 (0.0562)	0.0221 (0.0512)
<i>South Asia</i>	-0.0285 (0.0373)	-0.0113 (0.0799)	-0.0688 (0.0580)	0.0028 (0.0528)
<i>Sub-Saharan Africa</i>	-0.0615* (0.0346)	0.0522 (0.0742)	-0.1225** (0.0539)	-0.1385*** (0.0490)
<i>Adj. R<sup>2</sup></i>	0.8814	0.6515	0.8259	0.7751
<i>Observations</i>	160.00	160.00	160.00	160.00

Note 1: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note 2: For all models the religious reference group is 'No Religion' and for Region fixed effects; North America.

**Table 6. Cross\_Country Estimation Results of Index Indicators\_FEMALE**

Key Control	(1) Labor Force Participation	(2) lnGNI	(3) Mean Years Schooling	(4) Adult Literacy Rate	(5) Primary Enrolment	(6) Secondary Enrolment	(7) Tertiary Enrolment
<i>Sharia</i>	-0.2689*** (0.0519)	-0.0074 (0.0374)	-0.1508*** (0.0513)	-0.1323** (0.0589)	-0.0314 (0.0451)	-0.1339** (0.0612)	-0.0861 (0.0760)
<i>Sharia_PersonalLaw</i>	-0.0976*** (0.0363)	0.0138 (0.0261)	-0.0695* (0.0360)	0.0030 (0.0427)	-0.0318 (0.0310)	-0.0076 (0.0437)	-0.0910* (0.0530)
<i>NoSharia_Islam</i>	-0.0528 (0.0333)	-0.0180 (0.0240)	-0.0995*** (0.0329)	-0.1322*** (0.0371)	-0.0156 (0.0276)	-0.0334 (0.0394)	-0.0801 (0.0486)
<i>lnGdp</i>	-0.0103 (0.0156)	0.1116*** (0.0112)	0.0908*** (0.0159)	0.0926*** (0.0184)	0.0087 (0.0132)	0.0845*** (0.0177)	0.0734*** (0.0228)
<i>lnUrban</i>	-0.0440 (0.0282)	-0.0030 (0.0203)	0.0031 (0.0283)	-0.0534 (0.0343)	-0.0332 (0.0233)	0.0133 (0.0323)	0.1762*** (0.0412)
<i>Political Stability Index</i>	0.0416** (0.0172)	0.0223* (0.0124)	-0.0011 (0.0170)	0.0165 (0.0198)	0.0730*** (0.0149)	0.0323 (0.0204)	0.0046 (0.0252)
<i>lnPop</i>	0.0143** (0.0065)	0.0020 (0.0047)	-0.0088 (0.0065)	-0.0071 (0.0077)	0.0168*** (0.0056)	0.0056 (0.0075)	0.0197** (0.0095)
<i>East Asia&amp; Pacific</i>	-0.0074 (0.0885)	-0.1461** (0.0637)	-0.1853** (0.0874)	0.1732*** (0.0594)	0.0554 (0.0738)	0.0201 (0.1296)	-0.1440 (0.1294)
<i>Europe&amp; Central Asia</i>	-0.0139 (0.0856)	-0.1347** (0.0617)	-0.0791 (0.0845)	0.2892*** (0.0616)	0.0711 (0.0709)	0.0995 (0.1267)	0.0277 (0.1253)
<i>Latin America</i>	-0.0132 (0.0883)	-0.2145*** (0.0636)	-0.2058** (0.0872)	0.2211*** (0.0626)	0.0697 (0.0731)	-0.0002 (0.1290)	-0.1733 (0.1292)
<i>MiddleEast&amp;North Africa</i>	-0.0758 (0.0945)	-0.1934*** (0.0681)	-0.2482*** (0.0932)	0.1421** (0.0643)	0.1179 (0.0788)	-0.0262 (0.1357)	-0.2110 (0.1382)
<i>South Asia</i>	-0.0219 (0.0975)	-0.1734** (0.0702)	-0.3403*** (0.0963)	0.0000 (-) (0.0000)	0.0456 (0.0809)	-0.0396 (0.1363)	-0.2595* (0.1426)
<i>Sub-Saharan Africa</i>	0.1198 (0.0905)	-0.1057 (0.0652)	-0.3183*** (0.0899)	0.0489 (0.0542)	-0.0342 (0.0750)	-0.2390* (0.1314)	-0.3148** (0.1324)
<i>Adj. R<sup>2</sup></i>	0.5551	0.7698	0.78	0.7133	0.4886	0.8031	0.7444
<i>Observations</i>	160.00	160.00	156.00	136.00	156.00	140.00	160.00

Note 1: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note 2: For all models the religious reference group is 'No Religion' and for Region fixed effects; North America.

**Table 7. Cross\_Country Estimation Results of Index Indicators\_MALE**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Key Control	Labor Force Participation	lnGNI	Mean Years Schooling	Adult Literacy Rate	Primary Enrolment	Secondary Enrolment	Tertiary Enrolment
<i>Sharia</i>	0.0026 (0.0317)	0.0803 (0.0702)	-0.1107** (0.0443)	-0.0854* (0.0445)	-0.0296 (0.0439)	-0.0568 (0.0570)	-0.0359 (0.0629)
<i>Sharia_PersonalLaw</i>	0.0388* (0.0222)	0.0757 (0.0490)	-0.0847*** (0.0311)	-0.0143 (0.0321)	-0.0467 (0.0302)	-0.0255 (0.0406)	-0.1047** (0.0439)
<i>NoSharia_Islam</i>	0.0420** (0.0203)	0.0302 (0.0449)	-0.0958*** (0.0284)	-0.1081*** (0.0281)	0.0029 (0.0269)	0.0071 (0.0366)	-0.0553 (0.0402)
<i>lnGdp</i>	0.0054 (0.0095)	0.2092*** (0.0211)	0.0660*** (0.0137)	0.0555*** (0.0138)	0.0111 (0.0128)	0.0727*** (0.0165)	0.0417** (0.0189)
<i>lnUrban</i>	-0.0312* (0.0172)	-0.0215 (0.0381)	0.0215 (0.0245)	-0.0091 (0.0258)	-0.0298 (0.0227)	0.0192 (0.0300)	0.1578*** (0.0341)
<i>Political Stability Index</i>	0.0084 (0.0105)	0.0587** (0.0233)	-0.0103 (0.0147)	0.0051 (0.0150)	0.0531*** (0.0145)	0.0260 (0.0190)	-0.0095 (0.0209)
<i>lnPop</i>	0.0075* (0.0040)	0.0114 (0.0088)	-0.0058 (0.0056)	-0.0023 (0.0058)	0.0135** (0.0055)	0.0089 (0.0069)	0.0276*** (0.0078)
<i>East Asia&amp;Pacific</i>	0.0436 (0.0540)	-0.0900 (0.1196)	-0.1463* (0.0755)	0.0974** (0.0445)	0.0520 (0.0719)	0.0196 (0.1206)	-0.0131 (0.1071)
<i>Europe&amp;Central Asia</i>	-0.0191 (0.0523)	-0.1190 (0.1157)	-0.0573 (0.0730)	0.1742*** (0.0463)	0.0539 (0.0691)	0.1171 (0.1179)	0.0818 (0.1036)
<i>Latin America</i>	0.1157** (0.0539)	-0.1899 (0.1194)	-0.2262*** (0.0753)	0.0972** (0.0471)	0.0520 (0.0713)	-0.0190 (0.1200)	-0.1148 (0.1069)
<i>MiddleEast&amp;North Africa</i>	0.0676 (0.0577)	0.0197 (0.1277)	-0.2018** (0.0832)	0.0990** (0.0485)	0.1191 (0.0768)	0.0063 (0.1262)	-0.1093 (0.1144)
<i>South Asia</i>	0.0981 (0.0596)	-0.1206 (0.1318)	-0.2505*** (0.0832)	0.0000 (.)	0.0439 (0.0788)	-0.0356 (0.1268)	-0.1371 (0.1180)
<i>Sub-Saharan Africa</i>	0.1044* (0.0553)	0.0000 (0.1224)	-0.2755*** (0.0777)	0.0042 (0.0410)	-0.0372 (0.0731)	-0.2284* (0.1223)	-0.1898* (0.1096)
<i>Adj. R<sup>2</sup></i>	0.4226	0.7628	0.7557	0.6542	0.4148	0.7987	0.7024
<i>Observations</i>	160.00	160.00	156.00	137.00	156.00	140.00	160.00

Note 1: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note 2: For all models the religious reference group is 'No Religion' and for Region fixed effects; North America.

**Table 8. Cross-Country Estimation Results for Islamic Family Law Index**

Key Controls	Panel A. Female				Panel B. Male			
	Development Index	Economics Index	Education Index	Health Index	Development Index	Economics Index	Education Index	Health Index
<i>Family Law Index</i>	-0.0101*** (0.0015)	-0.0051** (0.0024)	-0.0179*** (0.0026)	-0.0044* (0.0023)	0.0004 (0.0012)	0.0154*** (0.0025)	-0.0144*** (0.0021)	0.0001 (0.0020)
<i>lnGdp</i>	0.0601*** (0.0063)	0.0146 (0.0102)	0.1161*** (0.0109)	0.0727*** (0.0095)	0.0798*** (0.0051)	0.0845*** (0.0104)	0.0905*** (0.0089)	0.0624*** (0.0084)
<i>lnUrbanization</i>	0.0048 (0.0130)	-0.0207 (0.0209)	0.0359 (0.0225)	0.0255 (0.0195)	0.0108 (0.0105)	-0.0163 (0.0213)	0.0331* (0.0183)	0.0204 (0.0172)
<i>Political Stability</i>	0.0465*** (0.0075)	0.0655*** (0.0120)	0.0105 (0.0129)	0.0182 (0.0112)	0.0219*** (0.0060)	0.0399*** (0.0122)	-0.0030 (0.0105)	0.0289*** (0.0099)
<i>lnpopulation</i>	0.0109*** (0.0030)	0.0145*** (0.0048)	0.0047 (0.0051)	0.0039 (0.0044)	0.0080*** (0.0024)	0.0068 (0.0049)	0.0092** (0.0042)	0.0045 (0.0039)
<i>Adj. R<sup>2</sup></i>	0.81	0.39	0.77	0.64	0.86	0.63	0.74	0.64
<i>Observations</i>	160.00	160.00	160.00	160.00	160.00	160.00	160.00	160.00

Notes: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 9. Cross-Country Estimation Results of Development Index Indicators for Islamic Family Law Index**

<b>Panel A. Female</b>							
Key Controls	Labor Force Participation	GNI Index	Mean Years Schooling	Adult Literacy Rate	Primary Enrolment	Secondary Enrolment	Tertiary Enrolment
Family Law Index	-0.0145*** (0.0034)	0.0043* (0.0023)	-0.0222*** (0.0033)	-0.0226*** (0.0036)	-0.0071*** (0.0027)	-0.0152*** (0.0042)	-0.0213*** (0.0050)
<i>lnGdp</i>	-0.0651*** (0.0143)	0.0944*** (0.0097)	0.1318*** (0.0141)	0.1433*** (0.0155)	0.0434*** (0.0109)	0.1533*** (0.0180)	0.1344*** (0.0208)
<i>lnUrbanization</i>	-0.0357 (0.0294)	-0.0058 (0.0200)	0.0201 (0.0290)	-0.0124 (0.0320)	-0.0284 (0.0222)	0.0203 (0.0362)	0.1780*** (0.0427)
<i>Political Stability</i>	0.0811*** (0.0169)	0.0499*** (0.0115)	0.0024 (0.0163)	0.0005 (0.0187)	0.0459*** (0.0133)	0.0185 (0.0214)	0.0050 (0.0245)
<i>lnpopulation</i>	0.0210*** (0.0067)	0.0081* (0.0046)	-0.0044 (0.0066)	-0.0074 (0.0078)	0.0121** (0.0053)	0.0064 (0.0083)	0.0252** (0.0097)
Adj. R <sup>2</sup>	0.3986	0.7229	0.7163	0.6619	0.4274	0.6888	0.6583
Observations	160.00	160.00	156.00	136.00	156.00	140.00	160.00
<b>Panel B. Male</b>							
Family Law Index	0.0072*** (0.0021)	0.0236*** (0.0041)	-0.0191*** (0.0029)	-0.0153*** (0.0026)	-0.0054** (0.0026)	-0.0118*** (0.0041)	-0.0185*** (0.0041)
<i>lnGdp</i>	-0.0180** (0.0089)	0.1869*** (0.0173)	0.1070*** (0.0125)	0.0961*** (0.0114)	0.0428*** (0.0107)	0.1443*** (0.0174)	0.0914*** (0.0173)
<i>lnUrbanization</i>	-0.0263 (0.0182)	-0.0064 (0.0354)	0.0194 (0.0257)	0.0082 (0.0236)	-0.0285 (0.0217)	0.0241 (0.0350)	0.1434*** (0.0356)
<i>Political Stability</i>	0.0098 (0.0105)	0.0701*** (0.0203)	-0.0075 (0.0144)	-0.0113 (0.0138)	0.0287** (0.0130)	0.0041 (0.0206)	-0.0093 (0.0204)
<i>lnpopulation</i>	0.0046 (0.0042)	0.0091 (0.0081)	0.0004 (0.0058)	-0.0031 (0.0057)	0.0094* (0.0052)	0.0096 (0.0081)	0.0337*** (0.0081)
Adj. R <sup>2</sup>	0.1954	0.7449	0.6679	0.6134	0.3359	0.6575	0.5976
Observations	160.00	160.00	156.00	137.00	156.00	140.00	160.00

Notes: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 10. Cross-Country Estimation Results for Islamic Family Law Indicators\_FEMALE**

Key Controls	Development Index	Adj. R <sup>2</sup>	Economics Index	Adj. R <sup>2</sup>	Education Index	Adj. R <sup>2</sup>	Health Index	Adj. R <sup>2</sup>
<i>Inheritance</i>	-0.0771*** (0.0129)	0.8019	-0.0519** (0.0201)	0.3956	-0.1200*** (0.0229)	0.7460	-0.0208 (0.0190)	0.6296
<i>Spousal Rights</i>	-0.0776*** (0.0132)	0.8003	-0.0339 (0.0209)	0.3801	-0.1433*** (0.0227)	0.7622	-0.0424** (0.0193)	0.6381
<i>Guardianship</i>	-0.0870*** (0.0117)	0.8200	-0.0478** (0.0193)	0.3936	-0.1454*** (0.0207)	0.7732	-0.0408** (0.0180)	0.6388
<i>Right to Work</i>	-0.0723*** (0.0138)	0.7928	-0.0265 (0.0214)	0.3756	-0.1361*** (0.0236)	0.7538	-0.0463** (0.0196)	0.6397
<i>Minimum Age of Marriage</i>	-0.0380** (0.0150)	0.7656	0.0009 (0.0220)	0.3695	-0.0980*** (0.0255)	0.7270	-0.0186 (0.0204)	0.6288
<i>Divorce</i>	-0.0708*** (0.0130)	0.7952	-0.0400** (0.0202)	0.3852	-0.1381*** (0.0221)	0.7615	-0.0302 (0.0188)	0.6329
<i>Child Custody</i>	-0.0595*** (0.0145)	0.7798	-0.0084 (0.0220)	0.3700	-0.1340*** (0.0243)	0.7500	-0.0301 (0.0203)	0.6320
<i>Property After Divorce</i>	-0.0752*** (0.0126)	0.8014	-0.0435** (0.0198)	0.3885	-0.1199*** (0.0224)	0.7477	-0.0302 (0.0186)	0.6330
<i>Polygamy</i>	-0.0792*** (0.0120)	0.8094	-0.0448** (0.0192)	0.3909	-0.1353*** (0.0211)	0.7640	-0.0310* (0.0180)	0.6338
<i>Testimony</i>	-0.0916*** (0.0149)	0.8040	-0.0704*** (0.0232)	0.4050	-0.1196*** (0.0273)	0.7340	-0.0296 (0.0221)	0.6311
Observations	160.00		160.00		160.00		160.00	

Notes: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 11. Cross-Country Estimation Results for Islamic Family Law Indicators\_MALE**

Key Controls	Development Index	Adj. R <sup>2</sup>	Economics Index	Adj. R <sup>2</sup>	Education Index	Adj. R <sup>2</sup>	Health Index	Adj. R <sup>2</sup>
<i>Inheritance</i>	0.0100 (0.0102)	0.8598	0.1081*** (0.0214)	0.6037	-0.0934*** (0.0187)	0.7123	0.0125 (0.0167)	0.6443
<i>Spousal Rights</i>	-0.0016 (0.0105)	0.8589	0.1171*** (0.0217)	0.6116	-0.1155*** (0.0185)	0.7335	-0.0091 (0.0171)	0.6437
<i>Guardianship</i>	-0.0058 (0.0098)	0.8592	0.1038*** (0.0205)	0.6042	-0.1172*** (0.0169)	0.7458	-0.0049 (0.0160)	0.6432
<i>Right to Work</i>	-0.0008 (0.0107)	0.8589	0.1128*** (0.0224)	0.6033	-0.1057*** (0.0194)	0.7201	-0.0130 (0.0175)	0.6443
<i>Minimum Age of Marriage</i>	0.0113 (0.0109)	0.8599	0.1215*** (0.0227)	0.6104	-0.0880*** (0.0204)	0.7018	0.0057 (0.0179)	0.6432
<i>Divorce</i>	0.0010 (0.0101)	0.8589	0.1145*** (0.0210)	0.6129	-0.1151*** (0.0178)	0.7374	0.0029 (0.0166)	0.6431
<i>Child Custody</i>	0.0056 (0.0109)	0.8591	0.1313*** (0.0224)	0.6227	-0.1104*** (0.0197)	0.7225	0.0030 (0.0179)	0.6431
<i>Property After Divorce</i>	-0.0008 (0.0100)	0.8589	0.0271** (0.0128)	0.5820	-0.0887*** (0.0185)	0.7094	-0.0016 (0.0164)	0.6430
<i>Polygamy</i>	0.0014 (0.0097)	0.8589	0.1109*** (0.0201)	0.6142	-0.1112*** (0.0170)	0.7383	0.0039 (0.0159)	0.6431
<i>Testimony</i>	0.0102 (0.0118)	0.8596	0.1137*** (0.0253)	0.5919	-0.0895*** (0.0223)	0.6974	0.0068 (0.0194)	0.6433
<i>Observations</i>	160.00		160.00		160.00		160.00	

Notes : The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 12. Descriptive Comparison, World Value Survey**

	All Countries		No Islam		No Sharia_Islam		Sharia_Personal Law		Sharia	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
<i>Question1</i>	0.43	0.58	0.29	0.43	0.64	0.79	0.69	0.82	0.71	0.87
<i>Question2</i>	0.48	0.53	0.43	0.45	0.46	0.55	0.61	0.67	0.68	0.83
<i>Question3</i>	0.23	0.32	0.19	0.26	0.29	0.39	0.31	0.43	0.40	0.49
<i>Question4</i>	0.40	0.55	0.31	0.44	0.55	0.70	0.56	0.72	0.60	0.85

Note1: *Question1: When jobs are scarce, men should have more right to a job than women.*

*Question2: When mother works for pay, the children suffer.*

*Question3: A university education is more important for a boy than for a girl.*

*Question4: Men make better business than women do.*

Note2: The table above shows the sample means of 'Agree' for all religios based country groups.

**Table 13. Estimation Results for World Value Survey Vave 6, Female Respondents**

	Question1	Question 2	Question 3	Question 4
<b>Panel A: Law</b>				
<i>No Sharia_Islam</i>	0.3287***	0.0196**	0.0941***	0.2184***
<i>Sharia_Personal Law</i>	0.3634***	0.1505***	0.1046***	0.2161***
<i>Sharia</i>	0.3009***	0.1153***	0.1271***	0.1748***
<b>Panel B: Individual Variables</b>				
<i>Age</i>	-0.0013	0.0114***	-0.0020	-0.0060***
<i>Age2</i>	0.0000	-0.0002***	0.0000	0.0001***
<i>Single</i>	-0.0929***	-0.0280***	-0.0201***	-0.0618***
<i>Divorced</i>	-0.0945***	-0.0285**	-0.0213**	-0.0235**
<i>Primary Education</i>	-0.0804***	-0.0481***	-0.1109***	-0.1175***
<i>Secondary Education</i>	-0.1275***	-0.1540***	-0.1516***	-0.1775***
<i>University Education</i>	-0.2304***	-0.1971***	-0.2361***	-0.2635***
<i>Employed</i>	-0.0441***	-0.0629***	-0.0133	-0.0347***
<i>Unemployed</i>	0.0509***	0.0625***	0.0223**	0.0294***
<i>Low Income Level</i>	0.0079	0.0271***	-0.0136***	0.0114**
<i>R2</i>	0.1897	0.0677	0.0480	0.0913
<i>N</i>	29261.00		35643.00	

*Note: Q1: When jobs are scarce, men should have more right to a job than women.*

*Q2: When mother works for pay, the children suffer.*

*Q3: A university education is more important for a boy than for a girl.*

*Q4: Men make better business than women do.*

*Note 2: For all models the religious reference group is 'No Religion', for Marital Status; 'Married', for Education; 'No Education', for Employed Status; 'Student' and for Income Level; 'Mid-High Income' are taken as reference.*



**Table 14. Estimation Results for World Value Survey Vave 6, Male Respondents**

	Question1	Question 2	Question 3	Question 4
<b>Panel A: Law</b>				
<i>No Sharia_Islam</i>	0.3477***	0.0982***	0.1276***	0.2528***
<i>Sharia_Personal Law</i>	0.3715***	0.2083***	0.1691***	0.2688***
<i>Sharia</i>	0.3833***	0.3280***	0.1989***	0.3614***
<b>Panel B: Individual Variables</b>				
<i>Age</i>	-0.0074***	0.0005	-0.0019	-0.0079***
<i>Age2</i>	0.0001**	-0.0000	0.0000	0.0001**
<i>Single</i>	-0.1106***	-0.0564***	-0.0437***	-0.0765***
<i>Divorced</i>	-0.0732***	-0.0678***	-0.0287*	-0.0303*
<i>Primary Education</i>	-0.0482***	-0.0522***	-0.0697***	-0.0737***
<i>Secondary Education</i>	-0.0979***	-0.1484***	-0.1038***	-0.1238***
<i>University Education</i>	-0.1812***	-0.1866***	-0.1763***	-0.1801***
<i>Employed</i>	-0.0312***	-0.0125	-0.0180*	-0.0266***
<i>Unemployed</i>	0.0161	0.0408***	0.0489***	0.0070
<i>Low Income Level</i>	0.0325***	0.0443***	0.0133**	0.0331***
<i>R2</i>	0.1688	0.0673	0.0479	0.0975
<i>N</i>	26030.00		32523.00	

Note: Q1: When jobs are scarce, men should have more right to a job than women.

Q2: When mother works for pay, the children suffer.

Q3: A university education is more important for a boy than for a girl.

Q4: Men make better business than women do.

Note 2: For all models the religious reference group is 'No Religion', for Marital Status; 'Married', for Education; 'No Education', for Employed Status; 'Student' and for Income Level; 'Mid-High Income' are taken as reference.

## Islamic Family Law Index Robustness

**Table 15. Cross-Country Estimation Results for Islamic Family Law Index**

Key Controls	Panel A. Female				Panel B. Male			
	Development Index	Economics Index	Education Index	Health Index	Development Index	Economics Index	Education Index	Health Index
Family Law Index	-0.0056* (0.0028)	0.0062 (0.0043)	-0.0230*** (0.0048)	-0.0084** (0.0037)	-0.0001 (0.0020)	0.0223*** (0.0050)	-0.0213*** (0.0039)	-0.0023 (0.0032)
<i>lnGdp</i>	0.0689*** (0.0133)	0.0320 (0.0204)	0.1054*** (0.0228)	0.0646*** (0.0176)	0.0979*** (0.0095)	0.1408*** (0.0240)	0.0902*** (0.0187)	0.0611*** (0.0152)
<i>lnUrbanization</i>	-0.0445 (0.0368)	-0.0917 (0.0566)	0.0716 (0.0631)	0.0322 (0.0489)	-0.0136 (0.0263)	-0.1003 (0.0664)	0.0405 (0.0518)	0.0188 (0.0421)
<i>Political Stability</i>	0.0496*** (0.0120)	0.0708*** (0.0185)	0.0205 (0.0206)	0.0010 (0.0160)	0.0170* (0.0086)	0.0498** (0.0217)	-0.0040 (0.0169)	0.0099 (0.0138)
<i>lnpopulation</i>	-0.0020 (0.0064)	-0.0115 (0.0099)	0.0169 (0.0110)	-0.0003 (0.0085)	0.0026 (0.0046)	-0.0128 (0.0116)	0.0193** (0.0090)	-0.0005 (0.0073)
Adj. R <sup>2</sup>	0.7827	0.4995	0.7592	0.6074	0.9023	0.7697	0.7353	0.64
Observations	47	47	47	47	47	47	47	47

Notes: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 16. Cross\_Country Estimation Results of Development Index Indicators for Islamic Family Law Index**

Panel A. Female							
Key Controls	Labor Force Participation	GNI Index	Mean Years Schooling	Adult Literacy Rate	Primary Enrolment	Secondary Enrolment	Tertiary Enrolment
Family Law Index	-0.0010 (0.0065)	0.0135*** (0.0038)	-0.0218*** (0.0060)	-0.0251*** (0.0077)	-0.0147*** (0.0047)	-0.0265*** (0.0076)	-0.0241*** (0.0065)
<i>lnGdp</i>	-0.0461 (0.0308)	0.1100*** (0.0180)	0.1039*** (0.0308)	0.1186*** (0.0394)	0.0570** (0.0222)	0.1592*** (0.0362)	0.0913*** (0.0308)
<i>lnUrbanization</i>	-0.0880 (0.0853)	-0.0955* (0.0497)	0.0540 (0.0855)	0.1125 (0.1091)	-0.0054 (0.0615)	0.0326 (0.0978)	0.1661* (0.0854)
<i>Political Stability</i>	0.1064*** (0.0279)	0.0351** (0.0162)	0.0131 (0.0259)	0.0190 (0.0331)	0.0481* (0.0211)	0.0215 (0.0333)	-0.0281 (0.0279)
<i>lnpopulation</i>	-0.0022 (0.0149)	-0.0208** (0.0087)	0.0043 (0.0140)	0.0001 (0.0179)	0.0219* (0.0109)	0.0281* (0.0163)	0.0133 (0.0149)
Adj. R <sup>2</sup>	0.4153	0.7746	0.6482	0.646	0.5749	0.7438	0.624
Observations	47	47	46	46	44	39	47
Panel B. Male							
Family Law Index	0.0112*** (0.0030)	0.0334*** (0.0085)	-0.0223*** (0.0052)	-0.0188*** (0.0058)	-0.0131*** (0.0046)	-0.0257*** (0.0071)	-0.0240*** (0.0064)
<i>lnGdp</i>	0.0138 (0.0140)	0.2678*** (0.0404)	0.0862*** (0.0267)	0.0861*** (0.0295)	0.0746*** (0.0218)	0.1616*** (0.0341)	0.0490 (0.0306)
<i>lnUrbanization</i>	-0.0859** (0.0389)	-0.1148 (0.1120)	0.0435 (0.0740)	0.1114 (0.0816)	-0.0671 (0.0606)	-0.0217 (0.0920)	0.1485* (0.0847)
<i>Political Stability</i>	0.0316*** (0.0127)	0.0680* (0.0366)	-0.0057 (0.0224)	-0.0055 (0.0247)	0.0107 (0.0208)	-0.0177 (0.0314)	-0.0395 (0.0277)
<i>lnpopulation</i>	0.0033 (0.0068)	-0.0289 (0.0195)	0.0130 (0.0121)	0.0022 (0.0134)	0.0109 (0.0107)	0.0197 (0.0154)	0.0280* (0.0148)
Adj. R <sup>2</sup>	0.3499	0.8103	0.6091	0.6313	0.4915	0.7059	0.4681
Observations	47	47	46	46	44	39	47

Notes: The standard errors of regression coefficients, reported in parentheses, are clustered on county. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Figure 1. Female and Male Development Index, All Countries

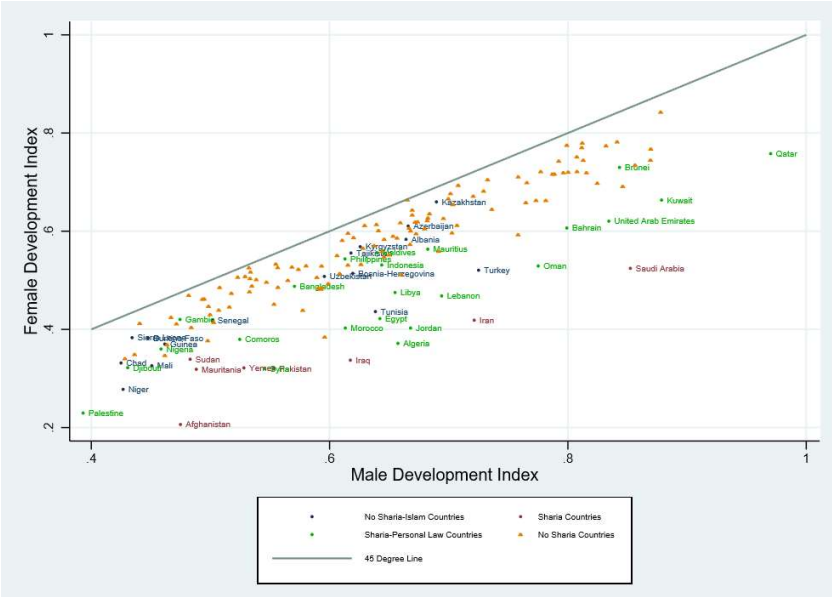
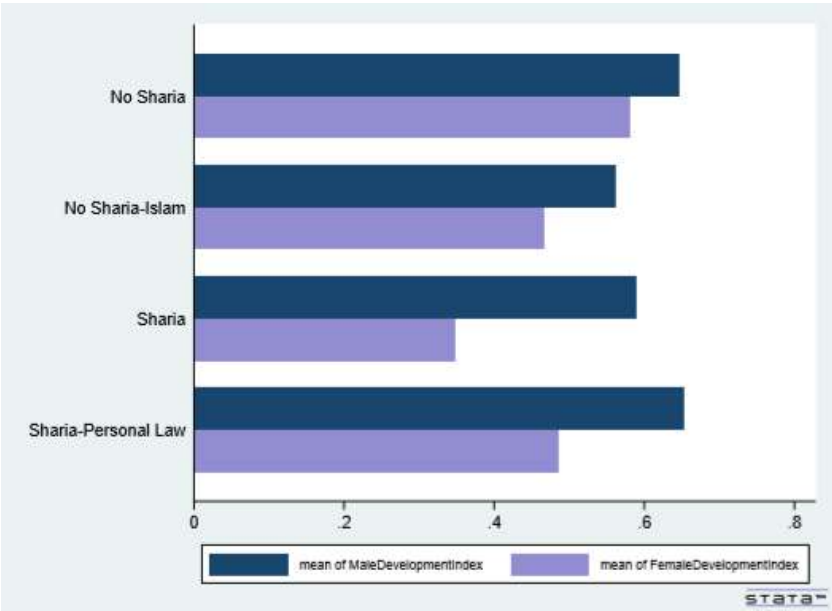
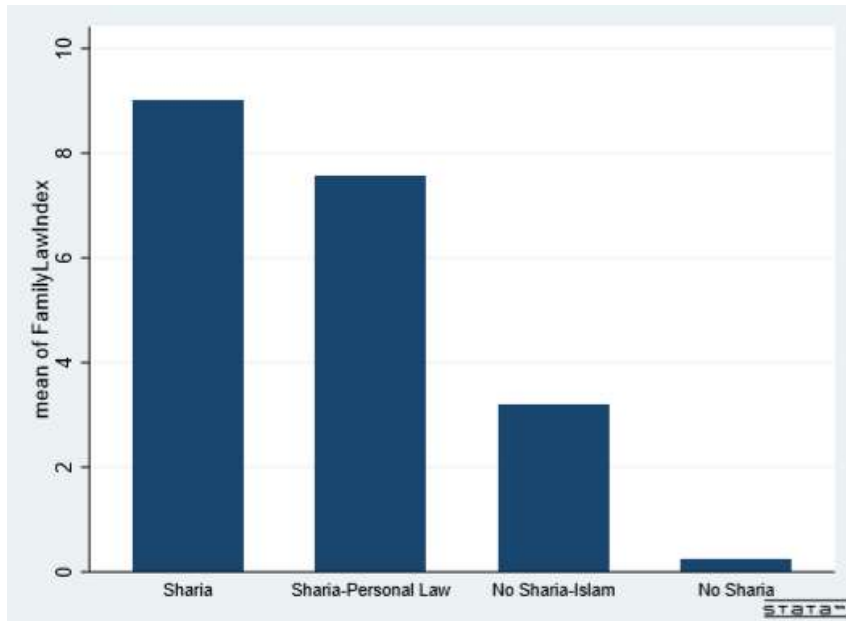


Figure 2. Female and Male Development Index by Islam based Country Groups



**Figure 3. Islamic Family Law Index by Islam based Country Groups**



**Figure 4. Female Development Index of Muslim Countries**

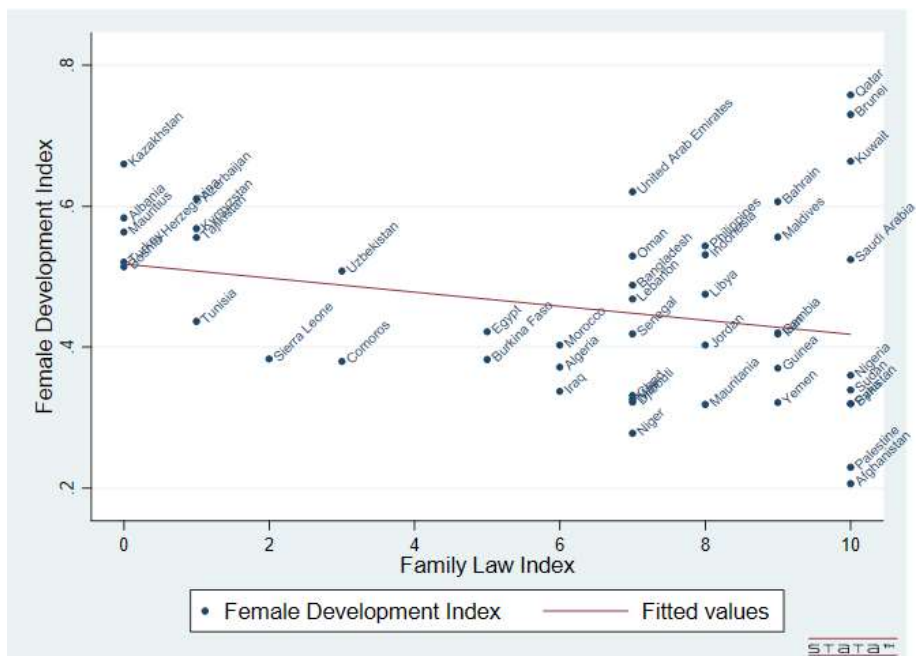
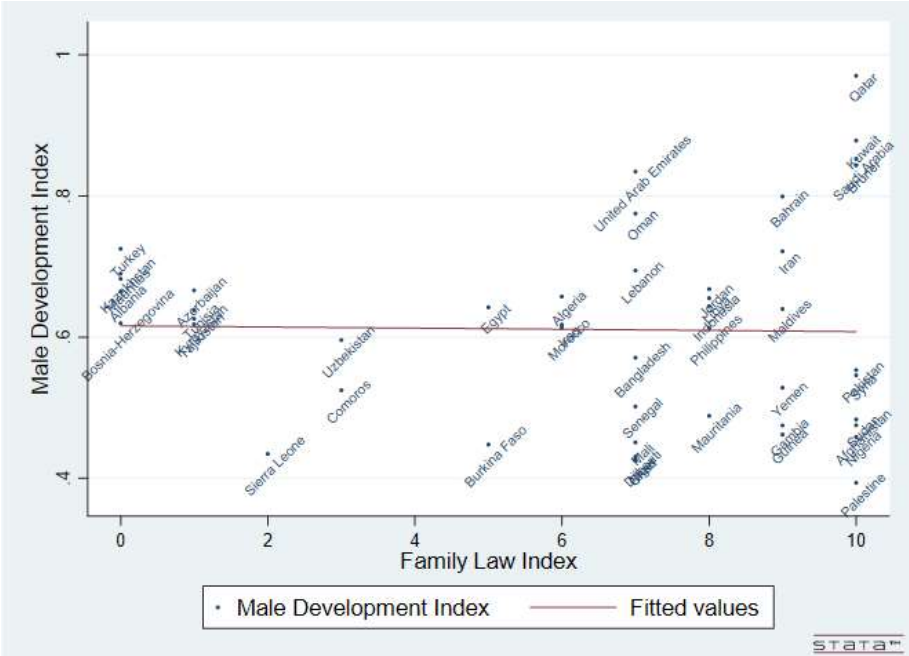


Figure 5. Male Development Index of Muslim Countries



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# **Women's Employment, Multiculturalism, and Islam: United Kingdom Case**

Gozde Gozlet<sup>2</sup>

## **Abstract**

This analysis begins with examining whether Islam has direct relationship through Sharia courts with women's work behaviors in United Kingdom by using 2001 IPUMS individual survey data. The extent to how Islam in UK influences women's labor force activity was examined by comparing to those from other religious groups and using difference-in-difference framework migrant Muslim female employment differentials between other migrant religious groups is also empirically proven. In the last stage, this paper also highlighted the regional differences between Muslim females. This paper shows that strict Islamic legislation exerts the same lower female labor participation pattern of Muslim majority countries in a non-Muslim western country for Muslim females if there is any type of Islamic legislation.

Keywords: female labor force participation, Sharia courts, United Kingdom, Muslim females, Islamic legislation, immigrant,

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## **I. Introduction**

A lot has been written on the concept of social status and employment for women in a serious number of literatures. Yet prior research has largely overlooked the role of religion or it is mostly associated with focusing on Christian societies. Today there are an estimated 1.7 billion Muslims in worldwide. As the media regularly associate Islam with extremism or terrorism, the status of Muslim women did not improved much either. A growing body of literature documents that Islam has widespread effects on the economic and demographic behavior of women. However the reality of Muslim populations in Muslim majority countries and in the Western countries can be the topics of two different research field.

This study addresses issues on women, Islam and how this is related to their economic participation in the Western world. It focuses on Muslim diaspora in UK and the challenges faced by Muslim women. It is suggested here that the economic role and social participation of Muslim women are also heavily influenced by Islamic laws and cultural values in non-Muslim developed countries as well. It is proven that immigration involves inflows of people who are on average less skilled than the native workers and it affects the distribution of income in the economy (Kahanec and Zimmerman, 2008). However, migrant women face a double battle; first to integrate in their host country, and then to overcome the gender bias in the social, and economic life (Farah, 2006). In this paper I investigate whether Muslim females have to face not double but triple battle being immigrant, women and also Muslim in a Western country.

The research itself contains three stages, first, labor participation of Muslim women is analyzed in United Kingdom by examining the extent to how

Islam in a non-Muslim country influence their economic activities. The second stage of this research is the analysis of substantially diverse ethnic composition of Muslim, their educational and socio economic status. In the third stage, the analysis highlights Muslim employment differentials between Sharia areas which are close to active Sharia courts and non-Sharia areas in which there is no active sharia courts according to officials.

This study simply focused on all Muslim groups as one and provides critical insights into some of the religious and migration related social topics for Muslims specifically for women. As expected, women's share of the labor force is generally lower in Islamic nations than in others (Altorki,1986; Moghadam,1988). The results of this study on the other hand, showed that Islam exerts a negative influence on women's labor force participation also in a non-Muslim Western country but first time in all literature, the effect is much stronger if any type of existence of Islamic legislation is in question.

This paper is organized as follows. In Section II, I introduced related literature and the background of this study. In Section III, I gave a brief description about Muslim Diaspora, their historical background and today's position, followed by Section IV which discusses United Kingdom's unique case for Muslim individuals. Section V explains the data, variables and estimation methods. In Section VI, I present the results under different regression specifications. In conclusion, I summarized and suggested avenues for future research.

## **II. Literature Review**

Despite a growing literature documenting effects of Islam on demographic and economic behavior, the influence of Islamic values on Muslim population

outside Muslim majority countries has received very little attention. Within the context of migration, researchers have focused on the role of gender in religious among migrants (Alumkal 1999; Amir-Moazami and Jouili 2006), and yet Islam had relatively less attention.

First guest workers arrived in Western countries between the 1950s and 1970s, in response to a great demand for low educated workers. Later some of these workers had chose to stay following another wave of immigration as family reunions. Since then the migrant minority populations have grown rapidly creating second and third generations. For the following decades, the studies showed some correlation between migrants' market employment and language skill, length of stay, educational attainment and birthplace (Khoo and McDonald 2001; Foroutan 2008b).

The presence of Muslims among the immigrants whether as a guest worker, family reunion or asylum seeker are hard to ignore. The large-scale Muslim communities in Western countries is actually centuries old, but unlike the other minority groups, strong prejudice targeted specifically Muslims, with the term "Islamophobia" (Brown, 2000). Following the September 11 terrorist attacks, serious amount of scholars studied on discrimination and prejudice against Muslim communities. Strabac and Listhaug(2008) studied with data of 41,000 individuals from 32 countries and found that aggregate level of anti-Muslim prejudice was significantly higher than the corresponding level of anti-immigrant prejudice in both Western and Eastern Europe which is the first statistical evidence about anti-Muslim prejudice in Europe.

Some studies have shown that amongst migrant and locally born Muslims, Islam is central for their identity (Hopkins 2004), on the other hand more recent ones concluded that members of households actually can be connected to both

their country of origin and their country of residence (Engbersen 2013). However prejudice resulting in disadvantage in the labor market has been observed to be usually ‘against persons who are visibly different’ (Anker, 1998). Since one of the known Islamic requirements for women is wearing hijab; being visually different suspect as a terrorist, Muslim women’s economic status is far vulnerable than other migrants. The significantly low employment level of Muslim women mainly results from this situation.

In fact, worldwide, regardless of their religion a smaller proportion of women are recorded as high-skilled migrants than men (Moreno-Fontes Chammartin, 2006). A sizable body of research over the past two decades has showed that the majority of migrant women workers are employed only in service sector occupations (Greenless and Saenz, 1999). Because, ethnic minority women were subject to a ‘double disadvantage’ when applying to higher education: as women, and as members of an ethnic minority (Taylor, 1992).

Lemaitre (2007) found that employment rates increase as foreign-born women stay longer time in the country, in Sweden, Germany, and the Netherlands, but not in the UK. However, none of those studies were large scale empirical studies for immigrant women under religious effect. Especially Muslim women’s social and economic decisions need further scholarly discussion in the field.

### **III. Muslim Diaspora**

Most European countries closed their doors to labor immigration in the 1970s, yet some immigrants and asylum seekers arrive in Europe each year. The total number of Muslims in Europe in 2012 is estimated at 44 million

people. Today, almost 50 percent of Muslims in Western Europe were born there and more than third of Muslim Americans (37%) were born in US (Pew Research Forum 2011). Muslims are now a permanent part of Western societies yet they have tended to cluster geographically within industrialized, urban areas within poorer neighborhoods such as Berlin's Kreuzberg district, London's Tower Hamlets, and the *banlieues* (suburbs) of major French cities.

Muslim communities in Europe are significantly younger than the non-Muslim population with three times faster birth rate. One third of France's five million Muslims are under the age of 20; one-third of Germany's four million Muslims are under 18; one-third of the United Kingdom's 1.6 million Muslims are under 15; and one third of Belgium's 364,000 Muslims are under 15 (Olivier, 2003).

Today a number of states in Europe, notably Belgium, Denmark, France, Greece, Hungary, Italy, and Spain, it is illegal to register people according to their religion in censuses, as does the United States. The figures and statistics used in various demographic of religion might be problematic since they are often based on the assumption that migrants of certain ethnic origins are Muslims. We need to be cautious as they contribute to the 'ethnification of Islam'. The statistic from Muslim organizations might be also biased since in that they usually describe only 'organized' Muslims and exclude Muslims who are not active in Muslim organizations (Jacobsen, 2009).

Western communities tend to view the Muslim presence as a real threat which is framed in terms of security and economics; yet, the real threat is to the European way of life. In Belgium, since 2008, the government has enforced tough regulations which means, migrants from outside the EU can take jobs only if there are no European candidates. A national poll in June 2003 showed



that 53 per cent of the French were against the wearing of headscarves in public spaces (Salvatore, 2006). In all Europe, employed Muslim women are not always safe from jokes, criticism, and harassment (Bendriss, 2016).

Whether they born in or grew up in Western countries, most young Muslims face identity problems. Many migrants born in the host society can be expected to be less religious than those who immigrated as adults yet although second generation Turks in Germany have higher levels of education, labor force participation and more contacts with natives than the first generation, their social assimilation progresses more slowly than other migrants (Diehl and Schnell 2006). Even though they may be third-generation, they are still identified as immigrants.

Today, all these states that have mentioned above notably Austria, France, Germany and US, are secular or it can be said that religion does not play any major role on legislation for both natives and minorities. The status of Muslims and other religious groups generally rests on the Basic Law of the freedom of faith, and culture. Marriage contracts must be signed in a civil registry office in order to be legal. The legal and court system is entirely secular and religious affiliation is irrelevant in any litigation except United Kingdom.

#### **IV. Islam in United Kingdom**

Islam is the second largest faith group in the United Kingdom; the census of April 2001, which included a question on religion for the first time since 1851, determined 1.55 million Muslims forming around 3% of population. The total number of Muslims in 2011 is almost 2.71 million with 47% of them UK-born. At present, Muslims remain concentrated in urban areas; around 76% of all Muslims live in the inner city of conurbations of Greater London, West

Midlands, the North West and Yorkshire and Humberside, forming actually 12.4% of London's population (British Muslims in Numbers, 2011).

Most Muslims are from Pakistan, Bangladesh and India. Other smaller groups come from Africa and Middle East. Especially those of Bangladeshi origin, experience low incomes and housing conditions, limited education and relatively high unemployment. On the other hand, the East African Asians tend to be better off, and London is host to a high number of very wealthy Arabs. More recent arrivals have been refugees, especially from Somalia and Iraq (Peach, 2005).

There is no common legal or constitutional regime governing the status of religion in the UK: each of the constituent countries has its own regime but the accumulated legal tradition guarantees freedom of religion within the limits of public order. Despite the growing body of public and political debates, an indeterminate number of Sharia courts are currently working in the UK. Sharia means the entire Islamic legal system derived from Quran (sacred book), sunnah (decisions of Prophet Muhammed) and reasoning by Islamic scholars. In most of the Muslim majority countries Sharia courts deals only with family law cases. Most reports cite five courts, based in London, Birmingham, Bradford, Coventry, and Manchester. However, investigations indicate that a considerably larger number are operating around the country (MacEoin, 2009).

In UK, Sharia Courts specialize in providing advice and assistance, issuing divorce certificates; and producing expert opinion reports on matters of Muslim family law and custom. They usually issue fatwas which is simply a ruling from a religious scholar over a contested issue (Modood, 2003). The British state currently exercises no form of supervision over these courts and a British judge or jury could not rule against a Muslim authority. (Brandon and Hafez, 2008).

In her study Shah-Kazemi found that the reason why women choose to use a Sharia Council is their need to obtain a religious divorce certificate rather than a desire to save their marriages. In addition to this, UK immigration rules which determine “bogus” or “sham” marriages dictate “both parties must demonstrate that they can maintain and accommodate themselves” (Kewley, 2000, p. 140–141). As a result, a woman attempting to divorce may find her residency in the UK under review which makes it almost impossible for them to escape abusive husbands or manage a life by themselves (Brown, 2006).

Unlike France, there is no legislation limiting the wearing of Muslim dress in public institutions including schools. On the other hand, religious education is a compulsory subject on the school timetable, but students can be withdrawn by their parents. Over the years, most schools have made some arrangements for the special needs of a variety of ethnic and religious groups, which related to religious holidays or to dressing for physical education and music lectures.

## **V. Data and Estimation Methods**

### **V.I. Baseline Analysis**

Data for this study come from IPUMS International for UK which is administered in 2001. It is the only available micro level survey data set in IPUMS that included a question on religion for UK. Since the data is cross-sectional rather than longitudinal, I can only examine individuals at one stage in the life cycle rather than follow them across their life course. Later, same year household data from IPUMS International for UK is also added into analysis because of region information to check whether the employment status differ as they live in the areas close to Sharia courts under same model.

As this study concerns employment participation, the age range is limited to the main working ages, 27-62 which makes 962,251 respondents in total with 474,503 males and 487,748 females from all religions and overall 21,857 Muslims. One problem is the measurement of women's work because the interviewees showed that Muslim women are not economically inactive, often working in the grey economy for example, by working unpaid in the family business (Light, 2004). The term 'Employed' is the key dependent variable of this analysis and refers to a situation in which individuals either employed currently (=1) or not.

Religion is measured with dummy variables identifying Muslim respondents and other religious communities and several control variables are included notably nativity, education attainment, marital status and ethnicity. In the second part of the analysis, I used double and triple difference-in-difference variables to confirm the existence of intergroup inequalities for women, and that Sharia Courts construct serious limitations for Muslim women in social and economic life. Table 1 provides detailed information about the variables used in the analysis.

[Table 1 Here]

[Table 2 Here]

Table 2 highlights key labor force comparisons among native and foreign born respondents for different religious groups. Since the primary outcome is female labor force participation, with the age limitation, women in this study sampled overall 65% labor force participation rates for all religion groups. As seen in the Table 2, Muslim female labor force participation is lower than any

other religious group in both native born and foreign born groups. Especially foreign born Muslims showed extremely low employment rates even compared with native born Muslim females. To eliminate the sample size effect for each religion group, I decided to focus female/male ratio for each indicator and the results are clear enough to support our hypothesis; even in a multicultural liberalistic country like UK, Muslims are relatively disadvantaged compared with other religious communities which derived from Islamic regulations. Additionally, majority of these working Muslim females are part of service sector or working as clerk in shops and markets (%12.86 and %10.69).

Differences in women's educational attainments by religion are similarly pronounced. Regardless of nativity, almost 50% Muslim females have no education whereas the rate is much lower for females from other groups. On the other hand, Level 4, which is the highest educational level coded in our data set, shows that Muslim females have the lowest participation for higher education compared with other females. As 81% of Muslim females are foreign born, almost 74% of them are married which is one of the highest ratio with Hindu females among all others. As expected only 9% of Muslim females are single in 27-62 age group which is the lowest ratio for all females in the same group (see Table 3). Unfortunately data set did not cover other family characteristics such as income, number of children or year of immigration. That is why, the control variables are kept as simple but explanatory.

[Table 3 Here]

The analysis focuses on two labor force outcomes, each representing an important dimension of women's economic activity. The first outcome is

difference between the religious groups and the second outcome is the difference between the foreign born and native born individuals for the same religious group. To test the differences of religious implications, first thing, I estimated employment by only using religion dummies with ‘No Religion’ reference group and then run a simple regression only with Muslim dummy for all sample and also for male and females separately. Since the main concern is Muslim females in UK, I added a difference in difference indicator in the last part of first estimation.

$$Y_i = \delta_1 + \delta_2 rel_i + \delta_2 W_i + \delta_3 W_i x M_i + \delta_4 X_i + u_i$$

In the equation above,  $Y_i$  denotes the variable of current employment status.  $rel_i$  includes all the religion dummy variables that indicate whether individual  $i$  is a member of a some religious group or not and  $W_i$  is the dummy of being female or not. Lastly,  $W_i x M_i$  is the DID indicator which refers to the Muslim females.

Then, I estimated the same model by keeping only Muslim dummy variable along with female and Muslim-female dummies, I added the control variables,  $X_i$ , notably age, ethnicity, nativity, educational attainment and marital status. Finally in the second part of the analysis I added the triple DID indicators to the model.

$$Y_i = \delta_1 + \delta_2 M_i + \delta_2 W_i + \delta_3 W_i x M_i + \delta_4 X_i + \beta_1 F_i + \beta_2 F_i x W_i + \beta_3 F_i x M_i + \beta_4 F_i x W_i x M_i + u_i$$

In the second equation above,  $F_i$  denotes the nativity dummy variable of

being foreign born or not whereas  $F_i \times W_i$  gives the double DID dummy of being foreign born-female or not which is followed by  $F_i \times M_i$  DID dummy of foreign born-Muslim or not.  $F_i \times W_i \times M_i$  denotes the triple DID variable that indicate whether being foreign born-Muslim-female or not.

## V.II. Regional Check

The models above can only show the difference between religious groups and maybe the relatively lower economic status of Muslim women in UK. Yet it is not enough to say that Sharia courts have a direct effect on lower labor force participation for Muslim women. To see this effect, I tried to give a regional explanation whether the labor force participation of women who live in areas close to the active Sharia courts are lower than the ones that lives in the other non-Sharia areas. I used the geography data from IPUMS 2001 household serious of UK and run the same model for ‘Employed’, ‘Labor Force’ and ‘Housework’ dependent variables separately. In the data the regions are coded as general areas not as cities, so the areas close to the cities with official Sharia courts have become Sharia Areas; such as North West, West Midlands, Inner London and Outer London are areas with Sharia court\*. I defined North West and West Midlands as Sharia area but since London is a special case with different regional characteristics from the rest of UK, I grouped Inner London and Outer London as London and run the analysis for Sharia areas and London DID interaction terms. The same control variables are included, but due to complexity of coefficients reading as quadruple foreign born indicator is removed from the model but analysis is run for foreign born individuals separately.

## VI. Estimation Results

The first question of this research is whether British Muslim community or specifically British Muslim women have a disadvantage for economic activities compared with other religious groups because of the existence of Islamic legislation. Table 4 presents regression coefficients for religious dummy variables on labor force participation. Model 1 examines the effect of all religious dummies for all sample; Model 2 and 3 did the same analysis for male and female sub-groups separately. Model 4 assesses only the importance of Muslim dummy without any other control variable for all sample whereas Model 5 and Model 6 did the same analysis again for male and females separately. Model 7 analyzes the effect of Muslim dummy, female dummy and Muslim-female difference-in-difference variables for the all sample.

[Table 4 Here]

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\*Sharia areas are coded as North West because of Manchester, West Midlands because of Birmingham and Coventry and Inner and Outer London because of London. Bradford is ignored since it is around Yorkshire geographically yet it is a huge area to code as Sharia because of one active Sharia court.

Muslim dummy is included in all models as a baseline measure and changes in the coefficients across models to explain why Muslim individuals have lower labor force participation rates than the other religious groups. As Model 2-3-5-6 presented that, this negative effect for Muslims are more significant for female groups. Gender differences in Muslim community are



excluded until Model 7 to examine the net effect of being female and being Muslim on labor force participation. Results indicate that Muslim females are considerably less likely than respondent from other religious groups to participate labor force.

Table 5 considers whether this relationships hold after the control variables added or not. Model 1 stays as Model 7 of Table 1 for some baseline. In Model 2 demographic control variables are added to analysis such as age, ethnicity and nativity followed by socio economic variables notably education and marital status. All three Models have been run for ‘Employed’ dependent variable. Model 1 to Model 3 indicate that Muslim females are still less likely than other religious groups to participate labor force even when considering differences in educational attainment, ethnicity or marital status. Model 4 and Model 5 show the results of same analysis for ‘Labor Force’ and ‘Housework’ dependent variables.

[Table 5 Here]

Respondents with some kind of education level are considerably more likely than their lesser-educated peers to participate in the labor force, and the likelihood is even higher for those with higher education and on the contrary, respondents with higher education level are less likely to stay at home as a housewife. Even though educational attainment has an explanatory impact on women’s labor force decisions, it does not explain why foreign born respondents are less likely to be economically active than native born ones, especially when we think that most of the late immigrants were actually well educated political immigrants instead of guest workers. The effects of marital

status vary by religion, with married respondents more likely to maximize their employment opportunities. This may require more control variables such as household income or the number of children for females at this point for further explanation.

Then I moved the second part of the analysis and estimated a negative effect for foreign born Muslims and Muslim females since they are supposed to be less Western and affected more by conservative Islamic culture before immigration. I created triple difference-in-difference variable along with new double DID variables for nativity. Table 6 presents regression coefficients for DID method for different subgroups also for different dependent variables while keeping control variables from previous analysis.

[Table 6 Here]

Model 1 and 2 did the analysis of Equation 1 for Native and Foreign born sub-groups and indicated that foreign born Muslim females are considerably less likely than native born Muslim females to participate labor force. Model 3 presents triple difference-in-difference coefficients for ‘Employed’ dependent variable; Model 4 and 5 run the same regression for Labor Force’ and ‘Housework’ dependent variables. All Model 3-4 and 5 indicate that native born respondents are more likely than foreign born respondents to participate in the labor force whereas they are less likely to stay at home than foreign born women. It is statistically significant with negative sign that ‘Foreign born Muslim females’ are less likely being part of economic activities in UK. In support to my hypothesis, being new in the society and also in Muslim community which have active Sharia courts, foreign born-Muslim-females

have not double but triple difficulties in UK.

[Table 7 Here]

Table 7 presents coefficients of last regression for this analysis which examines the same indicators with previous Tables but for education, marital status and age sub groups and seeing that each Muslim and female dummy coefficients are negative and statistically significant for all sub-groups. ‘Being Muslim female’ also gives significant results for almost all groups except ‘Age 52-62’ and Single groups. Compared with females from other religions, being Muslim female has no difference for old people or singles. On the other hand, being ‘foreign born-Muslim-female’ gives significance only for young age group (Age 27-37). The results are not reported yet the same models are also run for some of the other religious groups such as Hindu and Jewish, yet the results are not as significant as Muslim group which also supports the initial hypothesis about Muslim females lower labor force participation. The regional analysis with Sharia courts are also run for Hindu group yet again, the results showed no significance.

## **VI.I. Regional Check**

Table 8 presents the regression coefficients for Muslim and Female dummy variables on labor force participation, overall labor force and housework in same way with control variables. However only the region related coefficients are reported in Table 8. From the analyses so far, it is clear that Muslims and females are in relatively disadvantaged position and as Table 8 present, again this negative effect is more significant for Muslim females.

Additionally Sharia Area and London area indicated clear significance with negative sign for Employment and Labor force. The key result is the Sharia area-Muslim-Female coefficient which clearly shows that Muslim female in those areas are less likely be the part of labor force.

[Table 8 Here]

[Table 9 Here]

As mentioned above London area is included into analysis separately since it is a known metropolitan area with heavy multiculturalism and urbanization effects. That's why its results need to be read separately with consideration. It is clear that Muslims in London are less likely a part of labor force yet the Muslim females showed positive significance with might be because of the serious number of female health care workers or well educated higher position female workers in London. This needed some further analysis that's why I run the analysis for foreign born individual group separately to see whether this positive sign might be because of immigrated female workers in London or not. As Table 9 presents the foreign born Muslim females who lives in London are more likely be employed whereas the sign of Sharia area Muslim female coefficient is still negative with 99% of significance. The results for native born group which is presented in Table 10 show similar significance for Sharia area whereas losing its significance for Employed dependent variable which supports the idea of foreign worker effect specifically for London.

[Table 10 Here]

Although Muslim females are less likely be active in economic field, it is clear that the Sharia area resident Muslim females' situation is worse than those living in other parts of the country. Whether they are native born or foreign born, living in the areas close to active Sharia courts have a negative effect on Muslim females' employment decisions.

## **VII. Concluding Remarks**

This paper aims to identify the significance of Islamic factors in determining Muslim women's labor supply in UK. With below-average levels of education, distinct Islamic affiliations with active Sharia courts and low rates of labor force participation, British Muslim women provide a unique case to compare Islamic cultural and legislative effect for women's economic activity. The question is whether Sharia courts in UK have a direct relationship with British Muslim women's work behavior compared with Muslim women from other 'No Sharia court' Western countries.

First, supporting the previous literature, the baseline analysis supplied further evidence of the negative effects of Islam on Muslim women's labor force activities. Adding control variables to the same model, I have showed that education raises the chances of labor participation for women. Higher educated women are more likely to participate to labor force which emphasizes the importance of education investment for girls by families which is actually the lowest for British Muslims compared with other countries.

One of the most important findings of first section concerns the impact of nativity on British Muslim women's labor force; foreign born Muslim females are less likely join labor force. They did not born in UK, and they have exposed to Islamic culture, most probably a more conservative Islamic culture in their

early life, longer than native born Muslim women. Once these Islamic factors are considered in UK, the impact of nativity on Muslim women's labor force participation gets more significant. Yet the results on Housework are quite opposite; less educated or foreign born Muslim women are more likely stay at home. Perhaps the most striking is being in triple disadvantaged position as foreign born Muslim female in UK first time in all literature.

Though without Islamic limitations, the last part of this study pointed to significant differences for Muslim women's labor force participation between Sharia area and rest of the countries in UK. It can be seen for all areas analyzed here; education, ethnicity and cultural effects of Islam have important consequences for Muslim females. The significance of Muslim Females in Sharia areas is noteworthy and suggest promising results for the future studies.

Future work should expand some of the current findings to more representative samples for Muslim women in the West. Most large data sets today, do not contain religion information, birth country, the year of immigration or level of income data for women in almost any country. Future studies should examine whether birth country have similar effect for immigrated Muslim females or not. I estimated the low level of educational attainment for Muslims in UK can be the results of income or socio economic level of household yet lack of data sets did not allow us to examine further. Finally, some of the current regional findings of this study can be expanded with a more representative and city level sample of British Muslim women. Though IPUMS data contain insufficient additional information for further research, today it remains the most available and reliable source for making intra and inter group comparisons related with religion.

As a population growing rapidly, Muslims are indeed part of the Western

communities yet the discrimination and prejudice against Muslims are stronger than other groups. This seems to be affecting Muslim women worse especially in a country where they are not equal in front of law with rest of the society which determines their social activities, education and labor force decisions.

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## **Appendix**

### **Table 1**

## Measurement of Variables in Analysis

Variables	Measures
Labor Force Participation	1 = Employed, 0 = Otherwise
<b>Religious Dummies</b>	
Muslim (M)	1 = Muslim, 0 = Otherwise
Buddhist	1 = Buddhist, 0 = Otherwise
Hindu	1 = Hindu, 0 = Otherwise
Jewish	1 = Jewish, 0 = Otherwise
Christian	1 = Christian, 0 = Otherwise
Others	1 = Others, 0 = Otherwise
<b>Cultural Factors</b>	
Native	1 = Native Born, 0 = Otherwise
Foreign (If)	1 = Foreign Born, 0 = Otherwise
<b>Ethnicity</b>	
White	Reference Category
Black African	1 = Black African, 0 = Otherwise
Black Caribbean	1 = Black Caribbean, 0 = Otherwise
Afro Ecuadorian	1 = Afro Ecuadorian, 0 = Otherwise
Other Black	1 = Other Black, 0 = Otherwise
Chinese	1 = Chinese, 0 = Otherwise
Indian	1 = Indian, 0 = Otherwise
Pakistani	1 = Pakistani, 0 = Otherwise
Bangladeshi	1 = Bangladeshi, 0 = Otherwise
Other Asian	1 = Other Asian, 0 = Otherwise
Mixed Race	1 = Mixed Race, 0 = Otherwise
Two or More Race	1 = Two or More Race, 0 = Otherwise
<b>Educational Attainment</b>	
No Education	Reference Category
Level 1	1 = Level 1, 0 = Otherwise
Level 2	1 = Level 2, 0 = Otherwise
Level 3	1 = Level 3, 0 = Otherwise
Level 4	1 = Level 4, 0 = Otherwise
<b>Marital Status</b>	
Single	Reference Category
Married	1 = Married, 0 = Otherwise
Separated	1 = Separated, 0 = Otherwise
Widowed	1 = Widowed, 0 = Otherwise
Age	In years
Female (F)	1 = Female, 0 = Otherwise
<b>DID Variables</b>	
MxF	1 = Muslim-Female, 0 = Otherwise
IfxF	1 = Foreign Born- Female, 0 = Otherwise
IfxM	1 = Foreign Born-Muslim, 0 = Otherwise
IfxFxM	1 = Foreign Born-Muslim-Female, 0 = Otherwise

Table 2. Summary Statistics for UK, Economic Performance by Religion(Age 27-62)

Panel A.	Native Born- Female							Foreign Born- Female						
	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other
Employed	0.692	0.656	0.793	0.655	0.427	0.659	0.704	0.669	0.500	0.608	0.613	0.227	0.633	0.588
Unemployed	0.034	0.045	0.029	0.027	0.061	0.022	0.042	0.039	0.052	0.037	0.021	0.040	0.038	0.038
Housework	0.146	0.119	0.083	0.161	0.327	0.135	0.110	0.150	0.245	0.162	0.216	0.440	0.147	0.145
Retired	0.032	0.038	0.008	0.064	0.007	0.084	0.023	0.027	0.042	0.059	0.053	0.030	0.059	0.064
Sample	59729	573	662	1810	1912	348604	4285	5039	1102	4237	375	8465	22373	2497
Panel B.	Native Born- Male							Foreign Born- Male						
	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other
Employed	0.814	0.725	0.846	0.852	0.725	0.797	0.829	0.803	0.736	0.809	0.829	0.615	0.785	0.770
Unemployed	0.052	0.078	0.050	0.034	0.105	0.038	0.062	0.051	0.061	0.045	0.051	0.105	0.052	0.053
Housework	0.013	0.008	0.006	0.005	0.021	0.011	0.010	0.012	0.017	0.014	0.013	0.036	0.013	0.010
Retired	0.025	0.022	0.006	0.028	0.002	0.041	0.012	0.020	0.019	0.023	0.013	0.019	0.030	0.022
Sample	81523	873	655	1684	1723	310107	7686	5342	720	4351	375	9757	16658	2548
Panel C.	Native Born- Female/Male Ratio							Foreign Born- Female/Male Ratio						
	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian	Other
Employed	0.850	0.905	0.938	0.769	0.589	0.826	0.849	0.834	0.679	0.751	0.740	0.370	0.806	0.763
Unemployed	0.649	0.583	0.570	0.786	0.583	0.564	0.674	0.770	0.846	0.826	0.421	0.377	0.727	0.720
Housework	11.125	14.800	13.605	33.843	15.222	12.795	10.831	12.490	14.701	11.346	16.200	12.188	11.390	14.207
Retired	1.282	1.764	1.237	2.276	3.154	2.032	1.871	1.313	2.147	2.517	4.000	1.630	1.932	2.864

Table 3. Summary Statistics, Educational Attainment, Marital Status and Nativity by Religion for Females (Age 27-62)

**Panel A. Educational Attainment**

	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian
No Education	0.207	0.209	0.276	0.141	0.500	0.293
Level 1	0.200	0.093	0.121	0.140	0.113	0.202
Level 2	0.184	0.159	0.147	0.201	0.105	0.194
Level 3	0.077	0.081	0.061	0.095	0.052	0.061
Level 4	0.305	0.422	0.360	0.373	0.193	0.200

**Panel B. Marital Status**

	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian
Single	0.346	0.272	0.113	0.198	0.093	0.176
Married	0.451	0.490	0.780	0.647	0.739	0.634
Separated	0.185	0.206	0.062	0.125	0.121	0.156

**Panel C. Nativity**

	No Religion	Buddhist	Hindu	Jewish	Muslim	Christian
Foreign Born	0.073	0.526	0.864	0.169	0.811	0.058
Native Born	0.927	0.474	0.136	0.831	0.189	0.942
Sample	64768	1675	4899	2185	10377	370977

**Table 4. Effects of Religion Dummies on Employed (Baseline Estimation)**

	<i>All Sample</i>	<i>Male Sample</i>	<i>Female Sample</i>	<i>All Sample</i>	<i>Male Sample</i>	<i>Female Sample</i>	<i>All Sample</i>
<b>Key Kontrol</b>	<b>Dummy of Religion</b>			<b>Dummy of Muslim</b>			<b>Double DID</b>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Muslim(M)</b>	-.3041*** (.0033)	-.1741*** (.0041)	-.4320*** (.0051)	-.2707*** (.0031)	-.1590*** (.0039)	-.4004*** (.0048)	-.1590*** (.0043)
<b>Female(W)</b>							-.1382*** (.0009)
<b>MxW</b>							-.2413*** (.0062)
<b>Buddhist</b>	-.0901*** (.0089)	-.0883*** (.0110)	-.0811*** (.0138)				
<b>Hindu</b>	-.0370*** (.0046)	.0011 (.0059)	-.0591*** (.0070)				
<b>Jewish</b>	-.0163** (.0070)	.0358*** (.0090)	-.0442*** (.0103)				
<b>Christian</b>	-.0391*** (.0013)	-.0169*** (.0015)	-.0346*** (.0020)				
<b>Others</b>	-.0456*** (.0020)	-.0343*** (.0014)	-.0517*** (.0031)				
<b>Adj. R<sup>2</sup></b>	0.0088	0.0041	0.0149	0.0077	0.0035	0.0142	0.0349
<b>Observations</b>	962,251	474,503	487,748	962,251	474,503	487,748	962,251

*Note1* : The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

*Note2* : For (1)-(2)-(3) the reference group is 'No Religion'.



**Table 5. Effects of Religion Dummies on Employed, Labor Force and Housework with Control Variables**

	(1)	(2)	(3)	(4)	(5)
		<i>Employed</i>		<i>Labor Force</i>	<i>Housework</i>
<i>Panel A: Controlling for Religious and Gender Dummies</i>					
<i>Muslim(M)</i>	-.1590*** (.0043)	-.1029*** (.0055)	-.0869*** (.0053)	-.0410*** (.0051)	-.0420*** (.0033)
<i>Female(W)</i>	-.1382*** (.0009)	-.1383*** (.0009)	-.1431*** (.0009)	-.1600*** (.0008)	.1254*** (.0005)
<i>MxW</i>	-.2413*** (.0006)	-.2438*** (.0060)	-.2177*** (.0059)	-.2629*** (.0056)	.2555*** (.0036)
<i>Panel B: Controlling for Demographic Variables</i>					
<i>Age</i>		-.0086*** (.00004)	-.0071*** (.00005)	-.0077*** (.00004)	-.0027*** (.00003)
<i>Ethnicity</i>					
<i>Black African</i>		-.1014*** (.0051)	-.1101*** (.0050)	-.0474*** (.0048)	-.0189*** (.0031)
<i>Black Caribbean</i>		-.0441*** (.0044)	-.0089** (.0043)	.0245*** (.0040)	-.0263*** (.0026)
<i>Afro Ecuadorian</i>		-.3143** (.1298)	-.3287*** (.1264)	-.2762** (.1202)	.1903** (.0774)
<i>Other Black</i>		-.0976*** (.0122)	-.0663*** (.0119)	-.0180 (.0113)	-.0102 (.0073)
<i>Chinese</i>		-.0606*** (.0069)	-.0499*** (.0068)	-.0405*** (.0064)	.0037 (.0041)
<i>Indian</i>		-.0050 (.0036)	-.0097*** (.0035)	.0019 (.0033)	-.0158*** (.0021)
<i>Pakistani</i>		-.8940*** (.0062)	-.0813*** (.0060)	-.0746*** (.0057)	.0505*** (.0037)
<i>Bangladeshi</i>		-.1444*** (.0086)	-.1129*** (.0084)	-.0873*** (.0080)	.0672*** (.0051)
<i>Other Asian</i>		-.0461*** (.0069)	-.0651*** (.0067)	-.0457*** (.0064)	-.0045 (.0041)
<i>Mixed Race</i>		-.1700*** (.0364)	-.1613*** (.0354)	-.1520*** (.0337)	.0164 (.0217)
<i>Two or More Race</i>		-.0832*** (.0020)	-.0761*** (.0019)	-.0487*** (.0051)	.0052 (.0033)
<i>Nativity</i>		.0222*** (.0027)	.0477*** (.0019)	.0428*** (.0018)	-.0221*** (.0012)

**Table 5. Effects of Religion Dummies on Employed, Labor Force and Housework with Control Variables (Cont.)**

*Panel C: Controlling for Socio-Economic Variables*

<b>Education</b>					
<i>Level 1</i>			.1436*** (.0013)	.1335*** (.0012)	-.0267*** (.0008)
<i>Level 2</i>			.1703*** (.0013)	.1569*** (.0012)	-.0418*** (.0008)
<i>Level 3</i>			.1868*** (.0019)	.1710*** (.0018)	-.0561*** (.0011)
<i>Level 4</i>			.2198*** (.0012)	.1950*** (.0012)	-.0704*** (.0007)
<b>Marital Status</b>					
<i>Married</i>			.1077*** (.0011)	.0726*** (.0011)	.0439*** (.0007)
<i>Separated</i>			.0479*** (.0015)	.0439*** (.0014)	.0192*** (.0009)
<i>Widowed</i>			-.0576*** (.0031)	-.0820*** (.0030)	-.0033* (.0019)
<b>Adj. R<sup>2</sup></b>	0.0349	0.0758	0.1239	0.1357	0.0886
<b>Observations</b>	962,251	962,251	962,251	962,251	962,251

*Note :* The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 6. Effects of DID on Employed, Overall Labor Force and Housework**

*Panel A: Controlling for Religious and Gender Dummies*

	(1)	(2)	(3)	(4)	(5)
	<i>Employed</i>	<i>Employed</i>	<i>Employed</i>	<i>Labor Force</i>	<i>Housework</i>
	<i>Native Born</i>	<i>Foreign Born</i>		<i>All Sample</i>	
<b>Muslim(M)</b>	-.0751*** (.0127)	-.0912*** (.0064)	-.1058*** (.0108)	-.0567*** (.0103)	-.0346*** (.0066)
<b>Female(W)</b>	-.1421*** (.0009)	-.1555*** (.0034)	-.1420*** (.0009)	-.1592*** (.0009)	.1246*** (.0005)
<b>MxW</b>	-.1599*** (.0140)	-.2190*** (.0075)	-.1592*** (.0104)	-.1818*** (.0134)	.1713*** (.0086)

*Panel B: Controlling for Difference-in-Difference Variables*

<b>Foreign Born (F)</b>			-.0388*** (.0027)	-.0344*** (.0026)	.0131*** (.0016)
<b>FxW</b>			-.0149*** (.0033)	-.0119*** (.0032)	.0119*** (.0020)
<b>FxM</b>			.0147 (.0114)	.01118 (.0109)	-.0015 (.0070)
<b>FxWxM</b>			-.0576*** (.0158)	-.0884*** (.0150)	.0926*** (.0096)
<b>Adj. R<sup>2</sup></b>	0.1178	0.1606	0.1239	0.1357	0.0888
<b>Observations</b>	876,741	85,510	962,251	962,251	962,251

*Note* : The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 7. Effect of DID on Employed for Subgroups**

	Model 1			Model 2			Model 3	
Panel A: Controlling for Religious and Gender Dummies								
	No Education	Low Education	Higher Education	Single	Married	Divorced	Age 27-37	Age 52-62
Muslim(M)	-.1424*** (.0277)	-.0754*** (.0184)	-.0900*** (.0147)	-.1227*** (.0192)	-.1087*** (.0143)	-.1026** (.0424)	-.0997*** (.0108)	-.1150** (.0463)
Female(W)	-.1814*** (.0020)	-.1410*** (.0014)	-.0833*** (.0015)	-.0766*** (.0018)	-.1703*** (.0012)	-.1070*** (.0025)	-.1364*** (.0012)	-.1283*** (.0016)
MxW	-.1823*** (.0351)	-.2204*** (.0226)	-.0994*** (.0198)	-.0075 (.0263)	-.2189*** (.0181)	-.1345*** (.0503)	-.1597*** (.0137)	-.0445 (.0609)
Panel B: Controlling for Difference-in-Difference Variables								
Foreign Born (F)	-.0069 (.0074)	-.0298*** (.0053)	-.0401*** (.0033)	-.0654*** (.0049)	-.0425*** (.0036)	-.0227** (.0089)	-.0575*** (.0032)	-.0034 (.0054)
FxW	-.0211** (.0085)	-.0085 (.0065)	-.0542*** (.0042)	.0457*** (.0068)	-.0465*** (.0043)	-.0019 (.0102)	-.0088** (.0041)	-.0385*** (.0061)
FxM	.0156 (.0286)	-.0001 (.0204)	.0053 (.0156)	-.0053 (.0222)	.0138 (.0148)	.0238 (.0462)	.0599*** (.0117)	.0287 (.0473)
FxWxM	-.0317 (.0375)	.0363 (.0276)	-.0540** (.0230)	-.0236 (.0353)	.0095 (.0199)	-.0226 (.0559)	-.1015*** (.0161)	-.0812 (.0625)
Adj. R <sup>2</sup>	0.0884	0.0565	0.0652	0.1418	0.1365	0.1295	0.1166	0.0760
Observations	262,874	356,949	277,694	218,398	534,172	144,947	509,494	388,023

Note1 : The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note2 : The dependent variable for all Model 1, Model 2 and Model 3 is 'Employed' dummy.

Note3 : Model 1 is run for Education subgroups , while Model 2 is for Marital Status subgroups and Model 3 is for Age groups separately.

Note4 : For Divorced subgroup Separated and Widowed individuals are considered as one group.

**Table 8. Regional Effects of Sharia Courts as DID on Employed, Overall Labor Force and Housework**

	(1)	(2)	(3)
	<i>Employed</i>	<i>Labor Force</i>	<i>Housework</i>
<b><i>Muslim(M)</i></b>	-.0668*** (.0075)	-.0293*** (.0071)	-.0429*** (.0046)
<b><i>Female(W)</i></b>	-.1473*** (.0011)	-.1628*** (.0010)	.1281*** (.0007)
<b><i>Muslim(M) x Female(W)</i></b>	-.2342*** (.0097)	-.2670*** (.0092)	.2625*** (.0059)
<b><i>Sharia Area</i></b>	-.0140*** (.0016)	-.0091*** (.0015)	.0004 (.0010)
<b><i>Sharia Area x Female</i></b>	.0146*** (.0022)	.0096*** (.0021)	-.0132*** (.0014)
<b><i>Sharia Area x Muslim</i></b>	-.0227** (.0104)	-.0126 (.0099)	-.0037 (.0064)
<b><i>Sharia Area x MuslimxFemale</i></b>	-.0294* (.0152)	-.0482*** (.0144)	.0532*** (.0093)
<b><i>London</i></b>	-.0086*** (.0020)	-.0045** (.0019)	.0089*** (.0093)
<b><i>London x Female</i></b>	.0083*** (.0027)	.0045* (.0026)	.0019 (.0017)
<b><i>Londonx Muslim</i></b>	-.0861*** (.0094)	-.0634*** (.0089)	.0206*** (.0057)
<b><i>Londonx MuslimxFemale</i></b>	.0844*** (.0134)	.0644*** (.0127)	-.0585*** (.0082)
<b>Adj. R<sup>2</sup></b>	0.1234	0.1349	0.0894
<b>Observations</b>	966,849	966,849	966,849

*Note :* The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 9. Regional Effects of Sharia Courts as DID on Employed, Overall Labor Force and Housework- Foreign Born Individuals**

	(1)	(2)	(3)
	<i>Employed</i>	<i>Labor Force</i>	<i>Housework</i>
<b><i>Muslim(M)</i></b>	-.0639*** (.0092)	-.0208** (.0088)	-.0508*** (.0061)
<b><i>Female(W)</i></b>	-.1668*** (.0049)	-.1733*** (.0047)	.1445*** (.0033)
<b><i>Muslim(M) x Female(W)</i></b>	-.2358*** (.0123)	-.2797*** (.0117)	.2667*** (.0081)
<b><i>Sharia Area</i></b>	-.0507*** (.0079)	-.0302*** (.0076)	.0023 (.0053)
<b><i>Sharia Area x Female</i></b>	.0324*** (.0108)	.0164 (.0103)	-.0172** (.0072)
<b><i>Sharia Area x Muslim</i></b>	.0035 (.0143)	.0001 (.0136)	-.0084 (.0095)
<b><i>Sharia Area x MuslimxFemale</i></b>	-.0433** (.0207)	-.0533*** (.0197)	.0624*** (.0137)
<b><i>London</i></b>	-.0350*** (.0053)	-.0171*** (.0050)	.0142*** (.0035)
<b><i>London x Female</i></b>	.0152** (.0070)	.0006 (.0067)	-.0073 (.0047)
<b><i>Londonx Muslim</i></b>	-.0758*** (.0116)	-.0592*** (.0111)	.0194** (.0077)
<b><i>Londonx MuslimxFemale</i></b>	.0908*** (.0166)	.0762*** (.0158)	-.0540*** (.0110)
<b>Adj. R<sup>2</sup></b>	0.1569	0.1714	0.1770
<b>Observations</b>	89,883	89,883	89,883

*Note :* The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

**Table 10. Regional Effects of Sharia Courts as DID on Employed, Overall Labor Force and Housework- Native Born Individuals**

	(1)	(2)	(3)
	<i>Employed</i>	<i>Labor Force</i>	<i>Housework</i>
<b>Muslim(M)</b>	-.0831*** (.0180)	-.0366** (.0171)	-.0115 (.0109)
<b>Female(W)</b>	-.1463*** (.0011)	-.1622*** (.0010)	.1273*** (.0007)
<b>Muslim(M) x Female(W)</b>	-.1609*** (.0220)	-.1876*** (.0209)	.1863*** (.0134)
<b>Sharia Area</b>	-.0129*** (.0016)	-.0086*** (.0015)	.0005 (.0010)
<b>Sharia Area x Female</b>	.0136*** (.0022)	.0092*** (.0021)	-.0128*** (.0014)
<b>Sharia Area x Muslim</b>	.0105 (.0245)	.0134 (.0233)	.0061 (.0149)
<b>Sharia Area x MuslimxFemale</b>	-.0500 (.0339)	-.0600* (.0322)	.0406** (.0206)
<b>London</b>	-.0007 (.0022)	.0008 (.0021)	.0077*** (.0013)
<b>London x Female</b>	.0139*** (.0031)	.0108*** (.0029)	-.0001 (.0019)
<b>Londonx Muslim</b>	.0013 (.0244)	-.0259 (.0232)	.0070 (.0148)
<b>Londonx MuslimxFemale</b>	.0436 (.0333)	.0680** (.0317)	-.0754*** (.0202)
<b>Adj. R<sup>2</sup></b>	0.1180	0.1299	0.0753
<b>Observations</b>	876,966	876,966	876,966

*Note :* The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

# **Regional Conservatism and Labor Decisions of Females in Turkey: Comparisons of Generations**

Gozde Gozlet<sup>3</sup>

## **Abstract**

This analysis begins with examining whether there is a regional differences for women's labor decisions in Turkey by using data from Demographic and Health Survey for the years 1993, 1998, 2003, 2008 and 2013. In the first part of the analysis, the extent to how conservative and non-conservative regions shows different characteristics influence women's labor force activity was examined by comparing to birth cohorts. In the last part, using difference-in-difference framework this paper also highlighted regional migration effects on employment differentials of young cohort Turkish females. This paper shows that even though effect of modernization gets stronger over the years, yet young Turkish females have lower labor force participation compared to older generations if they live in a conservative area of Turkey.

Keywords: female labor force participation, Turkey, regional conservatism, birth cohort, migration

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## **I. Introduction**

After Ottoman Empire, the Turkish republic has founded in 1923 as a democratic, secular state with no official religion even though the population is predominantly Muslim. Mustafa Kemal Atatürk, the father of modern Turkish republic, introduced several new ideas such as illegalization of polygamy and the establishment of equality in divorce, and women's right to vote. Today, Turkey is a case study due to their representation of differences within the region in terms of the creation of the secular state which was the first ever in a Muslim country. Turkish laws grants women many freedoms but traditional attitudes about women still prevail, particularly in Eastern regions and the expected economic benefits of women have remained low. It is generally agreed that conservatism in Turkey is on rise, but it is not easy to prove it statistically. This study aims to investigate the reasons of low FLFP rate in Turkey, taking into consideration religious, regional, demographic, and educational factors focusing on the differences between generations.

This paper assumes that the environment plays a major role in the decision-making process of women. Up to a certain age, parents make the decisions about household and educational attainment, and later their husbands will most likely have the same norms as her father in a conservative society. Although, here, I give general information on FLFP in Turkey, using difference-in-difference framework and 'Demographic and Health Survey' data of Hacettepe University, I found that women from young birth cohorts in traditionally conservative areas are less likely participating labor force in Turkey.

In addition to the main determinants found in previous literature, this paper simply focuses on regional conservative differences instead of urban-rural

specification. The results are surely in accordance with the previous literature in emphasizing that urbanization and education level play an important role in the labor participation decisions of women, yet these factors are not sufficient to explain the lower female labor force participation for young cohorts. This paper presents a new concept by showing that living in traditionally conservative areas of Turkey have a negative effect on younger generation regardless of education level.

This paper is organized as follows. In Section II, a brief description about Turkey and female labor force dynamics are given. In Section III, I introduced related literature and the background of this study, followed by Section IV which explains the data, variables and estimation methods. In Section V, I present the results of estimation, followed by conclusion, I summarized and suggested avenues for future research.

## **II. Trends of Conservatism and Women's Labor Force Participation in Turkey**

The Republican reforms after 1923 are generally viewed as a positive effect on women's lives, although the benefits were not enjoyed equally by the entire female population (Berkay 1995, Erman 1998). Today, Turkey has a sizable highly educated and economically active middle class population which enjoys the modernization process. However, there is a large group of uneducated women in the countryside who are still heavily under the influence of traditional values. Historically, West is the most advanced, and urbanized region in which the infrastructure necessary for regional development was built up there earlier than in the other parts of Turkey whereas East is the least

developed region (Gunduz-Hosgor and Smits 2006, 2007, Gedikli 2014).

Urbanization has been accelerated since 1950 and still carries on by increasing its speed and women's labor force participation rates in urban areas have been diminished dramatically. Since 1980s, government prioritized the interests of consumers above producers in their policies regarding agriculture and this change increased poverty in rural areas and the increased violence and terrorism in the Eastern parts of the country caused some of the rural populations of these areas to migrate to cities in the western part of the country (Bicerli and Gundogan, 2009).

In countries with low levels of female employment, families often under-invest in girl's education also females' chances of getting an education differ more by region than they do for males (Tansel 2002). However, migrant families in general want to educate their children because even though education has little impact on labor force participation in rural areas, they experienced how important it is in urban areas since most of migrant women had to work in low paying jobs with no social security. Therefore it is natural to expect a rising trend for younger generations for educational and employment statistics.

However, an entire generation has passed, which is sufficient time to give women the opportunity to be integrated into the urban labor market, and one would expect an increase in FLMP, particularly as access to education has increased (Patterson, 2013). Women are becoming more educated; and fertility rates are declining yet, the participation of women in the labor force has seen a declining trend, from 34.3% in 1988 to 29.5% in 2012 in Turkey (Dildar, 2015).

### **III. Literature Review**

The idea of explaining economic outcomes by social norms, religion and tradition is not new in the literature. The recent papers started to investigate the relationship between religion and economic performance (McCleary and Barro, 2006), and the relationship between social norms and female labor force participation since the beginning of new millennium (Fernandez and Fogli, 2004). In the literature, it is mostly argued that age, years of schooling, marital status, the presence of children matter for women's employment (Dayioglu and Kirdar 2010). Many researchers emphasized the importance of education (Tansel, 2002; Baslevent & Onaran 2003; Gündüz-Hoşgör & Smits, 2008). Empirical evidence on the effect of education on female labor force participation in Turkey shows a positive effect which is larger at higher education levels (Tansel, 1998) yet some others argued that the case is not as simple in the Middle East (Patterson, 2013).

Despite the restructuring of the Turkish economy from agriculture to industry, generally migration from rural to urban negatively affected the female participation rate more than males (Palaz 2005). For the rural women, usually there was not much change, because the modernization attempts were blocked by the religious leaders and lack of schooling infrastructures (Gunduz-Hosgor & Smiths, 2007). Statistics also confirm that there is a positive relationship between education level and labor force participation for the women who live in urban areas (Tansel, 2002). Low educated women usually work at domestic cleaning, child minding or home-working and thus become members of the informal sector (Ecevit 2003). Taymaz (2010) examines the labor force participation probabilities of men and women in urban areas using a multinomial logistic model and finds that education improves the participation

of women in all types of employment but that the strongest effect is seen in service employment.

Göksel (2013) finds that the conservatism variable has a negative effect on women's participation decision in urban areas and a positive effect in rural areas. Cinar (1994, p.378) conducted a survey of home-working migrant women in Istanbul and majority of them reported that their father/ husband did not permit them to work for wages before (64.28%) and even after marriage (54.35%). Men tend to perceive women's employment as a threat to their traditional role as the "head of the family". As in other Muslim countries, women's sexual conduct in Turkey is still related to the family's honor, and that it should be controlled by men as heads of the family (Erman, Kalaycioglu and Rittersberger, 2002). Gündüz-Hosgör & Smits (2008) find that women who are more strongly controlled by their families, as indicated by the fact that brides money was paid at their weddings or that they have only a religious marriage, have a higher probability of being housewives. However, the longer women have lived in a city environment, the more chance they have of working in the formal economy.

According to Fraker and Ozdemir, 2011, Turkey does not experience the pressure of religion on FLFP as much as other Muslim countries and the U-curve hypothesis seems to give a good explanation for the low participation rates of women in Turkey. However, it does not explain why women's LMP is lower than in other regions at similar levels of development (Forsythe et al., 2000; Morrison & Jutting, 2005). Compared to Turkey, less developed countries with more religious views, such as Iran, Iraq, or Morocco have much higher FLFP rates.

Dayioglu & Kirdar (2011) examine the labor supply behavior of women

using cohort analysis. Controlling for age and time effects they find that younger cohorts of women are more likely to participate in the labor market than older cohorts in urban areas. In the later part of this paper, I tried to close this gap between this cohort analysis and regional conservatism for Turkey.

#### **IV. Data and Methodology**

Women's low participation rates are generally explained by human capital variables, while the role of traditional values and culture are ignored. To test whether there are differences between regions and generations and in order to determine the correlates of labor force participation, I use data from Demographic and Health Survey for the years 1993, 1998, 2003, 2008 and 2013. No panel data set is currently available for Turkey, yet this survey is a nationally representative survey of 40,322 individuals in total age 15-49. It provides data on women's education, labor status, marital status, conservative opinions, and parents educational attainment. It also allows me to analyze the regional origin of individuals along with their childhood region.

In order to investigate whether social norms and culture provide an additional explanation for the low and stagnant participation rates of women between regions of Turkey, I divided cities as Conservative and Non-Conservative by collecting questions related with traditional and conservative ideas. First I checked the number of people who agree with these questions for each city. Then I divided this number with the population of that city. If the ratio is high the city is coded as Conservative area (top 50 cities out of 81). The questions are listed below.

- Performing Namaz
- Marriage arranged

- Bride money paid
- Beating can be justified
  - if wife goes out without telling husband
  - if wife neglects children
  - if wife argues with husband
  - if wife refuses to have sex with husband
  - if wife burns the food
- Opinion on
  - Family decisions should be decided by men
  - Educated son better than educated daughter
  - Women should not work
  - Women should be virgin at the wedding night
- Situation
  - Husband prevent wife from seeing female friends
  - Husband limit wife's contact with her family

[Table 1 Here]

As Table 1 provides, there are clear differences between regions in terms of working status and educational attainment as educational attainment and rate of being employed are always higher in Non-Conservative area. I estimate the following regression model to see the regional differences but age, urbanization, education, marital status, wealth and some household related determinants,  $R_i$ , such as number of children, whether mother and father is literate or not are included as explanatory variables, in addition to the main

determinants found in the previous literature. The term ‘Employed’ is the key dependent variable and refers to a situation in which individuals either employed currently (=1) or not.  $year_i$  is the year of survey conducted as a fixed effect.  $Conreg_i$  represents whether the region is Conservative or not. Since my main concern is young cohort’s employment status in conservative areas, I added a difference in difference indicator in the last part of this estimation. The birth cohorts are divided according to the dates of military coups in Turkey, 1960 and 1980, since Turkey had experienced some social and economic changes caused by new constitutions after both coups. In the equation below,  $Y_i$  denotes the variable of current employment status.  $Cohort_i$  is the birth cohort variables and  $CRxCohort_i$  is the DID indicator which refers to the young cohort or middle cohort who lives in conservative area.

$$Y_i = \delta_1 + \delta_2 Conreg_i + \delta_3 Cohort_i + \delta_4 CRxCohort_i + \delta_5 X_i + \delta_6 R_i + \delta_7 year_i + u_i$$

The model is run for all sample to control family conservatism and religious determinants, later I did the same analysis for each survey year separately by excluding Mother and Father literate data to keep more individual into analysis for earlier years. However, the results are not as explanatory as the full sample because of smaller number of individuals and missing data, that’s why I decided not to report the results in here for further analysis.

Throughout the literature it is claimed that urbanization plays an important role in the decreasing trend of female labor force participation and conservatism (Goksel, 2012). Also migration is a major issue in Turkey since 1950s and migrated individuals’ socioeconomic level and labor decisions are requires a



totally different study, yet because of the nature of this study the real effect of conservative area might be also related with migration, since people also carry their conservative and traditional ideas even after immigration. In order to confirm this theory, in the second part of the study I added migration related control variables in to the regression.

By controlling childhood city and current resident city of individuals I made a new variable for migration. First the same analysis is carried out with the migration dummy variable from conservative areas to the three major cities of Turkey, Istanbul, Ankara and Izmir. Later I made 4 different migration dummy for individuals migrated from; Non-Conservative area to Non-Conservative area, Conservative area to Conservative area, Non-Conservative area to Conservative area and Conservative are to Non-Conservative area. This analysis is also run for each birth cohort separately to see immigration and urbanization affect clearly on regional base.

In the equation below,  $MB_i$  denotes the whether individual migrated from conservative area to major cities and  $M_i$  refers the other four different type of migrated individual groups.

$$Y_i = \delta_1 + \delta_2 Conreg_i + \delta_2 Cohort_i + \delta_3 CRxCohort_i + \delta_3 X_i + \delta_4 year_i + \delta_5 MB_i + \delta_6 M_i u_i$$

The issue in this empirical specification is the potential endogeneity problem. While conservative values may have an impact on women's employment, it is also possible that women's employment affects these values. Similarly conservative area may have an impact on women's employment, it is also possible that women's employment decisions affected the area to become

more and more conservative over the years. The data sets unfortunately do not enable us to distinguish between the two effects (Gedikli, 2014). Connelly, DeGraff, Levison, and McColl (2006) conclude that researchers must either choose to investigate the relationship in a reduced form or take the risk of endogeneity bias. In this study, I choose to take the risk of endogeneity bias by including the proxies for family norms and performing migration into the analysis.

## **V. Empirical Results**

The first question of this research is whether there is difference for women's employment between regions of Turkey because of the traditional Islamic conservatism. Using a large individual level data set, I determine the effect of characteristics of these regions for different birth cohorts on being in labor force. Table 2 presents regression coefficients for conservative region dummy variables on labor force participation. Model 1 examines the effect of region dummies controlling for Non-Conservative area with birth cohorts as old (1944-1960), middle (1961-1979) and young cohort (1980-1998), year fixed effect, with control variables for all sample. In Model 2, region-birth cohort indicators are added and Model 3-4-5 assesses the importance of having children or literate mother for females by doing the same analysis only by adding household control variables.

[Table 2 Here]

As all the models presented, there is a clear difference between

Conservative and Non-Conservative areas of Turkey. The coefficient estimates indicate that in Conservative areas, women are less likely working in a paid job. Model 2 to Model 4 indicate that the difference between East and West regions from previous literature is valid for different birth cohorts. Respondents with some kind of education level are considerably more likely than their lesser-educated peers to participate in the labor force, and the likelihood is even higher for those with higher education. As all Models showed, urbanization is negatively significant for employment of women which supports the previous literature's findings. Model 3-4-5 considers whether this relationships hold after the household control variables added or not. In Model 3 socioeconomic control variable, Wealth is added, followed by number of children and mother-father literacy. They indicate that number of children affects women's labor participation negatively whereas having a literate mother has a positive effect on labor decision of women. The effects of marital status vary by birth cohort, with divorced respondents more likely to maximize their employment opportunities. It is clear that young cohort who lives in Conservative area shows 99% significance whereas middle cohort coefficients show no such significance.

[Table 3 Here]

Then in the second part of my analysis, using difference-in-difference framework, I estimated a negative effect for migration effects on employment differentials of young Turkish females if they migrate from conservative area to three biggest cities of Turkey since they are expected to be more conservative because of years of Islamic culture and also because of the sudden effect of

urbanization. The results for the migration dummy variable from conservative areas and also from non-conservative areas to the three major cities of Turkey, Istanbul, Ankara and Izmir are presented in Table 3. The significance for young females who lives in conservative area still holds while the coefficient of migration to big cities shows negative significance for both conservative and non-conservative area migrations meaning urbanization effect of these three cities might be stronger than the effect of traditional conservatism in there. It is clear that migrated individuals in these cities are suffering from some other type of obstacles such as lack of education, security concerns or household conservatism from family or husband. Yet the migrated women from conservative area are less likely to be working compared to non-conservative area migrants which is another sign that conservative area women carries more traditional burdens when migrating to those three cities.

However migrating to only these three cities is a special case that's why I made 4 other different migration dummy for individuals migrated from; Non-Conservative area to Non-Conservative area, Conservative area to Conservative area, Non-Conservative area to Conservative area and Conservative area to Non-Conservative area. I also run the analysis for different birth groups to avoid so much interaction coefficients in the model. Table 4 presents regression coefficients for alternative migration dummies while keeping control variables from previous analysis.

[Table 4 Here]

Almost all models are overall statistically significant with negative sign and have high R –squares for migration dummies for all birth subgroups which

means that any type of migration has a negative effect on females' employment, still migration from Conservative area to Non-Conservative area has the lowest compared with other dummies. Model 2, 3 and 4 shows the same regression results for different birth subgroups and indicate that respondents who migrated are less likely to join labor force. Regression coefficients for migration dummies are statistically significant with negative sign for old and middle birth cohort that 'older women who migrated' are less likely being part of economic activities in Turkey. In support to my hypothesis, living in conservative parts of country affected young generations more than it did older cohorts and even though migration has some kind of negative effect on younger women still migrating to from Conservative areas Conservative areas has negative effect for these young individuals.

As expected, age and education have positive and highly significant effect, while the relationship between marital status and female participation reveals that divorced women have much higher participation rates than married young women. The fact that in the conservative area which is generally the eastern part of the country more women are not employed may be related to their lower educational level, their more traditional family background or the region's more conservative history. Previous research indicated the disadvantaged position of women in the east in terms of social and economic well-being. Also, the highest shares of wage workers are seen Marmara and Aegean reflecting the better socio-economic conditions in these regions (Gunduz Hosgor and Smits, 2007). Overall the results presented so far show that there are important differences among women from different cohorts in different areas of Turkey in terms of their labor market situations.

The results can be considered as a clear indication of changing

composition of the labor force for younger cohorts. Regression coefficients for conservative area are all significant and the young cohort coefficients show statistical significance for all dependent variables with positive sign, on the other hand DID coefficients are still supporting my main hypothesis. This means compared to middle cohort, young women still less likely to be active in economic life whereas migration has a negative effect on almost all migrated women. Young females who migrated from Conservative area to Conservative area are less likely change the traditional conservative attitudes and join labor force which is another support for my hypothesis about younger generations.

## **VI. Concluding Remarks**

This paper aims to identify the significance of regional conservatism in determining young generation women's labor supply in Turkey. With lots of modernization reforms and government support of education and labor participation, distinct Islamic affiliations with conservative traditions and low rates of labor force participation, Turkish young women provide a unique case to compare Islamic traditions and regional effect for economic activity.

Economically active women provide not only their families more economic independence, but also increases standard of living and reduce poverty among women and children. Unfortunately, the secular modernization reforms have partly helped urban women to achieve a higher quality of life, but it has rarely benefited rural women. Even after migrating to big cities or to western part of the country, those women are still disadvantaged in the city. They are highly dependent on their husbands economically or have to work in low pay jobs with no social security. However, since 1950s a whole generation

past yet the FLFP rates are still low in Turkey especially for young women.

Environment affects women's life and behavior differently than men. In conservative and traditional environments which have stronger social norms, women usually tend to stay at home. There are differences between regions in terms of traditional gender roles for women and my hypothesis is that living in a traditionally conservative area is affecting younger generations' labor decisions more than it does older women.

This paper makes two important contributions. First, I address the difference between regions of Turkey by using a large individual data set with number of control variables. Supporting the previous literature, the baseline analysis supplied further evidence of the negative effects of Conservative areas which are mostly Eastern regions of Turkey, on women's labor force activities. Adding control variables to the same model, I have showed that education raises the chances of labor participation for women which emphasizes the importance of education investment for girls by families and importance of investment for Eastern regions by government. Policy makers should be aware that ignoring the effect of regional traditions and customs in Turkey can act as a brake on the usefulness and effectiveness of the policies and more importantly on infrastructure investments in these regions. So, there is a positive relationship between an increased level of education and women's participation to labor force, as it helps finding a job and it weakens conservatism, as shown in this study. Having a literate mother also increases women's participation to labor force whereas having kids has a clear negative effect on female employment.

Second, I used different types of migration dummies in analyzing the effects of regional migration between Conservative and Non-Conservative areas and birth cohort on female labor force participation. Results highlighted

the negative effect of migration on female labor force participation regardless of age and level of education yet I can also conclude that young women who migrated from Conservative area to Conservative area are still not capable of escape from this negative effect and they are less likely to join labor force.

To summarize, the results show that, even after controlling for the main determinants of female employment, such as age, education, and marital status, there is still a link between the traditional or conservative social norms and employment outcomes in Turkey. Even though modernization and access to education and other resources become easier by each day, yet Turkey's FLFP rates are not increasing for young generations. Young cohorts' poor performance compared to older cohorts' and the negative trend in FLFP might be caused by factors such as traditions and conservatism which is shown that regional conservatism negatively affects the job market decisions of young generations negatively. Having any level of education especially university level higher education has a positive correlation with younger women's employment decision than it has with older cohorts.

Using TDHS surveys, it is shown that, although it is decreasing in prevalence over time, a considerable amount of women continue to internalize regional traditions about gender roles but migration to Non-Conservative areas may remove the effect of these traditions for younger generations. Future work should expand some of the current findings to more representative samples for Turkish women especially in the east. Most data sets today, do not contain nature of employment, year or the reason of immigration, and level of individual income data for women in Turkey.



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## Tables

**Table 1. Summary Statistics for Economic Performance and Education by Conservative/Non-Conservative Regions**

	<b>Non-Conservative</b>	<b>Conservative</b>
<b>Working</b>	0.378	0.321
<b>No Education</b>	0.106	0.242
<b>Primary Education</b>	0.519	0.476
<b>Secondary Education</b>	0.244	0.198
<b>Higher Education</b>	0.131	0.084
<b>Sample</b>	18099	22222

**Table 2. Estimation Results for Employed, Controlling for Regions and Birth Cohorts and DID Dummy Variables**

	(1)	(2)	(3)	(4)	(5)
<b>Region</b>					
Conservative	-.0583*** (.0046)	-.0567*** (.0105)	-.0417** (.0197)	-.0259 (.0197)	-.0252 (.0197)
<b>Birth Cohort</b>					
1961-1979 (Mid-Cohort)	.1005*** (.0091)	.0953*** (.0109)	.1211*** (.0169)	.1227*** (.0169)	.1219*** (.0169)
1980-1998 (Young Cohort)	.0997*** (.0150)	.1168*** (.0168)	.1475*** (.0227)	.1495*** (.0227)	.1483*** (.0227)
Conservative x Mid Cohort	...	.0092 (.0120)	-.0071 (.0209)	-.0143 (.0209)	-.0129 (.0209)
Conservative x Young Cohort	...	-.0280** (.0138)	-.0427** (.0218)	-.0589*** (.0219)	-.0568*** (.0219)
<b>Age</b>	.0084*** (.0005)	.0084*** (.0005)	.0084*** (.0006)	.0095*** (.0006)	.0096*** (.0006)
<b>Type of Residence</b>	-.2362*** (.0050)	-.2364*** (.0050)	-.1614*** (.0066)	-.1643*** (.0066)	-.1642*** (.0066)
<b>Education</b>					
Primary	.0434*** (.0062)	.0445*** (.0062)	.0329*** (.0083)	.0116 (.0087)	.0077 (.0089)
Secondary	.0600*** (.0077)	.0607*** (.0077)	.0764*** (.0103)	.0497*** (.0108)	.0408*** (.0112)
Higher Education	.2805*** (.0092)	.2811*** (.0092)	.2609*** (.0117)	.2295*** (.0124)	.2173*** (.0130)
<b>Marital Status</b>					
Married	-.0081 (.0085)	-.0074 (.0085)	.1219*** (.0117)	.1350*** (.0118)	.1353*** (.0118)
Separated	.0859*** (.0139)	.0866*** (.0139)	.1978*** (.0174)	.2021*** (.0174)	.2025*** (.0174)
<b>Wealth</b>			.0269*** (.0067)	.0308*** (.0067)	.0339*** (.0068)
<b>Number of Children</b>				-.0150*** (.0019)	-.0147*** (.0019)
<b>Mother Literate</b>					.0257*** (.0066)
<b>Father Literate</b>					-.0059 (.0077)
Constant	0.1706	0.1693	-0.2765	-0.2739	-0.2809
Adj. R <sup>2</sup>	0.1409	0.1411	0.1652	0.1672	0.1677
Observations	40,321	40,321	25,226	25,226	25,226

Note1: The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note2: The control variable for Region is 'Non-Conservative', for birth cohort is 'Old Cohort', for education is 'No Education', for marital status is 'Single'.

**Table 3. Estimation Results for Employed, Controlling for Regions and Birth Cohorts, DID Dummy Variables and Migration to Major Big Cities**

	(1)	(2)	(3)	(4)	(5)
<b>Region</b>					
Conservative	-.0683*** (.0058)	-.0496*** (.0144)	-.0443** (.0201)	-.0287 (.0202)	-.0278 (.0202)
<b>Birth Cohort</b>					
1961-1979 (Mid-Cohort)	.1331*** (.0105)	.1373*** (.0131)	.1241*** (.0171)	.1257*** (.0171)	.1251*** (.0171)
1980-1998 (Young Cohort)	.1403*** (.0164)	.1647*** (.0187)	.1529*** (.0229)	.1547*** (.0229)	.1537*** (.0229)
Conservative x Mid Cohort	...	-.0097 (.0155)	-.0079 (.0211)	-.0149 (.0211)	-.0138 (.0211)
Conservative x Young Cohort	...	-.0431*** (.0167)	-.0463** (.0220)	-.0619*** (.0220)	-.0602*** (.0220)
Migrated from Non-Conservative Area to Three Major Cities	-.0272*** (.0090)	-.0273*** (.0090)	-.0052 (.0106)	-.0056 (.0106)	-.0065 (.0106)
Migrated from Conservative Area to Three Major Cities	-.0440*** (.0107)	-.0424*** (.0107)	-.0328*** (.0122)	-.0304** (.0122)	-.0282** (.0122)
<b>Age</b>					
	.0091*** (.0005)	.0091*** (.0005)	.0084*** (.0006)	.0094*** (.0006)	.0095*** (.0006)
<b>Type of Residence</b>					
	-.1956*** (.0056)	-.1959*** (.0056)	-.1607*** (.0067)	-.1636*** (.0067)	-.1636*** (.0067)
<b>Education</b>					
Primary	.0475*** (.0070)	.0488*** (.0070)	.0329*** (.0083)	.0124 (.0087)	.0090 (.0089)
Secondary	.0556*** (.0086)	.0556*** (.0086)	.0711*** (.0104)	.0457*** (.0109)	.0379*** (.0113)
Higher Education	.2627*** (.0099)	.2635*** (.0099)	.2612*** (.0119)	.2312*** (.0125)	.2204*** (.0131)
<b>Marital Status</b>					
Married	-.0123 (.0086)	-.0117 (.0086)	.1219*** (.0117)	.1344*** (.0118)	.1347*** (.0118)
Separated	.0730*** (.0149)	.0738*** (.0149)	.1974*** (.0176)	.2014*** (.0176)	.2018*** (.0176)
<b>Wealth</b>					
			.0263*** (.0068)	.0300*** (.0068)	.0328*** (.0068)
<b>Number of Children</b>					
				-.0145*** (.0019)	-.0141*** (.0019)
<b>Mother Literate</b>					
					.0235*** (.0066)
<b>Father Literate</b>					
					-.0059 (.0077)
Constant	✓ -0.1232 ✓	✓ -0.1331 ✓	✓ -0.1644 ✓	✓ -0.1591 ✓	✓ -0.1649 ✓
Adj. R <sup>2</sup>	0.1410	0.1413	0.1653	0.1672	0.1676
Observations	33,330	33,330	24,852	24,852	24,852

Note1: The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.

Note2: The control variable for Region is 'Non-Conservative', for birth cohort is 'Old Cohort', for education is 'No Education', for marital status is 'Single'.

**Table 4. Estimation Results for Employed, Controlling for Regions and DID Dummy Variables with Different Migrated Groups**

	(1)	(2)	(3)	(4)
<b>Migrated from</b>	All	Old	Middle	Young
<i>Conservative to Conservative</i>	-.0685*** (.0056)	-.0721*** (.0157)	-.0583*** (.0074)	-.0812*** (.0101)
<i>NonConservative to Conservative</i>	-.0547*** (.0142)	-.1067** (.0447)	-.0732*** (.0190)	-.0089 (.0238)
<i>Conservative to NonConservative</i>	-.0426*** (.0085)	-.0628*** (.0220)	-.0416*** (.0108)	-.0217 (.0169)
<b>Age</b>	.0060*** (.0003)	-.0082*** (.0025)	.0056*** (.0006)	.0231*** (.0013)
<b>Type of Residence</b>	-.1945*** (.0056)	-.3000*** (.0157)	-.2086*** (.0074)	-.1343*** (.0099)
<b>Education</b>				
<i>Primary</i>	.0516*** (.0070)	.0077 (.0159)	.0414*** (.0090)	.0605*** (.0159)
<i>Secondary</i>	.0496*** (.0087)	.0206 (.0247)	.0634*** (.0116)	.0725*** (.0167)
<i>Higher Education</i>	.2584*** (.0100)	.3442*** (.0319)	.2725*** (.0133)	.1988*** (.0188)
<b>Marital Status</b>				
<i>Married</i>	.0051 (.0086)	.0565 (.0682)	-.1533*** (.0145)	-.0103 (.0145)
<i>Separated</i>	.0872*** (.0149)	.0746 (.0720)	-.0516** (.0209)	.1340*** (.0361)
<b>Constant</b>	0.0896	0.8720	0.4314	-0.0092
<b>Adj. R<sup>2</sup></b>	0.1364	0.1289	0.1564	0.1646
<b>Observations</b>	33,330	3,921	19,171	10,238

*Note1: The standard errors of regression coefficients, reported in parentheses. A single asterisk denotes statistical significance at the 90% level of confidence, double 95%, triple 99%.*



## 5. Conclusion

This study aims to identify the basic determinants of lower labor force participation of Muslim women. The lack of large scale micro level study about economic decisions of Muslim women was a reality in economics literature. Usually the gender equality related literature touches mainly social norms with religion or state effect, yet this study emphasizes specifically the role of Islam affecting the female economic development.

I started to do a worldwide research with the most recent available data by developing a new set of data on Islamic family law index focusing on the effect of Islam on family law and in order to examine how individual level support for Islamic norms and traditional ideas affect support for Islamic legislation in Muslim societies, World Value Survey (WVS) is used. Three important results emerged in the second chapter of this study. First, cross-sectional analysis results suggest that the level of Islamic law legislation shows significance in shaping education and economics dimensions for females and comparing female development results with male analysis shows on the other hand some differences that supporting the argument about unequal treatment between men and women by Islamic law. Promoting gender equality protected by the egalitarian family laws whether they coded by Islamic effect or not, might be an important explanation of increasing female development, especially for educational and economic fields.

Second, the family law classified as strict Sharia legislation is more likely to have negative effect on levels of development for women regardless of the official religion of the country. These results support the argument that when Islam and family law legislation are fused, especially in highly devout Muslim

societies, it is more difficult for females to access fundamental rights and resources than males. The regression results lend support to this argument that strict Islamic family law is a hurdle to overcome in order to improve the status of women to be equal and protected especially in educational and economic involvement. Third, single and divorced people are less supportive to the social inequality between men and women, higher education has a positive effect on both sexes when deciding the place of women in society, and men are decisively believe that it is enough for women staying at home, and raising children without any economic participation.

In summary of the second chapter; 1) in the Muslim societies, respondents were overwhelmingly supportive to bigger roles for men in society and the more a country's legislation is Islam base, the more respondents agree with gender inequality in economic activities; 2) non-Muslim or not all populations had attitudes that are supportive for higher education of males and also females; 3) yet regardless of the degree Islamic legislation, majority of respondent agreed with sentiments that support some aspect of gender inequality in economic life. Overall, this paper indicated that lower degree of female development differs by the degree of Islamic legislation of that country and individual decisions to support of traditional gender division and lower status of females may deserve more attention than the country level variables such as economic growth or level of industrialization.

As a population growing rapidly, Muslims are indeed part of the Western communities yet the discrimination and prejudice against Muslims are stronger than other groups. This seems to be affecting Muslim women worse especially in a country where they are not equal in front of law with rest of the society which determines their social activities, education and labor force decisions.

Then third chapter of this study addresses issues on women's economic participation and Islam in the Western world by focusing on Muslim diaspora in UK. With distinct Islamic affiliations with active Sharia courts and low rates of labor force participation, British Muslim women provide a unique case. The question is whether Sharia courts in UK have a direct relationship with British Muslim women's work behavior compared with Muslim women from other 'No Sharia court' Western countries. I suggested that the economic role of Muslim women is also heavily influenced by Islamic laws and values in non-Muslim developed countries as well. It is proven that migrant women face a double battle; first to integrate in host country, and then to overcome the gender bias in the social life, yet I investigated whether Muslim females have to face not double but triple battle being immigrant, women and also Muslim in Western countries.

First, the baseline analysis supplied further evidence of the negative effects of Islam on Muslim women's labor force activities. Adding control variables to the same model, it is shown that education raises the chances of labor participation for women. Higher educated women are more likely to participate to labor force which emphasizes the importance of education investment for girls by families which is actually the lowest for British Muslims compared with other countries. One of the most important findings of first section concerns the impact of nativity on British Muslim women's labor force; foreign born Muslim females are less likely join labor force. They did not born in UK, and they have exposed to Islamic culture, most probably a more conservative Islamic culture in their early life, longer than native born Muslim women. The most striking result from baseline regression of third chapter is being in triple disadvantaged position as foreign born Muslim female in UK first time in all

literature.

To see the Sharia area effect, I tried to give a regional explanation whether the labor force participation of women who live in areas close to the active Sharia courts are lower than the ones that live in the other non-Sharia areas. I used the geography data from IPUMS 2001 household survey of UK but in the data the regions are coded as general areas not as cities, so the areas close to the cities with official Sharia courts have become Sharia Areas; such as North West, West Midlands, Inner London and Outer London are areas with Sharia court. Since London is a special case with different regional characteristics from the rest of UK, I grouped Inner London and Outer London as London and run the analysis for Sharia areas and London DID interaction terms. Sharia Area and London area indicated clear significance with negative sign for Employment and Labor force. The key result is the Sharia area-Muslim-Female coefficient which clearly shows that Muslim female in those areas are less likely to be the part of labor force.

As mentioned above London is a known metropolitan area with heavy multiculturalism and urbanization effects. That's why its results need to be read separately with consideration. It is clear that Muslims in London are less likely to be a part of labor force yet the Muslim females showed positive significance with might be because of the serious number of female health care workers or well educated higher position female workers in London. That's why I run the analysis for foreign born individual group separately. The foreign born Muslim females who live in London are more likely to be employed whereas the sign of Sharia area Muslim female coefficient is still negative with 99% of significance.

Although Muslim females are less likely to be active in economic field, it is

clear that the Sharia area resident Muslim females' situation is worse than those living in other parts of the country. Whether they are native born or foreign born, living in the areas close to active Sharia courts have a negative effect on Muslim females' employment decisions. The results of this chapter showed that Islam exerts a negative influence on women's labor force participation also in non-Muslim Western countries if any type of existence of Islamic legislation is in question or Muslim women who lives close to active Sharia courts in UK are less likely join the economic life.

After comparing Muslim majority countries with non-Muslim countries in a large scale cross country analysis followed by a study focusing on the case of UK for Muslim diaspora, in the fourth chapter I studied on Turkey which is a modern Muslim majority country with a democratic secular constitution first time among all Muslim majority countries. This chapter assumed that the environment plays a major role in the decision-making process of women, and using difference-in-difference framework and 'Demographic and Health Survey' data of Hacettepe University, I found that women from young birth cohorts in traditionally conservative areas are less likely participating labor force in Turkey. Urbanization has been increasing its speed and migrant families also experienced how important joining the labor force and having proper education are in urban areas since most of migrant women had to work in low paying jobs with no social security. However, an entire generation has passed, which is sufficient time to give women the opportunity to be integrated into the urban labor market, women are becoming more educated; and fertility rates are declining yet, the participation of women in the labor force has seen a declining trend in Turkey. That's why the forth chapter focuses on regional conservative differences instead of urban-rural specification and presents a new

concept by showing that living in traditionally conservative areas of Turkey have a negative effect on younger generation regardless of education level.

The forth chapter makes two important contributions. First, the baseline analysis supplied further evidence of the negative effects of Conservative areas which are mostly Eastern regions of Turkey, on women's labor force activities. Adding control variables to the same model, I have showed that education raises the chances of labor participation for women which emphasizes the importance of education investment for girls by families and for Eastern regions by government. So, there is a positive relationship between an increased level of education and women's participation to labor force, as it helps finding a job and it weakens conservatism, as shown in this study. Having a literate mother also increases women's participation to labor force whereas having kids has a clear negative effect on female employment. Second, I used different types of migration dummies in analyzing the effects of regional migration between Conservative and Non-Conservative areas and birth cohort on female labor force participation. Results highlighted the negative effect of migration on female labor force participation regardless of age and level of education yet I can also conclude that young women who migrated from Conservative area to Conservative area are still not capable of escape from this negative effect and they are less likely to join labor force.

To summarize, the results show that, even after controlling for the main determinants of female employment, such as age, education, and marital status, there is still a link between the traditional or conservative social norms and employment outcomes for Muslim women in Muslim majority countries, also in a non-Muslim country if these traditions are supported with Islamic legislation. Even though modernization and access to education and other

resources become easier by each day in modern Muslim majority countries such as in Turkey, FLFP rates are not increasing for young generations. Young cohorts' poor performance compared to older cohorts' in FLFP might be caused by factors such as traditions and conservatism. Having any level of education especially university level higher education has a positive correlation with younger women's employment decision than it has with older cohorts in almost all countries studied in these chapters. Using different micro level survey data such as IPUMS, WVS, and TDHS surveys, it is shown that, although it is decreasing in prevalence over time, a considerable amount of Muslim women continue to internalize regional traditions about gender roles but migration to Non-Conservative areas may remove the effect of these traditions for younger generations. Future work should expand some of the current findings to more representative samples for Muslim women especially in the Non-Muslim countries such as USA or France. Most data sets today, do not contain nature of employment, year or the reason of immigration, and level of individual income data for Muslim women in almost all around world.

### **Abstract (in Korean)**

이 분석은 양적 방법론에 기초하여 이슬람 샤리아 법이 이슬람 여성의 업무 행동과 직접적인 관계가 있는지를 조사한다. 이 연구는 여성 노동 참여 발달의 정도가 이슬람 율법의 정도에 따라 다르다는 것을 보여주는 국가간 교차 분석(cross country analysis)을 사용하여 세계적 차원의 접근법으로 시작한다. 그 다음에는 2001 IPUMS 개별 설문 조사 자료를 사용하여, 엄격한 이슬람 율법이 있는 경우 비무슬림 국가인 영국과 같은 나라에서도 무슬림 다수 국가와 유사한 낮은 여성 노동 참여 패턴이 있다는 것을 보여준다. 마지막으로, 인구 통계 및 건강 조사 데이터를 사용하여 터키인 여성들의 노동 참여 결정에 대한 이슬람 보수주의의 영향을 검토하여 이슬람 문화에서 파생된 보수주의가 세속적인 이슬람 국가인 터키의 비교적 보수적인 부분에 살고 있는 젊은 세대의 낮은 여성 노동 참여 패턴에 영향을 주고 있음을 보여준다.

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키워드 : 여성 노동 참여, 이슬람 율법, 무슬림 대다수 사회, 영국, 지역 보수주의, 터키

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