FACULTY OF SOCIAL SCIENCES
DEPARTMENT of PUBLIC ADMINISTRATION

ERASMUS UNIVERSITEIT ROTTERDAM

MASTER THESIS
International Public Management and Policy

KEEPING FAITH IN DEVELOPMENT:

A Cross-National Assessment of the Faith-Development Interface in Gender-Related Issues.

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August 16, 2011

American English, Harvard APA

Words, 27.000

EXECUTIVE SUMMARY

The situation of women in developing countries strikes the neoliberal conception of basic human rights and calls upon the international community to protect and promote women's rights to 'life, liberty, and the pursuit of happiness'. Sex oppression and gender discrimination starts in informal institutions and private domains, meaning that development programs and policy need to be introduced through unconventional channels. Religion is still salient in the life world of the poor and therefore international organizations actively consult and co-opt religious establishment in development matters. As the contribution of these cultural agents is ambivalent, especially in the field of gender equality, research has to yield more insight on patriarchal societies. By means of large cross-national data analysis, the research asks why familial patriarchy is fading in some developing countries while remaining intact in other. By means of comparing and combining existing theories and studies, potential explanatory factors were derived from the evolutionary view of the neoclassical modernization theory and the cultural sensitive view of the 'Women in Development' and 'Gender and Development' approach. The former argues that progress in living and working conditions entails coherent shifts in values, whereas the latter argues that specific cultural traits can be impediments to social reforms. A new set of data is created by taking conventional and suggested variables, and a linear regression analysis is conducted to test this joint explanation regarding contemporary levels of familial patriarchy in developing countries. The results reveal that differences and similarities in levels of familial patriarchy across developing countries only exists along broad denominators. Broadly defined, the persistence of familial patriarchy seems to depend on the extent to which historical events and the geographic site have determined people's dependence on spiritual guidance and social hierarchies to make survival secure. No support is found for any other explanation, but the logic in the reasoning beyond the other assumptions make it interesting to test whether the underlying variables do explain intra-cultural variance. Hence, it is inter alia suggested that an assessment of the causes of the similarities and differences between countries belonging to the same civilization –implying that these large underlying factors no longer inhibit more specific conclusions- potentially yields more insights regarding the assumptions for which this study cannot (yet) find support. The basic story that emerges is that development thinking needs to be cautious of crude generalizations and that the causes and experiences of sex oppression and gender discrimination should be discussed in the language of the civilization to which developing countries belong.

ACKNOWLEDGEMENT

During the course of writing this master thesis, frustration and exhaustion gradually overshadowed my initial enthusiasm and excitement. The prime reason for my frustration was the fact that the topic made me repeatedly realize how fortunate I should be about the cause of being at my wits end. Hence, I would like to thank some people who helped me to keep my spirit up over the last couple of months. First of all, my parents for providing the financial and nutritional resources as well as Drs. C.J. van der Eijk for helping me find peace of mind, and as such to continue the writing process slowly but surely. My special thanks go to my dear friend Nikky van Buuren. Her enthusiasm for statistics is contagiously, and her patience with me and devotion to my thesis were heartening. Grateful thanks also go to Dr. M. Haverland. Not only for being my second supervisor, but also for being the sincere person he is. Last but not least, I want to thank my first supervisor Dr. A.G. Dijkstra for keeping faith in me, even though it took a real while for my mind to finally settle down.

ACRONYMS

ARDA	Association of Religion Data Archives
DV	Dependent Variable
FGM	Female Genital Mutilation
HIC	Higher Income Countries
GAD	Gender And Development
GDI	Gender-related Development Index
GDPPC	Gross Domestic Product Per Capita
GI	Gender Inequality (index)
GID-DB	Gender, Institutions and Development Database
GLM	Generalized Linear Model
HDI	Human Development Index
IV(s)	Independent Variable(s)
LIC	Lower Income Countries
LMP	Labor Market Participation
MDG(s)	Millennium Development Goal(s)
MENA	Middle East and North Africa
OLS	Ordinary Least Squares
OPEC	Organization of the Petroleum Exporting Countries
PC	Prevailing Creed
PPP	Purchasing Power Parity
SSA	Sub-Saharan Africa
UN	United Nations
UNIFEM	United Nations Development Fund for Women
VIF	Variance Inflation Factor
WB	World Bank
WCD	Women Culture and Development
WDI	World Development Indicators
WID	Women In Development
WRR	Scientific Council for Government Policy
WVS	World Values Survey

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1. INTRODUCTION

(CNN, May 27th 2011) -- *A 32-year-old Saudi Arabian who has crusaded for women to drive in her country said she was stopped Saturday for driving a car -- even though there is no law against it.*

(CNN, June 17th 2011) -- *Authorities stopped Manal al Sharif, for driving a car May 21 and detained her the next day. She said she was forced to sign a form promising not to drive again and spent a week in jail.*

1.1 Problem Definition

Manal al-Sharif is part of the *Women2Drive* campaign, which like other current protests in the Middle East started this time via Facebook, that challenges the status quo by endorsing the right for women to drive and travel freely in Saudi Arabia (Jamjoom, 2011; Shubert, 2011). The strict sex segregation and oppression, which i.a. prohibit women to travel without a male relative or to take public transportation, makes Saudi Arabia even stand out in a region where women's rights lag in political, civil, economic, and legal terms (Coleman, 2011). Although the kingdom has technically no formal restriction, religious authorities ban female driving without any legitimate religious justification (Ibid.). This year heralds the 21th anniversary of the protest, but the situation has not changed in the interim. Saudi Arabia presents an extreme but not an unique case. In most developing countries, facts and figures illustrate a situation in which women's freedom and fulfillment is constrained by men (Morrisson & Jütting 2005, 1065-7). According to Whitworth (2008, 106), the impact of informal institutions –and especially of those in the private sphere- is most pernicious and persistent. As a consequence, women are recurrently less easily drawn into development than men.

This situation strikes the neoliberal conception of basic human rights and therefore calls upon the international community's responsibility to protect and promote women's rights to 'life, liberty and the pursuit of happiness' (Hampson 2008, 203). Moreover, contemporary perspectives on development reproach gender equality as an essential component in combating poverty and driving economic development at large (OECD 2010, 11). Young Turk leader Namil Kemal (1867) once illustrated the societal relevance of promoting gender equality by asserting that: "*preventing women from contributing to the sustenance and improvements of others by means of their efforts infringes the basic rules of public cooperation to such a degree that a national society is stricken like a human body that is paralyzed on one side*" (in Morrisson & Jütting 2005, 1065). On the brink of the 21th century, reducing gender asymmetries gained priority on the development agenda, justifying much of the third Millennium Development Goal (MDG) that focuses on women's educational, occupational, and

political equality as well as composing an important component of some of the other MDGs[1]. Generally, these goals can be achieved with policies and programs that address gender equality in a subtle manner in order to avoid accusations of interfering illegitimately in culturally sensitive issues and the private lives of citizens. Such endeavors would generate serious popular resistance and resentment. In other words, the MDGs present just the tip of the iceberg[1], and the root causes of women's discrimination and deprivation, namely the enduring influence of social institutions, requires a more cautionary approach. As a historical legacy of i.e. colonialism, external pressure for social reform is a tedious and tricky endeavor that runs the risk of encouraging conservatism rather than institutional modernization.

For this reason, the international community actively consults and co-opts local and cultural agents as a best chance of bringing stable and sustainable change in women's status *vis* a *vis* men. As faith idioms and identities are still salient in the life world of people living in developing countries, international organizations and agencies[2] acknowledge -despite the traditional dichotomy and disarticulation between the secular and sacred edicts- that faith-based institutions are potentially pivotal in galvanizing and popularizing modern values, such as women's human rights (Clarke & Jennings 2008, 15, 39-41; Marshall 2001, 343-4; Selinger 2004, 524). In marked contrast to this optimism, feminist groups are outright apprehensive about engaging the same voices which typically permeate the marginalization and essentialization of women. Ergo, a solemn tension emerges regarding one of the most critical and central themes in contemporary development politics, as the vitiation of the autonomy of women is potentially overruled by an overarching religious patriarchy (Pearson & Tomalin 2008, 51-2). In this matter, the case of Saudi Arabia serves as an example of an ultra-conservative patriarchal society in which the power and authority of faith-based institutions clearly resonate. Fortunately, different studies demonstrate that women are generally better off in other developing countries, including other Islamic countries in the Middle East and North Africa region (MENA). Unfortunately, in many of these developing countries, gender discrimination and sex oppression also light out in women's everyday life, albeit less extremely than in Saudi Arabia.

1.2 Objectives and Relevance

A rich array of empirical literature discusses the transition from traditional to modern social institutions. This master thesis is a deductive research that combines and compares the arguments of the

[1] The eight MDGs originate from the Millennium Declaration of the United Nations (UN), which is based on a set of fundamental values that assert that every individual has basic rights -including freedom from need and want as well as equality and physical security- and encourages solidarity and tolerance. In September 2000, virtually all UN member states and over 20 international organizations agreed to coordinate and accelerate efforts on freeing men, women and children from the abject and dehumanizing condition of poverty" through three major areas of human development; (1) bolstering human capital; (2) improving infrastructure; and (3) increasing social, economic and political rights (Kabeer 2010, 11).

[2] For example, the United Nations Population Fund (UNFPA) (UNFPA 2008) and the World Bank 'World Faiths Development Dialogue' (WFDD) (Marshall 2001).

different schools of thought in order to identify an explanation for the persistence of familial patriarchy in some developing countries. The majority of empirical studies have analyzed assumptions on women's emancipation by means of little advance indicators, such as females' literacy rates, educational degrees, or labor participation. In 2009, the OECD released its expanded and renewed database, called Gender, Institutions and Development (GID-DB), of which data have been collected from various sources. The GID-DB presents data on a wide range of variables and indices on women's social and socio-economic emancipation in a comprehensive and coherent manner. Accordingly, one of the main objectives is to test the modernization thesis, which maintains that women's emancipation is a linear and systematic process along economic development, by means of this expanded and renewed database and thereby assess the usability of the database with respect to analytical and policy questions.

Over the last ten years, Morrisson and Jütting and the GID-DB have been inseparable. These scholars presented empirical evidence on the impact of social institutions on women's emancipation in the public sphere, which definitely added to the existing body of knowledge. Nevertheless, like the impressive work done by others, some quite basic topics and questions are yet to be addressed. In order to find a solution to the recurrent problem that women are less easily drawn into development than men, it seems crucial to understand why sex oppressive and gender discriminative institutions –which primarily play out in private domain- are more persistent in some developing countries than in others. Social scientists present a range of economic and cultural explanations of which the indicators form a new set of data for which the joint explanation is assessed. In this way, the research addresses a query that is very relevant to contemporary developments in development politics, because it encourages to examine whether people's environment determines the levels of familial patriarchy as well as if characteristics of societies with shared cultural traits can be generalized.

So, a policy question remains whether the type of religion constitutes the key explanation of women's daily experiences with formal and informal institutions, especially those within the household? Hence, what are the prospect for engaging religious establishments? Can religion be a protective device as well as a transformative force? Under which circumstances are religious establishments suited to forge new paths? Although this study cannot address nor answer all these questions, the objective is to shed light on the potential causes of traditionalism in order for public management and policy to establish an engagement with cultural agents and create an environment that is conducive to promote gender equality. As such, the research is inherently societal relevant as gender equality will make societies fairer, more coherent, and more secure, which is indirectly in the interest of all citizens of the planet. At best, this master thesis serves, however, as a next step in raising attention for the impediments to women's emancipation and therefore the primary purpose of this research is to add to the body of knowledge by combining, sophisticating, and testing the -sometimes conflicting- assumptions of others and therein create more practical insight for contemporary development politics on how to approach this recurrent problem.

1.3 Research Questions

Looking at the facts and figures on women's situation in developing countries, a analytical approach starts with questioning which circumstances either impede or generate opportunity structures for female emancipation while imagining what public management and policy can do to improve women's status and address issues of gender equality in developing countries effectively. There is no ready and easy way to answer such questions, but a cross-national comparison may provide some new insights in conditions and instruments that could forge new socio-cultural paths. Therefore, the central research question of this dissertation is:

Why is familial patriarchy fading in some developing countries while remaining intact in others?

As will be explained later on (§1.5), this question maintains an assumption that originates in the modernization thesis underlying this research. Throughout the different chapters, the term 'familial patriarchy' is expressed in terms related to social institutions or situations that represent women's status or gender equality. This is particularly true for the literature review, as it is more accurate to use the specific vocabulary of the research at hand. When this thesis is of concern, however, the term 'familial patriarchy' is most explicit and therefore is used in cases that refer specifically to the variable of interest - i.e. women's status and power *vis* a *vis* their male household members (see also §1.5).

The analysis is guided by sub-questions, whose cumulative answers intend to explain why women are better off in some developing countries than in others. The first sub-question explores the importance of a civic religion in explaining patriarchal attitudes and practices in developing countries by testing the effect of several cultural traits, asking: *which shared cultural traits can account for the variation in familial patriarchy across developing countries?* Although culture is inherently a multi-dimensional factor, research suggests that an interaction model with socio-economic factors bears more explanatory power. Women's emancipation might be a natural process along a society's socio-economic development and therefore the second sub-question concerns whether *living standards can explain the variation in familial patriarchy across developing countries?* These questions are based on an extensive literature review of which the next chapter attempts to present a coherent and comprehensive overview. The different studies apply slightly different vocabulary and variables, which the concepts 'cultural traits' and 'living standards' attempt to accumulate. The conceptualization follows in sub-section 3.2.2, where these variables are operationalized.

1.4 Research Design

As appears from the research questions, countries constitute the units of analysis and familial patriarchy is the variable of interest. Accordingly, as physical assignment or exposure of subjects to classical randomized controlled or manipulated treatments is not feasible, a non-experimental research design is the only appropriate research design. More specifically, the research attempts to answer the research question by means of a cross-sectional design in the form of an aggregate data analysis of secondary data, covering about 120 developing countries. With this design, the research aims at testing a number of theoretically informed hypotheses and to make causal inferences on the variation in familial patriarchy across developing countries.

1.5 Key Concepts

Modernization – The main assumption that guides this research is related to a traditional definition of development, namely the modernization thesis. In short, this thesis maintains that development is a linear, cumulative, and diffusionist process in which typical traditional values are gradually replaced by modern values along the different stages of economic development (Jaquette 1982, 268). In this research, values are frequently referred to as either "traditional" or "modern" and therefore it is important to briefly discuss the assumed contrast and conflict between these terms. The dichotomy is a legacy of Enlightenment's rationalism and positivism, where values based on knowledge and rationality were considered evolutionary superior to values that are based on fear, ignorance, and superstition. Human development would free individuals from illogical and suppressive social guidelines and thereby undermine the social foundations of religious dogma and authoritarian regimes. In other words, increased knowledge provided the cognitive account of the constitutional dichotomization of sacred and secular domains (Inglehart & Baker 2000,19; Selinger 2004, 526; Thomas 2007, 23; Turner 2006, 439; Uzodike & Whetho 2008, 200-1). As a consequence, secular reductionism and materialistic determinism became dominant in Western politics (Clarke 2008, 17). Contemporary development thought is more critical about the evolutionary view and therefore also about terms as "traditional" and "modern". Despite the recognition, development is unavoidably still largely observed in arbitrary and ambivalent hierarchies. This implies that also traditional assumptions and concepts tend to prevail and therefore this research applies terms that are in accordance with the classical conception of pre-modern and modern values. The universality of these concepts is, like the variable of interest –i.e. human rights and gender equality-, questionable.

Patriarchy and Social Institutions - Twentieth-century social scientists have applied the umbrella term *social institution* to refer to a burgeoning array of phenomena. Since the conceptual definition of this concept has implications for both the focus and relevance of the research, the specific meaning is explicated by linking up the different conceptualizations and criteria mentioned in Martin (2004). Very extensively defined, institutions are formally or informally[3] determined social codes of conduct, equated with all major societal realms, that possess prevalence and performance across extensive time, controlling, obligating or inhibiting as well as appropriating, facilitating or centering recursive human action and interaction on important and recurrent societal goals, needs and activities through interrelated, but not necessarily internally consistent, rules, procedures, customs and routines. Although this gives the impression that institutions are important for collective action that is benevolent and beneficial to all members of society, a growing number of scholars recognize power differentials and social inequalities as typical institutional features. Institutions are often organized in accord with and therefore permeated by the very privileges and powers they allocate to incumbents of some social positions while simultaneously disadvantaging and disempowering others. Under the mutually reinforcing distributional aspects of power and institutions, especially when these are legitimized in some ideological principles and internalized by group members as the identity of their network of association[4], even dysfunctional and suboptimal social practices are constituted and reconstituted by group members (Martin 2004, 1249-59; Jütting, Dreschler, Bartsch, & de Soysa 2007, 31, 50). When it comes to gender equality and women's rights, a web of institutions may systematically disadvantage and subordinate women to men and thereby perpetuate the system of social organization characterized by male dominance. Such a system is generally referred to as *patriarchy* and therefore this research will generally employ the term *patriarchal institutions* to refer to situations in which asymmetric relations of power based on sex are maintained and reproduced by granting women a lower social status than men. However, as the intersections of gender differentials with institutions are manifold and complex, the analytical focus is kept on familial forms of patriarchy. Familial patriarchy involves cases in which men have a higher status and more power within the household than women and the rule of the father extends to other males in the household. The familial sphere is particularly relevant as women necessarily have a presence in the private domain, where predominantly informal institutions are abound. Moreover, women's status in this domain also impacts and explains the lived experience and struggle of women in public domains (Jütting et al. 2007, 53).

[3] To distinguish between formal and informal institutions, the former are encapsulated in formal structures and enforced by official entities while the latter are largely self-enforcing, socially sanctioned norms of behavior. Not all formal institutions are beneficial and not all informal ones are harmful. Informal institutions are complementary, or even substitutive when formal institutions are ineffective, in case both types of institutions converge on similar incentives and enforcement characteristics. Conversely, there are numerous examples in which informal institution may accommodate, or even compete with, formal institutions when incentives and enforcement diverges (Jütting et al. 2007, 35-6).

[4] Morrisson and Jütting researched the totality of social relations and institutions through which women's subordination to men is permeated. They state that "established institutional frameworks outweigh the importance of commonly assumed factors, and social institutions are the most important determinants of women's participation in economic activities" (2004, 5) and state that "ignoring traditions, customs, and explicit and implicit laws can limit the usefulness of policy action aimed at improving the situation of women" (2005, 1066).

1.6 Thesis Overview

This introductory chapter has set the stage for the remainder of this master thesis. The next chapter first discusses the main theoretical approaches to women's emancipation in developing countries, which continues in an overview of relevant theoretical and empirical claims on the causes of patriarchy. This review of the existing body of knowledge makes clear how much we know and do not know about the topic at hand, providing an explanation of the ways in which this research can contribute. Moreover, to get the ideas and assumptions underlying this study across, the end of the chapter presents the analytical framework in both textual and schematic ways. To make the analytical method even more concrete, concepts and processes are operationalized in the following chapter. In this way, the ideas and assumptions can be empirically tested in the data analysis of the subsequent chapter. This chapter starts with a thorough quality control of the data, including preliminary observations of the assumed causal relationships through a correlation and simple linear regression analysis. Subsequently, a multiple regression model analyzes the multiple relationship for different sets of independent variables. Lastly, at the end of the chapter, the statistical assumptions are evaluated for the best model(s). The second last chapter discusses the strengths and shortcomings in order to identify the limitations in interpreting the findings as well the opportunities to fill knowledge gaps by improved or further research. After this critical reflection, the conclusion answers the research question and re-examines whether the assumptions are met, which implies that an opinion is formed on the body of knowledge and the lens through which contemporary development is understood. The topic at hand represents a complex phenomenon and therefore there is room for discussion.

2. LITERATURE REVIEW

A burgeoning literature has appeared on the prerequisites for the transition from 'traditional' to 'modern' gender roles in society. The theoretical discussion comprises contending schools of thought of which scholars have tested some aspects and assumptions abundantly and empirically. These studies bear on the same assumption but not on the same focused hypothesis, which means that a true meta-analysis is not feasible. Nonetheless, the first section will organize the available literature in three sub-sections. These sections result in an evaluation of the need for further research as well as an analytical model for which assumptions are both schematically and textually presented in the last section of this chapter.

2.1 The Modernization Theory

The first sub-section (§ 2.1.1) must give the reader a fuller appreciation of the available literature and existing criticism on the modernization thesis. In addition, this part serves as a reference point for the different perspectives of the empirical studies presented in the third sub-section. Before presenting these empirical studies, the second sub-section first addresses some theoretical claims that have been made on the cultural preference for gender inequality in order to respond to the theoretical perspective at the end of section 2.1.1. This implies that the first two sub-sections discuss the theoretical claims and the last sub-section the empirical claims that have been made regarding the impact of both cultural traits and economic modernization on women's status and gender equality. Taken together, the arguments, ideas, and results of these different studies form a new way of testing the modernization thesis. Accordingly, the exposition of ideas and discoveries initiates a section on the ways in which the body of knowledge can still be extended and improved.

2.1.1 Theoretical Perspectives on Progressivism

Historically, Western politicians and academics alike have been concerned with questions about the conditions under which, so perceived, less developed people let go of 'traditional' values and replace them by 'modern' values (Ter Haar & Ellis 2006, 354-5). The modernization thesis maintains that social development is a linear, cumulative and expansionist process that parallels economic modernization (Forsythe & Korzeniewicz 2000, 574; Fukuyama 2001, 9; Jaquette 1982, 268; Selinger 2004, 526). So, economic development is associated with coherent shifts away from absolute

norms and values. Industrialization is key to the modernization thesis, as it is assumed to lead to, for instance, occupational specialization, rising education, and higher income levels. The thesis maintains that such developments eventually bring unforeseen changes in most other elements of preindustrial society (Inglehart & Baker 2000, 21). The structural explanation of Wilensky (2002) makes the case that traditional gender relationships are bound to wither away systematically with a rise in the levels of urbanization, industrialization and education. His argument is that industrialization raises the need for higher education and participation, for both men and women. Hence, industrialization gives greater opportunities and incentives for women to study and work alongside men (in Bergh 2006, 6-7), and thereby gives way to modern, sex-neutral attitudes and reducing discriminatory practices and gender asymmetries (Jaquette 1982, 268-9; Forsythe & Korzeniewicz 2000, 575; Morrisson & Jütting 2005, 1065; Jütting & Morrisson 2005, 7). In turn, this would increase women's ability and freedom of action and thereby enhance their competence and self-respect.

This prophecy sounds optimistic and seems too good to be true. According to the more contemporary Women in Development (WID) approach, the process indeed needs much more time and effort than suggested. The modernization thesis had in fact been gender blind up to this point, because it did not pay attention to the fact that "women matter in development and that they are important economic actors in ways different to men" and thereby failed to see the different impact modernization has on men and women (Brown 2007, 62). In the pioneer publication '*Women's Role in Economic Development*' (1970), Esther Boserup posits that the emphasis on productivity, technology and competition entailed an increased emphasis on the human capital differentials –e.g. education, skills, social networks, etcetera- between men and women. Whereas gender asymmetries had been negligible in pre-industrial agriculture-based society, industrialization and specialization results in a polarization and hierarchization of resources and labor that is male dominated (Baliamoune-Lutz 2006, 302; Forsythe & Korzeniewicz 2000, 574-6; Jaquette 1982, 270-2). The WID brings a more nuanced structural explanation to the table, holding that if economic development is not accompanied by the type of formal interventions that empower and stimulate women to achieve their full essence, women will rather face prolonged exclusion from or exploitation by the new competitive markets than systematic emancipation (Brown 2007, 59; Forsythe & Korzeniewicz 2000, 580; Ray & Korteweg 1999, 52). Accordingly, this school of thought rather speaks of an inverted U-curve than a linear shaped relationship, showing that from a female perspective power relations turn down first, later stabilize, and only narrow in later phases of economic growth (Forsythe & Korzeniewicz 2000, 576).

Although the WID approach arose as an anti-movement of the modernization thesis, its' top-down approach subscribes interventions much similar Western ideals and experiences. The Gender and Development (GAD) approach highlighted this bias and sought alternative means to realize women's empowerment over the sequential two decades (Brown 2007, 58-9). Nonetheless, the GAD approach draws selectively from the WID approach when emphasizing the continued or rising vulnerability of women over the course of economic development (Jaquette 1982, 276; Forsythe & Korzeniewicz 2000,

577). The argumentation of this approach is neither very structured nor homogenous. In general, the GAD is critical of approaches with an understanding of development as a primarily economic endeavor, recommending adjustment policies and programs to developing countries, because these approaches often ignore the extent to which women might continue to experience -in conventional or new forms- deeply entrenched structures of female subordination and sex oppression[5] (Brown 2007, 62). The GAD approach argues that WID projects will be limited in effectiveness, because these do not challenge the gender asymmetries in institutional arrangements, mentioning global to local manifestations of patriarchy, that shape women's lives and cause structural gender inequality (Ibid., 62-3; Forsythe & Korzeniewicz 2000, 578-9). This bottom up approach calls for more women agency, allowing women to form collective identities and articulate their goals for themselves, as happens in the case of Saudi Arabia[6] (see §1.1; ¶ 1). A fundamental re-examination of both formal and informal institutions requires challenging existing privileges and power relations in patriarchies (Brown 2007, 59; Morrison & Jütting 2005, 1067; Ray & Korteweg 1999, 53).

Clearly, the strategic empowerment of women is even more difficult than effectively establishing and enforcing some formal institutions that grant women equal rights to, for instance, education and healthcare as men (Forsythe & Korzeniewicz 2000, 578). However, the distinction between development projects as either WID or GAD is far from clear and far more complicated than the literature suggests. Strategies and goals are often combined. As a consequence, despite decades of criticism, the WID approach continues to dominate development policy, as appears from the MDGs, as much as the neoclassical theory remains the central lens through which development is viewed. The language of these approaches is more attractive to scholars and policy-makers alike, while these approaches may also help to achieve some GAD objectives. A remaining criticism concerns the culturally-insensitivity of this approach, as it views Third World women as a homogenous group leading essentially truncated lives and having similar needs, desires and interests[7] while assuming that an universal solution exists (Brown 2007, 58-65; Ray & Korteweg 1999; 49, 65).

Considering these three paradigms, Chua, Bhavnani and Foran introduce the Women, Culture and Development (WCD) approach, which escapes the economistic impasse regarding the shape of the relationship. According to these scholars, not enough systematic studies exist on the ways in which gender divisions are shaped and informed by patriarchy and ethnicity while these are often manifested in ways that are "locally specific, historically contingent, and shifting and enmeshed with culture" (2000, 836). Hence, this approach draws on the cultural domain as significant as that of the economy to understand more clearly how inequalities are created, reproduced and challenged (Ibid., 823-5).

[5] Policies and programs aimed at female education might (1) have a differential impact on different groups of women; (2) improve women's status in some respects, but exacerbate it in others; (3) run the risk of creating new problems.

[6] The writers of the news articles (see §1.1 ; ¶ 1) believe that Saudi Arabian authorities are naïve if thinking that it can control its increasingly well-educated female population, which generally have enjoyed education abroad, in the long-run. But the reporters are pessimistic about the effects of contemporary protests.

[7] This could also be said of the Gender, Institutions and Development database, which evaluate women's rights, interests, and needs in legal and customary practices from a typical Western perspective.

2.1.2 Theoretical Perspectives on Conservatism

In line with the WCD approach, social scientists argue that religious traditionalism arose as a populist reaction to western domination, especially in Islamic and Hindu societies. Referring to Kandiyoti and Chatterjee, Ray and Korteweg explain that "in the colonial context, the family came to be seen by the colonized as the only untouched space, and thus control over women and the family became the most significant symbolic markers of nationalist resistance" (1999, 58). According to Dr. Wijsen (Seminar at Radboud University Nijmegen; October 8, 2010), professor of mission studies, the Western notion of helping others in their march to a better world receives much suspicion in the non-Western world. People still fear marginalization. Moreover, while societies might not oppose development and modernization, Western triumphalism about female liberty is simply not shared by societies who value female dignity[8]. In other words, historical experiences and culturally defined principles make some societies cling to the status quo and maintain conservative dispositions towards Western ideals of female emancipation, even though it is economically suboptimal (Dollar & Gatti 1999, 18; Morrison, Raju & Sinha 2007, 31-40).

Despite limited control over citizens' private life, government can have a major impact on such suboptimal situations based on its capacity and willingness to outlaw these particular patterns of behavior. In several African countries, the weak state apparatus, the misuse of power, and the inability of governments to deliver basic services have resulted in despondency on the part of a majority of citizens and a resurgence of faith-based institutions and networks (Uzodike & Whetho 2008, 198-9). A BBC survey (2005) verified African governments' lack of credibility and legitimacy, finding 75 per cent of African identified religious leaders as the most trusted group whereas politicians were the least trusted (Ibid, 203). According to the World Values Survey (WVS) and the World Bank's 'Voices of the Poor', this finding can be generalized to other developing regions too (Thomas 2004, 137). So, while secularization has been characteristic for most Western societies, faith-based establishments are performing public functions and govern political and civil affairs in other parts of the world. This is, moreover, particularly true for developing countries where principles of modernity and neo-liberalism have failed to materialize (Clarke & Jennings 2008, 4; Ter Haar & Ellis 2006, 359; Thomas 2004, 133; Turner 2006, 438-40). In some places, faith-based establishments function as one of the most visible and widely distributed institutional safety nets for the poor (Narayan et al. 1999, 105).

In other words, in the life worlds of the poor, faith-based establishments are generally the 'intellectual and social center of the masses and serve the purpose of interest aggregation, articulation, and actualization' (Ruben in Uzodike & Whetho 2008, 202-3), having an overt role and wide reach with respect to the establishment, maintenance, or break down of the value systems that govern gender

[8] To link this to the topic at hand, women also have a stake in the continuance of certain institutions (Jütting et al. 2007, 53). Due to the naturalization process of social institutions, women can come to believe that girls are inferior to boys (Ibid., 39). Moreover, women are sometimes even supportive of informal norms that seem to work against them, "limiting their mobility, reducing their health and life expectancy, stigmatizing and violating them, and subordinate them within power relations", in order to trade off sanctions, status or support, or to show solidarity (Ibid., 59).

attitudes and practices. Therefore, even though none of the main religions actually prescribes female subordination and sex oppression, religion is often referred to as the most important single factor for traditionalism (Clarke & Jennings 2008, 4; Pearson & Tomalin 2008, 51-2). However, any developing country can be under the spell of religious extremism where normative versions of doctrines permeate social institutions and hierarchies (Fukuyama 2001, 16; Thomas 2004, 135-6). In this way, social institutions can be in existence for more than a decade or even century, having only marginally changed, passed from one generation to the next. However, according to Gusfield (1967), the path dependency of these doctrines is actually not as rigid as assumed. Traditions and values are selectively plucked, created, and shaped to ground people's present action in some justifying principle and are changed, stretched, and modified to the needs and aspirations in some specific historical guise (p.358).

The resilience of pre-modern religiosity in all types of developing countries contrasts rationalism and positivism predictions -of the early 19th century- on the decline or demise of religiosity in the public sphere as a consequence of modernization and human development (Clarke 2008, 17; Selinger 2004, 526; Uzodike & Whetho 2008, 200). The imbrication of a civic religion constitutes an important indicator of the opportunity structures for social reform. Looking at Islamic countries, for instance, "the political orthodox ideology with strong patriarchal views on society is often the same as that which propagates to establish an Islamic state. Consequently, the incorporation of Islam into the framework of a country might mean that patriarchal ideas are institutionalized and may frame state actions, laws and practices. This might limit the opportunities of women" (Spierings et al., 507). Also Ray and Korteweg argue that the effect of Islam on women's emancipation is mediated by both the policies and ideologies and ideologies of the state. Within this discussion, Spierings et al. introduce the idea of a socio-economic elite, which will be discussed at the end of the next sub-section.

2.1.3 Empirical Evidence

The theoretical assumptions on the consequences of the economic as well as cultural context have been studied empirically with respect to gender-related issues. The essence of the cultural context, for instance, has been recognized by social scientists from Max Weber to Samuel Huntington. Huntington's study on differences and similarities in value systems resulted in a subdivision of the world into eight civilizations[29], arguing that the clash between civilizations was most prominent in values of democracy. Inglehart and Baker used this comparative study to contest the modernization thesis by opposing the notion of a necessary global convergence towards Western standards. These

[9] The zones are the Western, the Orthodox and the Islamic worlds, and the Sinic, Buddhist, Hindu, African and Latin American zones (Huntington 1996, 26). See Appendix A.

scholars find empirical evidence that economic modernization does not generate the same institutional outcome in all situations to similar degrees, because the impact is "contingent on the historical and cultural context of the society in question" (Inglehart & Baker 2000, 49). Social phenomena have a large element of context specificity, arising from difference in meta-institutions that likely coincide with contextual variables such as history, geography or other initial conditions.

Followers of this school of thought argued that distinctive cultural traits exert an enduring and autonomous influence on social institutions and primarily explain the status quo. Inglehart and Baker find that societies with quite common cultural traits and traditional values are likely to follow similar trajectories of institutional change (Inglehart & Baker 2000, 20). Although Huntington's theoretical classification is criticized for oversimplifying reality, Inglehart and Baker find that all zones are conceptually and empirically justifiable (Ibid., 32). Interestingly, however, Inglehart and Norris find that the real fault line between the Western and the Islamic civilization concerns gender equality and sexual liberalization rather than political values (2003, 63-7). Accordingly, Inglehart and Baker use Huntington's typology to test the thesis that industrialization is linked with systematic and roughly predictable changes in basic values. These basic values were tapped by ten items from three waves of data from the WVS, which were classified as either typically traditional or secular-rational values using factor analysis (Inglehart & Baker 2000, 24). In the study, both the results of a regression analysis and a time-series analysis are presented, of which the latter are particularly relevant in identifying trajectories of institutional change.

In a regression analysis on cross-cultural variation in values, Inglehart and Baker also find empirical evidence that value systems reflect both the level of economic development, occupational structure, religion and other major historical influences (Ibid., 32). Subsequently, the time-series analysis demonstrates that industrialization tends to push societies' values in a common direction. However, rather than converging to universal moral values societies seem to move in parallel trajectories corresponding to cultural characteristics (Ibid., 49). In addition, by controlling for the economic level and occupational structure, Inglehart and Baker demonstrate that a society's cultural heritage makes and independent contribution (Ibid., 38). Similarly, and closely related to what has been stated in the previous sub-section, the analysis demonstrates that if people of a given society place a strong emphasis on religion, the relative position on many other variables can be predicted to be in favor of traditionalism and authoritarianism (Ibid., 23-5, 28-9). As an aside note on religion, however, Inglehart and Baker remark that intra-national differences between different religious groups are much smaller than are inter-national differences between similar religious groups, which suggests that shared cultural traits cannot be indicated by a shared religious affiliation alone (Ibid., 37).

Other research corroborates the statistical evidence on the joint explanatory power of cultural traits. For instance, Dollar and Gatti question what macroeconomic data can reveal about the choice to invest in girls. Their approach of the research question suggests that the social change along economic modernization can only fail to occur as a result of stubborn and irrational institutions or market

mechanisms, which in the standard liberal theory is seen as "a failure of diffusion, not a failure of the model itself" (Jaquette 1982, 269). By means of an aggregate data analysis, Dollar and Gatti demonstrate that religious preference, regional factors, and other underlying characteristics of society systematically explain gender asymmetries in education and health across hundred developing countries (1999, 17). In this study, the fact that the prevailing creed had a considerable joint explanatory power to socio-economic predictors, increases the confidence that differences in cultural preferences really are an important determinant in explaining variance in the levels of gender equality (Ibid.,16). Cultural preferences for gender equality are also reflected in the political system. In this respect, Spierings, Smits and Verloo (2009) assessed the levels of women's labor market participation (LMP) among solely Muslim countries in relation to political factors[10], showing that the existence of practical democracy can explain women's LMP relative to men.

Likewise, the OECD (2010, 56) finds that women and men share equal rights and responsibilities in the Eastern Europe and Central Asia region, most likely as a legacy of Communism, although the end of the Soviet system has caused a resurgence in patriarchal institutions and reversion to traditional stereotypes in, especially, rural areas. In addition, this report presents some important regional disparities with respect to gender equality: Southeast Asia and Latin America are consistently more egalitarian than Sub-Saharan Africa (SSA), the Indian sub-continent and the MENA region (Morrisson & Jütting 2004, 8; 2005, 1070). Nonetheless, a recent report adds that women in Latin America still suffer from a deeply rooted sexism, stereotyping, and discrimination, especially in rural areas, even when legislation supports them (OECD 2010, 92-3). This report also specifies for South- and East Asia and thereby shows that the existence of patriarchal institutions is actually minimal in the East Asia and Pacific region (Ibid., 176). The OECD studies bear out that gender discrimination in social institutions tends to be higher in Muslim and Hindu-dominated countries, compared to Christian and Buddhist ones, but emphasize that this must not hold per se. The Islamic MENA countries display great differences in the status of women (Jütting & Morrisson 2005, 15). Apparently, various interpretations and applications[11] are possible within a religion and therefore religion alone cannot fully explain the situation of women (Morrisson & Jütting 2005, 1077-8).

Several scholars concur with this critique on the homogenization and generalization of ethnic groups (Dr. Ruerd Ruben [Seminar at Radboud University Nijmegen] October 8, 2010). The position of women in developing countries cannot be understood solely through the lens of religion. Ray and Korteweg refer to an extensive number of case studies that show that the articulation of a feminist consciousness depends on a constellation of factors that are situational and historically specific. These determine the availability of political opportunity structures. The influence of culture waxes and wanes

[10] The exact impact of democracy on female emancipation would be interesting, but it would be difficult to identify the difference between formal and practical democracy accurately. Moreover, like gender equality, democracy is generally considered to be a modern value and therefore might actually measure the same construct as the dependent variable.

[11] Gusfield (1967) calls attention for the manifold variations and possibilities of traditional and modern values, because a socio-cultural system consists of several dimensions. This makes the relationship between tradition and modernity complex and variable, suggesting that civilizations are not consistent and uniform bodies. Only the specific configuration of people and the institutional framework influence the selective acceptance, rejection, or fusion of modernist values.

with economic and political circumstances, but the studies to which these scholars refer show that neither national liberation nor democratization in general terms have extended women's voice in the Arab world (1999, 54-7). Spierings et al. also analyze the effects of situation-specific economic, political and cultural characteristics, and find that practical democracy[12] (see §2.1.3; ¶4) but mainly economic differences are key to why gender equalities decline in some while remaining pervasive in other Islamic developing countries (2009, 517-8). Without disregard for the joint explanatory power of cultural traits, this finding helps to reconsider ways in which cultural and economic explanations rather complement than compete each other. Spierings et al. also show the importance of thinking carefully about a combination of potentially relevant factors.

At this point, the modernization thesis at least seems right that there is some sort of economic stimulus for institutional change. Social scientists have increasingly researched the thesis in respect of gender equality in socio-economic domains, finding a positive relationship when taking Gross Domestic Product per capita (GDPPC) to indicate the level of industrialization. However, using different statistical methods, studies generally do not find empirical evidence of a perfect linear shaped relationship between economic development and gender equality. Only the linear regression by Forsythe and Korzeniewicz (2000) tacks linearity fairly close. The study evaluates both the cross-sectional and longitudinal impact of economic growth, measured in the natural logarithm of per capita income to maintain proportional differences in the distribution (Ibid., 585), on changes in both women's status and gender inequality. Women's status is measures by the Gender-related Development Index (GDI)[13], which has become controversial in recent years as the lack of abstraction from levels of development thwarts cross-national comparison of gender equality (Dijkstra & Hanmer 2000, 43, 49-50). For the GDI index, the results of both the cross-sectional (regression) and the longitudinal (time-series) analysis indicate that the level of economic development has a statistical significant, positive and a strong linear relationship to women's status. These results were robust after controlling for cultural characteristics.

By contrast, the results provide little support for a quadratic model[14] (Forsythe and Korzeniewicz 2000, 589-97). Nonetheless, Forsythe and Korzeniewicz obtain different results when assessing patterns and trends in women's status relative to men through the Gender Inequality index (GI)[15] (2000, 583). In this case, the regression and time-series analysis provide cross-sectional and longitudinal evidence, respectively, for a quadratic relationship. When controlling for cultural characteristics, however, the curvilinearity is not robust in case of the longitudinal model (Ibid., 597-603). Since these findings seem to support the assumption of linearity of the modernization thesis, it is

[12] Spierings et al. use this term to distinguish between properly working democratic systems and those that pretend to work democratically.
[13] Developed by the UN to further specify its human development index (HDI). The UN's HDI uses standardized data drawn from national sources to measure the relative achievement of nations in advancing three components of human capability: health and longevity, education, and standard of living. The GDI is designed to evaluate the achievement of women along each of these three dimensions (Dijkstra & Hanmer 2000, 44-5; Forsythe & Korzeniewicz 2000, 581-4).
[14] Here, Forsythe and Korzeniewicz ad dan quadratic term to the equation in a way that follows the "usual form to empirically assess whether the cross-sectional data follow the curvilinear pattern described by authors such as Boserup" (2000, 585).
[15] In order to assess patterns and trends in inequality between men and women, Forsythe and Korzeniewicz (2000, 583) use a formula recommended by the UN in the methodological observations regarding the GDI. The level of gender inequality (GI) is the weight of the gap relative to a country's HDI: GI = (HDI-GDI)/HDI.

important to note that the linear relationships were not perfectly linear. The longitudinal model on the GDI showed that improvements in women's status and gender equality were more pronounced in countries that had higher initial levels of GDPPC (Forsythe & Korzeniewicz 1999, 595).

This discussion on the shape of the relationship brings a quite similar study by Dollar and Gatti (1999) to the table, which focused on the question of causality. In this research, the prime measure of gender inequality concerns educational attainment. The strongest empirical regularities of the OLS regression analysis correspond to the findings by Forsythe and Korzeniewicz, although Dollar and Gatti find a convex relationship. This means that the effect of the level of economic development is minor or nonexistent first whereas a much stronger effect kicks in later. For instance, there is little relative improvement in female educational attainment as income increases from $500,- up to a level of about $2000,- per capita (PPP adjusted) -and countries move from being very poor to lower middle income. After that level of income, there is a strong tendency for female achievements to catch up with superior male attainment (1999, 12). Dollar and Gatti also run a fixed effects regression analysis, in which they instrument for income, in order to show that it is not simply a cross-sectional effect but a strong and consistent causal relationship in which rising levels of income result in higher educational achievement of women (Ibid., 14-5). The relationship is very strongly convex, because the variables become mutually reinforcing in the last phase of modernization, and eventually level off (Ibid., 19-21). In other words, particularly at lower levels of economic development, the causal relationship is unidirectional and not spurious[16].

Instead of educational attainment, OECD scholars Morrisson and Jütting (2005) measure gender equality in terms of female occupational attainment in an attempt to estimate the importance of different types of constraints on the economic activity of women in developing countries. Women's LMP is measured as 'women among active population, excluding family workers', which intends to capture salaried or self-employed women with personal incomes that may ensure their financial independence, plus three other variables on the percentage of women: as wage earners; in professional and technical positions; and among administrative workers and managers. The analytical framework presents three major factors, namely (1) economic and non-economic social institutions; (2) women's access to resources; and (3) the level of development, that could account for the cross-sectional variation between sixty-six developing countries. Whereas the level of development is measured by per capita income (PPP adjusted), the research introduces an innovative indicator, namely social institutions. ECO and NON-ECO indicator are aggregates composed of several variables, but the justification for this distinction is unclear[17]. Social institutions indeed turn out to be impediments to women's access to

[16] International organizations like the World Bank tend to draw selectively from such research, focusing on the part of the relationship in which the relationship between levels of income per capita and gender equality has become reciprocal, in order to obtain support from aid agencies or local agents and plead the case of gender equity as development goal in its own right as well as an instrument in a number of other development goals (Klasen 2002, 346; Morrison et al. 2007). This advocacy may confuse the interpretation of the actual causal relationship.

[17] The distinction between ECO and NON-ECO institutions cannot be clarified , because the justification for the chosen variables is obviously ambivalent. The statement maintains that "NON-ECO includes four that have no economic character –"genital mutilation", "marriage before the age of 20" , "polygamy" and "authority over children", all selected on the assumption that these customs constrain women's freedom to choose the economic activities they wish to pursue" (p.1068) whereas the "ECO indicator incorporates three variables: the right to inherit from

resources, because access to human capital is more difficult for women in societies where women are considered inferior (Ibid., 1073-4). Also income per capita constitutes an important factor in explaining women's access to resources (Ibid.). However, whereas social institutions and women's access turn out to be important factors in explaining women's LMP in paid labor and to a lesser extent in the skilled labor force, contrary to the findings of the authors previously mentioned, this is not the case with income (Ibid., 1077). In contrast with other studies that have used income per capita (GDPPC, PPP adjusted) to explain gender equality, this study finds quite mixed effects in respect of both women's access to resources and women's economic activity. Only women's participation in highly skilled or specialized job can be explained, but the regression analysis shows that there is no significant relationship between the level of development and the type of LMP of women in general (Ibid., 1073-77). Although this is not addressed, the different relationships just discussed suggests that a relationship between GDPPC and the institutional framework is unlikely.

The database and article of Morrisson and Jütting (2005) have been a starting point of this thesis, implying that both the interesting perspectives as well as some shortcomings of this study have motivated further research in this area. In my opinion, the causal inferences are not completely valid for three main reasons: (1) the research design allows finding empirical evidence for association rather than causality; (2) the number of predictors exceeds the general prescriptions for results of a sample size of sixty-six cases to be valid (see §3.5; ¶4); (3) the operationalization is ambivalent which touches upon the validity of the results as well. This third point refers to the low construct validity of the measures, in which the discriminant validity –i.e. the assumed distinction between different constructs– is dubious; in other words, several variables from different indicators measure the same construct and appear interchangeable. For instance, it is not surprising that social institutions explain women's access to resources: "marriage before the age of 20" or "authority over children" and "women's access to birth control" do not seem to measure distinct constructs. Likewise, women's access to education and LMP, of which the former is used both as a dependent variable as well as a predictor of LMP, show overlap. As a last critique, the construct validity of the dependent variable is called into question by the WID and GAD approach (§2.1; ¶ 2-3), who argue that this construct both neglects women's needs, desires, and interest in participating in the formal economy and ignores the extent to which women continue to experience discrimination.

In many ways, the study by Morrisson and Jütting motivates to reconsider the academic debate in which scholars increasingly recognize the fact that academics tend to cling to conventional indicators, such as GDPPC or women's educational or occupational attainment, while there are many other adequate measures of the level of development and gender equality. There are some rare examples, such as Bell (1973), who gives more attention to changes in the mode of production than to rises in income

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the husband , the right of ownership, and freedom of movement and dress. All three have an economic impact" (p.1069). Quite similar questions can be asked about the operationalization of "women's access to resources", the second main factor. For instance, the percentage of women having access to birth control and total fertility rate is used to represent 'women's access to the labor market' (p.1069).Obviously, this measure has low construct validity.

levels. More convincingly, research by Inglehart and Baker demonstrates that economic variables other than income levels have more explanatory power.

In this respect, they find that the percentage of the labor force in the industrial sector explains individuals' values and priorities even more consistently than does income per capita (2000, 33). Moreover, in contrast to macroeconomic research, Inglehart and Baker analyze the consequences of individuals' existential security for institutional change. Inglehart and Baker observe coherent shifts away from traditional and survival values toward a syndrome of increasingly secular-rational and postmaterialist values along three distinct stages of economic development – the agrarian, industrial and postindustrial society (Ibid., 25-31, 49). A mainstream version of the preindustrial stage shows relatively low levels of subjective well-being, health, interpersonal trust, tolerance of out groups and support of gender equality while being relatively favorable of materialist values, religion and authoritarian government compared to industrially more advanced societies (Ibid., 23-8). Consequently, individuals "cling to traditional gender roles and sexual norms, and emphasize absolute norms and familiar norms" as a last resort to maximize predictability in such a precarious world (Inglehart & Baker 2000, 28; Jütting et al. 2007, 31; Dr. Ruerd Ruben [Seminar at Radboud University] October 8, 2010).

The economic explanation is further extended by Spierings et al., who suggest an additional factor that consolidates the perspective on the distributional aspects of power and institutions. Noting that high income levels do not necessarily reflect the living standards of ordinary people, Spierings et al. argue that not only the level but also the source of income is important for understanding differences in basic values between quite identical countries. For instance, while oil endowment has a positive effect on economic development and growth, it is expected to have a negative effect on the modernization of values. This coincides with claims that have been made about authoritarian leadership (§2.1.2; ¶ 3-4), explaining how ordinary people become beholden to religious elites. In an oil-based economy wealth and power are centralized in state elites, whom may draw and advantage from preserving a status quo that is suboptimal (Jütting et al. 2007, 38; Spierings et al. 2009, 508). The main findings of this research show that women's absolute LMP mainly depends on economic factors -such as oil endowment- together with specific cultural patterns, whereas the effect of oil endowment was indirect -through channels of democracy- for women's relative LMP to men (Spierings et al 2009, 517). Taken together, the last studies indicate that alternative indicators on the level and nature of economic development are at least equally important in explaining cross-cultural variation in patriarchal institutions.

2.2 The Need for Further Research

Looking at the dependent variables of most existing research on the variation in gender asymmetries across developing countries, it appears that studies have been preoccupied with women's socio-economic emancipation while Morrisson and Jütting demonstrate that women's socio-cultural emancipation is a prime prerequisite for understanding women's socio-economic emancipation (2005, 1073-8). These scholars call for a more proactive approach that addresses these fundamental roots of gender inequality, which makes it necessary to understand why the institutional framework is more traditional and patriarchal in some developing countries than in others. So, as a response to this study and others, it makes sense to conduct further research in this area by focusing on the variation in women's socio-cultural status and to use data from the quite recently expanded Gender, Institutions and Development Database 2009 (GID-DB) for the dependent variable. By means of this database, the sample of the research at hand can be relatively extensive compared to previous studies, comprising 119 developing countries. Moreover, the concerns and assumptions of the GAD and WCD approach emerge at the forefront with this twist to the dependent variable.

Nonetheless, this research is most concerned with the different explanations and assumptions of the approaches, the modernization thesis in particular, as well as the question whether the results of the various studies can coincide rather than compete. Hence, in accord with the previous sub-sections of this chapter, the cultural and economic explanations are considered equally causally relevant and receive equal attention in this research. However, unlike studies that follow the modernization thesis or WID approach, this research distinguishes itself from the type of WID studies that are preoccupied with the specific ways in which gender equalities reduce along distinct phases of economic development. The only time element that is involved is the fact that the same model will be tested with aggregate data from three periods over the last 30 years. The analytical framework is informed by existing approaches and studies, taking these as a starting point in finding an explanation by means of combining discoveries and suggestions from the different approaches and studies.

Besides modifying the dependent variable according to more recent research, some alternative and additional indicators are suggested to measure the level of development. The previous section explains that demographic statistics, such as occupational structures or the degree to which survival is secure, or otherwise the sources of a country's GDP provide more important and accurate variables in economic development than is solely GDPPC. Similarly, although these correspond more closely with indicators of previous research, this research attempts to add some nuance to the cultural variable. In this respect, the number of adherents as well as government favoritism of the prevailing creed are considered salient to societies' self-reflection and therefore the degree to which the type of religion predict familial patriarchy. In addition, this research also makes a clearer distinction between societies by not solely marking the difference between Muslim and Non-Muslim countries by means of an

additional dummy as well as Huntington's classification. This also allows for further analysis of cross-cultural patterns within these variables.

These adjustments to the cultural variable could help to explain variation across countries that share cultural traits and thereby end assumptions and crude generalizations on women's circumstances and the causes thereof in, for instance, the Middle East. Moreover, the additional explanatory factors are a means to check assumptions that measures other than simply GDPPC better reflect the rise of the living standards linked with industrialization and therefore better explain variation in gender asymmetries across developing countries. Taken together, these adjustments provide an opportunity to test the joint explanatory power of the variables.

2.3 Analytical Framework

Previous research on gender equality shows that neither cultural traits nor living standards can account for the variation in social institutions individually whereas their joint explanation might account for the variance in patriarchal practices and attitudes across developing countries. The literature review suggests several forms in which cultural traits and economic development are important in explaining sex oppression and gender discrimination in developing countries. This master thesis generalizes the assumptions and findings of existing studies on traditionalism to the most pernicious and persistent forms of gender inequality: familial patriarchy.

This section presents a general hypothesis first, followed by partial hypotheses that reflect the ways in which the general hypothesis is analyzed. The first assumption holds that economic development entails an upgrade of people's living standards, which makes people conducive to lower their protective shield of traditionalism. The second assumption is analyzed by the presumption that oil endowment is necessarily associated with a small ruling elite, but the construct validity of this presumption is not verified. Although alternatives are available, it was decided to stick to what has been suggested in the literature and thereby accept difficulties in making inferences about the relationship. Nonetheless, at the final stage, though, an attempt was made to capture the idea by an alternative variable, namely the Pareto index of wealth distribution (Gini index). The other two hypotheses concern the effect of cultural traits. The third hypothesis derives from the results of previous studies, making Islamic countries the reference group of the research. The forth assumption presents the nuance that is added to the assumed influence of the imbrications of a civic religion, which might –referring to the second hypothesis- indirectly be indicative of a social elite.

H_1 As living standards of a country's population improve, the country's social institutions become less patriarchal.

A] the lower a country's per capita income, the more patriarchal the country's social institutions are.

B] the higher a country's employment in industry and services, the more patriarchal the country's social institutions are.

C] the higher a country's rural population ratio, the more patriarchal the country's social institutions are.

D] the lower existential security a country's population has, the more patriarchal the country's social institutions are.

H_2 Countries characterized by a small ruling elite are more patriarchal than are countries in which wealth and power is more widely distributed.

A] oil endowing countries have more patriarchal social institutions than have countries in which the economy is based on products other than fuels.

B] countries in which wealth is unequally distributed have more patriarchal social institutions than have countries in which wealth is equally distributed.

H_3 Muslim countries are more patriarchal than are non-Muslim countries.

H_4 Countries in which the prevailing creed has more public presence are more patriarchal than are countries in which creed has less public presence.

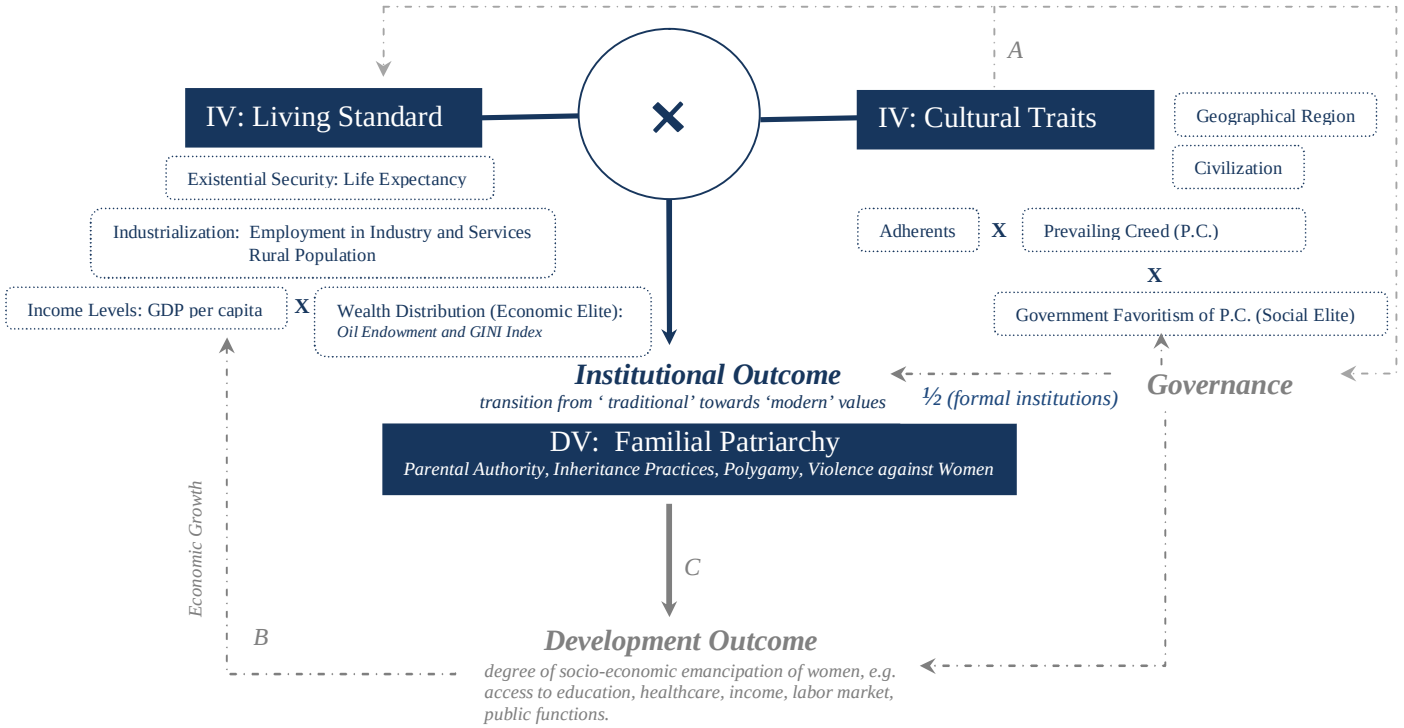
A] the more religiously homogeneous a country, the more patriarchal the country's social institutions are.

B] the more governmental support for the country's prevailing creed, the more patriarchal the country's social institutions are.

The different components of the same hypothesis will be kept separated as much as possible, because different predictors of the same construct can be collinear and overlap each other. For instance, the economic 'substructure' can to some extent be considered a product of the cultural 'superstructure' too (*see relationship A in figure 2.3.1*) (Max Weber in Fukuyama 2001, 17). Moreover, the relationship between patriarchal institutions and living standards is indirectly reciprocal instead of unidirectional (*see relationship B in figure 2.3.1*). As stated earlier and explained in the next chapter, the careful selection of indicators must diminish this threat of testing an endless cyclic causal model and therefore

improve inference of causality. As an example, the indicators of the DV make its relationship to development outcomes and therefore economic development (*see both relationship A and C in figure 2.3.1*) less direct than would, for instance, women's property rights and freedom of movement. In other words, the following assumptions and analytical model were preceded by a thorough literature analysis and careful consideration of factors and their relationships.

Figure 2.3.1 *A Framework for Analyzing Variance in Familial Patriarchy across Developing Countries*



This figure is a schematic presentation of the causal explanation for the variation in the levels of familial patriarchy across developing countries. The scheme presents the variables and indicators of the interaction model, but some factors and arrows were added to provide a complete overview of the relationships relevant to development. Indicators connected by an X are intended to be, albeit individually as well, simultaneously added to the model in order to analyze their joint explanatory power. The letters A-C refer to relationships described on the last page.

3. METHOD

The theoretical explanation is quite abstract and the purpose of this chapter is to make the means and methods concrete and clear. This phase is very important to the validity and reliability of the research. It requires thorough deliberation, as it determines whether the data analysis measures the hypotheses and relationships among variables as intended and needed. Accordingly, choices in the approach are explained, justified and critically assessed. The chapter starts with the research design and considers the implications for the validity of the research. Secondly, the dependent and independent variables are specified and operationalized while critically assessing the reliability and validity of the measures. The units of analysis and materials of the study are discussed more briefly in the second sections. The final section focuses on the core principles and procedures of the data analysis.

3.1 Design

This study has a non-experimental research design, because the unit of analysis as well as the variable of interest cannot be exposed to an experiment. More specifically, the approach concerns a cross-sectional design in the form of an aggregate data analysis on countries. This approach has inferential shortcomings; in other words; causal inference cannot be strong when the physical assignment or exposure of subjects to classical randomized controlled or manipulated treatments is not feasible (Johnson & Reynolds 2008, 147-9; 155-9). Moreover, with the use of secondary data, there will be systematic and random errors in the data that cannot be controlled. Countries as well as organizations may have collected data according to different standards, which might affect the validity and reliability of the research. While the setting is more natural and realistic in a non-experimental design, it is more difficult to identify, measure and control all relevant extraneous factors.

For these reasons, if feasible and if the main objective of this study was primarily practical instead of theoretical, this complex matter would have been served best by an extensive multiple case study in which first-hand observations give more insight to the data collection and the empirical evidence of causality. However, some quite basic questions about the universality of some assumptions can yet be tested in less-controlled environments. An aggregate data analysis serves this purpose well. As section 3.3 will discuss, the number of units exceeds hundred cases, which is important in respect of generalizability of the results of the aggregate data analysis. The main objective is to test theoretical assumptions and empirical evidence on causality with a new set of data and thereby identify in which way analytical and policy questions should be approached.

3.2 Data

In this section, each theoretical concepts of the previous chapter is assigned concrete representations that approximate the construct; in other words, different variables will be introduced to make the abstractions measurable. Any construct can be defined and measured in many different ways, providing enough food for careful thought and extensive deliberation (Johnson & Reynolds, 81-3). Even with justification in theories, variables rarely seem sufficient to capture a construct completely as its abstract features are not fixed, one-dimensional nor tangible. Variables are partial and imperfect, but indispensible in putting a finger on the occurrence, absence, or amount of the constructs. An operational definition specifies precisely the measures or scales assigned to the variable. Like variables, operational definitions are seldom completely adequate or absolutely incorrect, implying that each measurement taps some irrelevant features while leaving some relevant features out. Ergo, a measurement is never the definitive measure of a construct (Hoyle, Harris & Judd 2002, 75-8). Accordingly, this study uses multiples measures for the same construct, adding some complementary measures without violating the status of conventional measures, where each provides a check on the powers, errors and biases of others. In the following sub-sections, these multiple measures for the dependent and independent variables are discussed systematically. Potential issues regarding the validity and reliability of these measures are discussed immediately.

3.2.1 Dependent Variable(s)

Familial Patriarchy – There are different dimensions to familial expressions of patriarchy, implying that different types of measures of women's current status vis à vis male household members can be considered. This is, however, not only a possibility but also a necessity, because some societies can be relatively egalitarian in one dimension but inegalitarian in others; in other words, it is important to look at a broad range of indicators of social institutions when considering familial gender relation. In 2009, the OECD presented an innovative and comprehensive database comprising gender-related variables, which had been collected from various sources and primarily focus on social institutions, for a total of 160 countries. The Gender, Institutions and Development Database (GID-DB) provides an overview of sixty indicators of women's social and legal status *vis* a *vis* men in four dimensions; family code, civil liberties, physical integrity, and ownership rights. Both family code and physical integrity capture interesting elements of women's status in the private sphere. Many aspects were considered before selecting an appropriate set of variables from these two dimensions.

The first concern in the selection of dependent variables was the threat of endogeneity. Institutions could not be too culturally specific –such as female genital mutilation (FGM)– nor could these have an obvious impact on the country's macro economics, because a spurious relationships between the measure and the observation would affect the internal validity. Inheritance is the exemption

amongst institutions related to finances, as it affects women -and their offspring- primarily personally whereas ownership rights and freedom of movement have consequences for economic activity of half of the adult population and thus for the national economy. A second concern was the consistency and reliability of measurement. In this way, the variable on early marriage was not selected, because this is only a measure of the percentage of women that is married between 15-19 years of age (see GID-DB codebook); so, the data are not compared to the percentage of men and therefore does not necessarily indicate male dominance. Moreover, despite the general guidelines of the codebook, this variable is not based on two components: "the existence of a specific social institution….and the proportion that is affected by this social institution" while the source of this variable provides data on the minimum legal age for marriage with and without consent.

Other variables show that this is a general problem; both the description in the codebook as well as the consistency of the operationalization of variables yet have some obvious teething troubles. With respect to the four remaining indicators of family code and physical integrity, which are more appropriate than the two examples from the last paragraph, the measurement of two variables is less accurate and reliable than the other two. In case of **parental authority** and **inheritance,** it is unclear how the legal and customary components are measured and weighted (see §3.2.1;¶6 or codebook GID-DB). In both cases, less attention seems to be given to indicators of customary practices while this might be much more important to consider as these override existing laws. In case of **polygamy** and **violence against women**, the codebook discusses the two components and their indicators more extensively. This makes the construct validity of these two variables much better than the first two. Nonetheless, the criteria or instructions for identifying or measuring the patriarchal institutions are generally not crystal clear, which causes concern of the reliability of these secondary data.

Another problem derives from the lack of precision of the ordinal-level measurements. Countries are classified in only three distinct categories, meaning that the variables provide only a rough indication of the natural, realistic setting, generalizing differences and similarities between different countries in ways that might do no justice to the countries. As a last comment, missing values generally reduce the number of cases, implying that sampling becomes dependent on the availability of data and therefore could be biased. On the other hand, one must be aware that informal institutions are difficult to identify, measure and quantify. This implies that if the validity and reliability of the individual variables are critically appraised, the database provides some unique variables on the legal and practical status of women *vis* à *vis* men in the familial sphere. The prevalence of familial forms of patriarchy are measured by the unweighted average score of four variables; parental authority, inheritance, polygamy, and violence against women. The first three variables are ordinal-level measurements and only the last variable is a ratio measurement. The unweighted average is a continuous index and may take any value between 0 and 1, were lower scores represent greater gender equality between spouses and higher scores indicate patriarchal family relations. Taken together, these variables capture various dimensions of gender relations within the familial sphere.

The first variable, parental authority, is based on legal and customary practices, namely (1) the legal guardianship of a child during a marriage and (2) custody rights over a child after divorce (see codebook GID-DB). The presence or absence is scored on a three-point scale, in which a value of **0** means that the status of mother and father is equal; **0.5** indicates that (some) mothers have (some) rights, but less than fathers; and **1** represents a situation in which mother have no rights. The unweighted average of the two scores indicates the relative status of men and women in parental issues during a marriage and after a divorce, where lower scores represent greater gender equality and higher scores indicate greater gender inequality. However, in addition to earlier comments, a component of this operationalization actually also depends on the acceptance of marital divorce; in other words, this component may tap an element that is not of interest and thereby causes somewhat concern of the construct validity. This variable taps women's status as parent.

The second variable concerns women's inheritances rights as (1) spouse and (2) daughter. This variable is measured based on the legal code available, but the final scoring can also be driven by the actual application of the law (see codebook GID-DB). Like the first variable, the presence or absence is scored on a three-point scale. A value of **0** means that women and men can be heirs alike; **0.5** indicates that (some) women have (some) rights, but less than men; and **1** means that women cannot be heirs. The unweighted average of the two scores, which is primarily based on the formal institutions, potentially indicates males and females' relative status in a broader familial sphere than the first variable. In addition to earlier critique, the operationalization implies that this variable overlooks women's rights as heirs in other types of relationships, such as sisters and especially as unmarried partners. Nonetheless, this variable extends the coverage of the different dimensions in which practices of gender equality may occur within the familial sphere, tapping women's status as spouse and daughter in financial matters.

The third variable, polygamy, appears to have the same three-point scale, but the operationalization involved two ordinal-level and two ratio measurements. The first two components are the legal and social acceptance of polygamy, respectively, which are both scored on a three-point scale whose interpretation corresponds with the scales for parental authority and inheritance rights, i.e. polygamy is not accepted; accepted by part of the population; generally accepted. The other two components indicate the prevalence of polygamy, measured both in terms of polygyny and polyandry – i.e. a marriage in which a man or woman, respectively, have multiple spouses of the opposite sex– in order to measure practices of polygamy relate to men and women equally. The codebook explains that these components are preferably expressed in the percentage in a polygamy marriage, but the three-point scale reveals that it is rather reported in three categories; i.e. the prevalence of polygyny is rare (**0**); frequent (**0.5**); or common (**1**). Hence, this variable provides insight on yet another dimension by tapping the marital relation between spouses. Again, lower scores imply greater gender equality while higher scores imply greater gender inequality.

The last variable concerns violence against women. This continuous variable also has two components, namely the existence and extent of legal protection as well as the percentage of women who are beaten by their partners. In other words, this variable considers not only the parental or marital

relation, but also couples that are neither parents nor spouses. The existence and extent of legal protection is an ordinal-level measurement that is based on an UNIFEM source, specifying for situations in which; there is a specific legislation in place (**0**); there is a legislation in place but of general nature (**0.25**); A specific legislation is being planned, drafted or reviewed (**0.5**); planned legislation is of a general nature (**0.75**); or there is no legislation in place (**1**). Although this variable is more specific and accurate about the actual situation, especially for this research, the categorical hierarchy can be called in question. For instance, it is unclear if the existence of general legislation (**0.25**) or plans for specific legislation (**0.5**) reflects societal concerns of gender equality better, arguing that their ranks could be reverted too. An additional question is whether, especially these two, categories are really as discrete as suggested. By contrast to the first comment, however, the general legislation might serve the interest and needs of women in some cases already appropriately, meaning that no specific legislation is required and for those cases reverting the ranks would do no justice. So, it was decided to leave the ranking unchanged. The second component is the percentage beaten by their parents, but the prevalence has been reported as (**0**) rare; (**0.5**) frequent; (**1**) common in cases for which a percentage figure was not available.

3.2.2 Independent Variables

Living Standard – Judgments about standards of living are perhaps inherently subjective given the numerous aspects that make up the quality of human life. So, the measurement of well-being is quite a political and controversial venture. Fortunately, the existing body of knowledge mentions different variables that tap the presence, absence, or amount of this abstract concept. Researchers have generally employed GDP per capita to position a people on the development scale. Therefore, data on per capita income, adjusted to purchasing power parity rates (PPP), were extracted from the World Bank's WDI database. As for all indicators of living standards, this ratio-level measurement is a five-years aggregates in order to reduce the threat of missing values. In light of these five years aggregates, GDPPC is expressed in constant international American dollars by the year of 2005 in order to balance the annual levels of GDPPC also against a constant rather than the measure of long-term equilibrium exchange rates alone. Ergo, not only a cross-national but also cross-annual standard is needed to create and compare unweighted averages accurately. GDPPC constitutes the most rough-and-ready measure, but runs the risk of oversimplifying reality and disguising the actual standards by neglecting the relative. In this way, this research calls the construct validity of past research in question. However, section 2.1.3 already referred to an approach in which, instead of depreciating this much appreciated variable, some alternative operationalizations are introduced to measure and capture living standards more accurately and precisely.

Reviewing and borrowing from past research, the type of work experience and the degree of existential security are inter alia important determinants of human development and provide other means of measuring the overall living standard. The modernization thesis holds that industrial labor requires higher education and participation of both men and women, which may lead to new experiences and

insights regarding i.a. gender relations (§2.1.1; ¶1). Only Inglehart and Baker (2000) approach this component of the modernization thesis befittingly, i.e. measuring industrialization in terms of the type of employment, but distinguish between the industrial and postindustrial phase in the shift of labor from the agricultural sector to other sectors. The first phase concerns employment in the industrial sector whereas the latter is marked by activity in the service sector. Accordingly, the data[18] were extracted from the WDI database on the share of economically active population that is employed in publicly or privately held industry or services, and receives remuneration for the work done, as a means of testing the modernization thesis according to Inglehart and Baker's approach as well as in terms of employment in the industrial sector alone.

Retrospectively, the thesis suggests that traditional forms of labor, i.e. employment in the agricultural sector, are assumed to coincide with people who cling to traditional value systems. Agricultural workers are assumed to live in inward-looking and conservative, close-knit communities whereas industrialization is associated with urbanization, where different peoples with different backgrounds and ideas meet. Both theoretical and empirical (OECD 2010) claims, including the modernization thesis itself, rely on focus primarily on the assumption that traditionalism is a problem of rural areas, and a consequence of lower living standards, rather than the merits of urbanization. The hypothesis is formulated and tested accordingly, taking the share of the population living in rural areas as an alternative indicator of living standards. The WDI database only provides statistics on urban residence. This results in a negative relationship in the assumption, where higher levels of urbanization would represent higher levels of modernization and therefore explain lower levels of patriarchy. As just said, in line with the theory and empery, an assumption formulated in respect of the rural population is more commonly accepted, implying a positive relationship in the assumption, and thereby the interpretation of the results will be easier when the data on the share of the population living in urban areas is computed to the share living in rural areas.

The last two indicators of living standards relate to the thesis' assumption on the impact of personal development, through occupation and education, while Inglehart and Baker (2000) argue that human development in terms of existential security is equally important. Insecurity rises and falls largely with people's material surroundings; e.g. the financial, physical, psychological, and interpersonal dangers, perils and menaces people face, that may have far-reaching implications. When survival is not secure, people tend to stick closely to traditional attitudes and behavior in order to maximize predictability in an uncertain world (Inglehart & Baker 2000, 26-8)[19]. When putting emphasis on the idea that it is survival that needs to be secured, this raises the question about how to develop a variable that measures the presence, absence, or amount of fear and need in a country. Several measures capture bits and pieces of the concept, but none seems to quantify the conditions that make survival secure as good and practical as does the life expectancy of a country's population (Ibid., 42). Hence, data on life expectancy were also

[18] New data were collected for two five-years periods, but the table in Appendix A only presents the data that have been analyzed.
[19] Inglehart and Baker (2000, 28) found that in countries where survival is threatened by conflict, disease, hunger, poverty, and the like, people show relatively low levels of i.a.; subjective well-being; interpersonal trust as well as tolerance of outgroups; support for gender equality and other postmaterialist values, while being favorable to authoritarian government (see also §2.1.3; ¶12).

obtained from the WDI database. A lower life expectancy represents lower existential security and therefore is assumed to be linked with lower tolerance for non-traditional social institutions. Moreover, looking at the influence of fear and need on people from a different angle, institutional change is likely also inconceivable in elitist societies

This remark refers to a claim that has been made earlier on in respect of oil endowment. According to Spierings et al. (2009), in oil endowing countries, power and wealth tend to be centralized in a state elite that uses these privileges to manipulate citizens' fear and want in order to preserve the status quo. This status quo might include traditional attitudes towards women. As such, this variable would be able to explain variation in countries that are otherwise quite similar. No ready measure exists to test the assumption within the assumption - i.e. linking oil endowment to a ruling elite that protects the status quo. Data can represent real levels of oil endowment without linking production or revenues to individuals, and therefore not necessarily indicate the presence, absence, or power of a ruling elite. In this sense, the construct validity must be observed when making inferences. In addition, accurate indicators for levels of oil endowment are rare. The statistical report (2009) from the Organization of the Petroleum Exporting Countries (OPEC) present data on oil production as well as oil and petroleum products export, but has two noticeable disadvantages: (1) the reduction of the sample size to 35 cases; (2) the measurement in barrels per day cannot indicate potential monopolies in the national economy. Indirectly, an alternative data source puts forward an alternative measure.

This alternative measurement involves, however, a shift from oil endowment to fuels export while still measuring the same construct, namely the potential of a small elite to obtain an economic monopoly. Moreover, the construction of the measure involves a seemingly complex calculation, because the presentation of the data on fuels export by the WDI database –i.e. as a percentage of all merchandise export- cannot serve this research. If the measurement needs to reflect the assumption on a socio-economic monopoly, fuels export need an expression that relates to the size of the national economy, but this data is not available. To approximate the share fuels export constitute of the GDP, first, merchandise export as a share of GDP was calculated by means of the five-years averages of merchandise export and GDP, both expressed in current U.S. dollar (see also subscript table 4). Obviously, the operationalization of the theoretical concepts is a long-winding process while the assumption within the assumption threatens the construct validity of the measure. For this reason, yet an other alternative measure, i.e. the distribution of wealth measured in the Gini index, captures the same idea but not in terms of control over natural resources.

In addition to earlier comments, the measurement of an economic elite in terms of oil endowment is less generally relevant than is the distribution of wealth. The Gini index results from a ratio analysis, which implies that it is not dependent on the size of the economy or the population of a country. Therefore, the Gini index constitutes also a more accurate representation of actual levels of per capita income and thereby presents an alternative to GDPPC. Where the GDPPC statistic is criticized for not representing income levels for the whole population as it takes the average, the Gini index demonstrates

how income is distributed for poor and rich. By means of the Lorenz curve[20] and a hypothetical line of absolute equality, the Gini index approximates the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. The WDI database presents the countries' scores, ranging between zero and hundred, where lower Gini indices represent higher income equality and vice versa. The Gini index constitutes a more general and direct measure of an economic elite than is oil endowment, implying that the construct validity of the Gini index is much higher. Moreover, this variable connects the assumptions of the modernization thesis and of Spierings et al. better, resulting in the expectation that the more unequal wealth is distributed the more patriarchal social institutions are.

Lastly, theory suggests that if the causal effect of these socio-economic variables on social values fails to occur, historical levels of development could explain the variation across countries. The effect of rising living standards on social relations and institutions may take time to play out. So, while the data on patriarchy and cultural traits are retrieved for 2009 and 2010, respectively, more leeway needs to be given to the representations of the living standard. Aggregate data on per capita income, industrial and postindustrial employment, the size of the rural population, and life expectancy are collected for three five-years periods; 2000-04, 1990-94, and 1980-84, in order to have reference to the past thirty years[21]. The initial step toward making predictions about the dependent variable concerns the latest period – i.e. 2000-04 – which is closest to the measurement of the other IV and the DV. The five-years averages have to reduce the threat of missing value as much as possible.

Cultural Traits – Most academics in the field argue that a society's sentiment and commitment to principles of sexual egalitarianism and liberalization are a cultural matter, meaning that the presence, absence, and severity of patriarchy is primarily explained by a society's most central cultural traits. Cultural traits are the basic patterns of human activity and fundamental principles of human life that are propagated through generations and hence have become characteristic for a group of individuals who feel affiliated with one another through this shared heritage. The manifestation happens in numerous aspects and has infinite features, which complicates choosing which type and level of measurement make this concept measurable and manageable.

There is no ready set of variables that represent cultural traits by bits and pieces and an attempt to develop this set requires tedious and ticklish deliberations. This implies that, especially for a master student, it is perceptive to draw from past research. In past research it so happens that a society's cultural traits are represented by a single nominal measurement, namely the prevailing creed, arguing that, despite western secularization, religion still renders a deep meaning to culture and is the most continuous and critical element in most non-western societies. Accordingly, the prevailing creed (P.C.) is the set of

[20] The Lorenz curve shows the proportion of the distribution assumed by the bottom quantile of the values, which is often used to present the probability distribution of wealth. According to the Pareto principle, every point on the Lorenz curve is indicative of the percentage the bottom x% of all individuals/households have of total income.

[21] Morrisson & Jütting state that this timeframe is required to have reforms effectively enforced (2005; 1067-8).

beliefs, principles and perceptions that strongly influence the daily attitudes and behavior of the majority of the population; in other words, the prevailing creed was determined by the latest data on religious affiliation per country (ARDA, 2010). The world houses some major religious adherents, which in this case results in six nominal categories that are exhaustive and mutually exclusive; namely Muslim, Christian, Buddhist, Hindu, Chinese Universalist, and Ethno Religionist (see table 2). Individual's religiosity is reasonably consistent and therefore, as a ratio-level measure, these data are believed to represent religious affiliation for the past couple of years too.

In this research it is particularly interesting to have a measure of the presence or absence of this creed in people's daily life in order to explain, for instance, intra-religious variation (see §2.1.1). With respect to socio-cultural self-reflection and renewal, it is assumed that *what* you know is less important than *who* you know (Fukuyama 2001, 9; WRR 2010, 84). As assumed to be the case in urban areas, cross-cutting ties between different or divided groups of people foster the transfer of ideas and perspectives on social matters. In societies where individuals are permitted to have multiple memberships and identities, information, innovation, and human resources can be exchanged and passed on between the peripheries of various social networks (Fukuyama 2001,10). Religious or ethnic homogeneous[22] groups of people tend to be inward looking, like people living in rural areas, which is assumed to serve the socio-cultural self-reflection and renewal of traditional value systems in a society badly. Ergo, indirectly related to the assumption on the relative size of the rural and urban population, not only the prevailing creed but also the percentage of the population affiliated to this creed is of interest. Meanwhile, this measurement is used to test Spierings et al. assumption in yet a different way, namely a potential religious elite.

In this respect, the share of the population that is affiliated to the P.C. shows the religious homogeneity and is assumed to indicate how deeply the prevailing creed is embedded in society. The imbrication of religion in public life runs the risk of granting spiritual leaders too much social influence and thus potentially an "elitist" status. In addition to the previous paragraph, this explanation constitutes yet another reason why religious homogeneity is relevant to why the status quo is not challenged. Likewise, government's financial support of this creed compared to other creeds forms a complementary indicator of the public support for religion and therefore power of its spiritual leaders. The Association of Religion Data Archives provides this ordinal-level measure of secularization in terms of government financial backing of the religious group(s), using a ten-point scaled index to indicate whether the government funds religious groups not at all, proportionally, or imbalanced (the subscript of table 2 elaborates on the origin of this multi-item measure). Higher scores reflect greater government favoritism of a specific religion, indicating the institutionalization of religion in people's daily life. This index variable represents the situation in 2010 as well.

In addition, being aware of the geopolitical forces that have left their marks on the manifestation of religion in the propagation of cultural traits, religiously similar countries that have been subject to quite similar internal and external experiences and influences can be clustered into civilizations. The best-

[22] According to Thomas, poor societies are often rich in localized or bonding social capital, but lack linking or bridging social capital (2004,138). These societies are generally composed of a large number of identical, self-contained social units with a narrow radius of trust, entailing a strong in-group solidarity that produces intolerance to unorthodox or heterodox outsiders (Fukuyama 2001,9; WRR 2010,85).

known classification, which has been both applauded and antagonized in the academic world, organizes the world into eight categories; namely the African, Buddhist, Hindu, Islamic, Latin American, Orthodox, Sinic and Western civilization (table 2). Despite critical notes, this nominal measurement seems particularly interesting for this research as Huntington (1996) claimed that the classification could be used to explain differences and similarities in important values, such as democracy and the like. This classification is a crude geographical division of the world that neglect regional specificities. The initial plan, therefore, was to improve the precision of measurement and research regional trends by means of the UN's classification of geographic sub-areas. This resulted in a nominal measurement of sixteen categories (table 2). Due to this extreme precision, however, the variable was eventually not included in all parts of the analysis (see also §4.1.2).

3.3 Unit of Analysis

This study concerns a cross-cultural analysis in which developing countries constitute the units of analysis. The database covers 119 countries, implying that the number of cases actually approximates the total population of developing countries. Nonetheless, these cases are referred to as a sample of developing countries. Developed countries are not of concern because of the conviction that developing and more developed countries are apples and oranges that should not be treated as equal or similar units in analyses, because the impact of the same social and economic solutions or distortions can vary with the stage of development (based on results of Dollar & Gatti 1999, 18). So, a fallacy might occur when the situation or statistics of one group are used to make inferences about the other. When included in the same fruit bowl, moreover, a data comparison makes rich nations appear the causal agents of backward nations. History has proven, however, that what works for Western countries cannot be replicated in developing countries. A fruit mix, therefore, could provoke quite some historical retention[23] and ethical discussion (Inglehart & Baker 2001, 20-2, 31; Inglehart & Norris 2003, 65; King 2009, 294; Jütting & Morrisson 2005, 5). Therefore, this study intends to be a good representation of any other sample of developing countries. The developing countries are virtually independent units; in other words, the data from one case do not influence or have been influenced by the data from another case. Sampling depends on the availability of data, since the GID-DB presents the dependent variable for a selected number of cases. The cases of Serbia and Montenegro and Chinese Taipei were not included because of missing values or inappropriate data, which brings the sample size (denoted N) to 119 cases. Due to missing

[23] In line with the traditional Christian believe in the creation of 'new heaven and a new earth', the evolutionist view of 18th century Enlightenment made Western Europeans and North Americans believe that they had the responsibility to bring a better quality of life to less advanced territories in the world (Wijsen 2009, 15; Bartelink 2009, 173). These 18th and 19th century endeavors have been described as 'coercive utopias' or model societies, in which Western standards of education, health care, science and technology were considered normal and necessary for progress. In this way, development became limited to a view of capitalist ideals and principles and therefore primarily material progress (Ter Haar & Ellis 2006, 354-5). Although contemporary development practitioners and scholars prefer an endogenous definition of development, considering what a more satisfactory life comprises in people's own terms, part of the debate remains whether notions of development are truly universal or typically Western doctrines of the world in the world.

values, however, the number of cases will fluctuate in the regression analysis. The descriptive analysis (§4.1.1) looks at the cultural and economic characteristics of the sample, showing the extent to which this sample is a good representation of the developing world.

3.4 Materials

Secondary data were retrieved from the online accessible databases of the World Bank, OECD and the ARDA. The statistical analysis was run on SPSS 16.0 for Windows XP/Vista with tips and tricks from 'Discovering Statistics using SPSS' (Field 2005).

3.5 Key Principles

The study is based on numerical manipulations, taking a quantitative approach through the use of a statistical data analysis. This analysis starts off with an examination of the secondary data for both the dependent and the independent variables in order to establish confidence in the reliability and validity of the data. Intending to predict the prevalence of familial patriarchy through different dimensions of gender inequality, a representative variable was computed by the unweighted average of the scores on parental authority, inheritance, polygamy and violence against women. Having one outcome variable and several predictors, a multiple regression is used to observe trends within data. However, in a regression model, predictors variables need to be continuous or categorical with only two categories (Field 2005, 208-12). Therefore, the categorical data on religion, region and civilization need to be transformed into dummy variables, choosing a baseline group for all dummy variables. The preliminary data analysis ends with simple linear correlations and cross-tabulations in order to give an idea about directions of relationships as well as to signify threats of collinearity as early as possible.

These simple correlations are helpful research tools, but correlations tell nothing about the contribution of variables to a model. By means of several simple linear regression analyses, the individual contribution of the independent variables in predicting familial patriarchy is examined first. In regression analysis a predictive model is fitted to the data and this model is used to predict values of the dependent variable from the independent variable. In regression the model that is fitted is a linear model, having the following general equation:

$$Y_i = (ß_0 + ß_1 X_i) + \varepsilon_i$$

In this equation, the Y-value represents the degree of familial patriarchy and X_i the i^{th} participant's score on the predictor variable. The betas are the regression coefficients[24], where the first constitutes the intercept and the second the gradient of the straight line fitted to the data. The epsilon is the residual term, which is the difference between the predicted and actual score of the i^{th} participant. The equation can be extended for a multiple regression analysis, in which the i^{th} participant's score on various predictor variables are included:

$$Y_i = (ß_0 + ß_1X_1 + ß_2X_2 + \ldots + ß_nX_n) + \varepsilon_i$$

Except for beta zero -which is the intercept or the unstandardized coefficient (B) of the constant- all beta-values are the coefficients of the predictor and the X-value is the i^{th} participant's score on this predictor. Hence, the coefficients indicate the individual contribution of each predictor to the explanation of the outcome variable.

The statistical analysis concerns these types of regression analyses and therefore its basic principle and concepts are briefly discussed here. In short, a simple linear regression analysis -including a single independent variable- seeks to find the line that best fits the data by means of ordinary least squares (OLS). A multiple regression analysis seeks to find the linear combination of predictors that correlate maximally with the outcome variable, which makes the best fit more complicated while the basic principle is the same as simple regression. To determine this optimal line, the vertical difference between the values predicted by the line and the data that were actually observed are used to calculate the sum of squared residuals (denoted SS_R) for each line, where a smaller value represents a better fit. Since this analysis provides the best line available, which is not necessarily a good line, the fit to the data can still be inaccurate. For this reason, the line of best fit is compared against the fit of the most basic model. This basic model calculates the difference between the observed values and the values predicted by the mean, known as the total sum of squares (denoted SS_T). By calculating the difference between SS_R and SS_T models, the model sum of squares (SS_M) show how much better the regression line is than just using the mean as a model. A large SS_M means that the regression model has made a big improvement to how well the outcome can be predicted.

The proportion of improvement is easily calculated by dividing SS_M by the SS_T. The resulting value is called R square (R^2) and gives a good gauge on the proportion of improvement the linear combination makes in explaining the variance in the outcome relative to the basic model. This statistic is related to the multiple correlation coefficient (denoted R), which is a gauge of how well the model predicts the observed values of Y in respect of the predicted values of Y. The literature study indicates, however, that this research is even more interested in the individual contributions of the predictors to the model than in the overall fit of the model. This has consequences for the ratio of predictors (denoted *k*) to the sample size. Although the simplest rule of thumb is that the bigger the sample size the better, Green

[24] The equation is sometimes written with ordinary *b*s to be consistent with the SPSS output, implying that these are the unstandardized coefficients (Field 2005, 145).

(1991) provides some rough and ready guidelines (in Field 2005, 173). The appropriate ratio between the minimum size of the sample and the maximum number of predictors depends on the nature and size of the effect the researcher wants to detect. When interested in the overall fit of the model, the proportion can be calculated $N = 50 + 8k$. The equation is $N= 104 + k$ when a researcher is interested in the individual contributions of predictors. In case a research is interested in both, Green recommends to calculate both and use the largest sample size. The sample size of this research is predetermined by the GID-DB and therefore the formulas are used to indicate the maximum number of predictors in respect of the sample size ($k_{max} \leq 9$).

Considering the fact that the number of variables increases significantly after transforming the categorical variables into dummies, the sequence of including and entering predictors into the model according to their theoretical importance has suddenly become a more complex endeavor. The fact that the number of predictors is too large for the sample size implies that not all indicators can be entered in the same model, and therefore a simple regression analysis will be used to test the quality and contribution of the indicators with least justification in theory and lowest construct validity. After having reduced the number of predictors by the results of the simple linear regression analysis, the predictors are examined as well as entered hierarchically. These methodological decisions are based upon past research (see chapter 2), and all meaningful variables enter the model in their order of known importance in predicting the outcome. Religion and per capita income represent the most conventional indicators of cultural traits and living standard, respectively, and are included in the first basic model. Although these variables are both first in hierarchy, it was decided to give the cultural explanation priority in order to consolidate the GAD and WCD movements. A second, and maybe third, basic model will subsequently examine the alternatives or complements of these variables systematically.

The contribution of the conventional predictors to the model determines with which priority the remaining predictors and factors are treated. With respect to the predictors, the indicator on the prevailing creed can be extended with government favoritism and share of the population affiliated to this prevailing creed, or can be replaced by the indicator on civilization. Another potential concern is the time the effect of living standard may take to play out, meaning that the model can be tested for data on living standard between 1990-94 or 1980-84. Initially, moreover, the best model(s) would be used to test whether the set of predictors could also account for the variation in the different components of familial patriarchy. However, as three variables are ordinal, neither a linear nor a logistic regression is suitable since the first requires continuous and the second dichotomous variables. An arbitrary decision was made to obtain a dichotomous variable where all values other than zero obtained value 1. For the three ordinal dependent variables, this resulted on average in an unequal division of the sample of approximately forty-five cases of gender equal against sixty-five cases of gender equality. This implies that the division is even more uneven, and therefore even more impractical, for one than the other. The results section ends in an assessment of the statistical assumptions. Nonetheless, like validity and reliability concerns regarding the data and method, statistical assumptions were checked throughout the analysis.

4. RESULTS

The results are presented in three parts. The first section explores and evaluates all data from 2000-on, resulting in a description of the basic features of the measures and sensible summaries about the sample. These basic statistics, including the first step in the quantitative data analysis: the simple correlation analysis. The second section presents the results of the linear regression analyses, building and discussing models regarding the index and individual indicators of familial patriarchy, respectively. The third and final section of this chapter evaluates the statistical assumptions of the best model(s) of the second section, which is necessary to draw conclusions in the next chapter.

4.1 Exploring the Data

By means of a quick analysis of the raw data, drawing from both the database of Appendix A (tables 1-4) and the statistics of Appendix B, the first sub-section describes the features while checking the statistical standards of both the measures and the sample (*for basic statistics, see* Hoyle, Harris & Judd 2002, 441-50; Field 2005, 1-16). The categorical data have to be prepared for the linear regression analysis and therefore a second sub-section will discuss the formation of dummy variables. Then, the simple linear correlations between variables are tested in the third and fourth sub-sections. Since the research deals with quite some variables, some structure is needed. First, the indicators of familial patriarchy, cultural traits and living standard are analyzed with an eye on the statistical evidence for the construct validity of these distinct measures. This is followed by a cross-sectional correlation analysis, which discusses the correlations between the indicators of the dependent and independent variables. In addition, some crosstabulations link familial patriarchy to cultural traits.

4.1.1 Descriptive Statistics

Three out of four dependent variables are cut-off values, categorized as either 0; 0.5; or 1, where the value 1 indicates high inequality. All three variables have an approximately normal distribution. Looking at the average scores, social institutions regarding women's inheritance rights turn out to defend the interest of women best ($\bar{x}$ = 0,374, s = 0,3301), whereas the average score on institutions regarding parental authority and polygamy are much closer to the 0.5 median; in which (some) women have (some) rights, but less than men (table 5). Violence against women appears the most rampant problem, showing most cases in which women are not granted special protection against men ($\bar{x}$ = 0,5885, s = 0,2411). The low and high average score of inheritance rights and violence against women, respectively, in combination with a smaller standard deviation means that the variation on these

topics across developing countries is smaller than on parental authority and polygamy. Although this is more an inferential than descriptive note, this might indicate that the former two are less culturally specific than the latter two (see also cross-tabulations tables 16-18). This might make the combination of indicators form a good measure of familial patriarchy. The combination of variables provides the index variable, which ranges from 0 to 1. Due to one or two missing values regarding the four indicators, no index variable could be computed for Panama, Puerto Rico, Turkmenistan and Uzbekistan (N= 115).

The descriptive statistics show no other aberrations despite the fact that the distribution is not completely normal (figure 1). The graph shows a slight drop rather than a peak in the upper-middle quartile. Nonetheless, the distribution in the histogram is also not obviously bi- or multimodal -which often results from the polarizing nature of a categorical measure. In addition, none arithmetic mutation of this computed variable provided a normal distribution. Therefore, a different explanation was sought. In this case, it appears that the non-normal distribution can be explained by two distinct groups that are hidden in the sample. When dividing the sample in countries with a GDPPC below and over $3000,- respectively, a roughly normal distribution can be found for the lower income countries. By contrast, the distribution is not normal for countries above this boundary (figure 2). For this group, the skew to the left side suggest that society's behind the boundary are generally most women-friendly, explaining the peak in the lower quartile of figure 1a, while a few wealthier countries turn out to be still amongst the most patriarchal societies[25]. The difference between the groups and the deviation from normality make the matter more complex, making it necessary to build and test models for the lower half of the sample separately before forming an opinion on the results. Meanwhile, though, this paragraphs intends to draw attention to the potential fallacies in generalizing the results of a sample to the population.

Taken together, the two groups in the sample approximate the population of developing countries. Consequently, data exploration shows that the database constitutes a fair representation of the developing world. The sample comprises all geographic regions that have to contend with development difficulties from the MENA countries to Southern America and from Southern Africa to Eastern Asia (table 6). Accordingly, the Islamic, African and Latin American civilizations constitute about 75 per cent of the sample (table 7a). Although the different creeds are not equally represented, the percentage of Christian and Muslim countries proxy the percentages their adherents make up of the world population (table 8a; CIA, 2010). The whole sample appears to comprise religiously quite homogeneous countries (table 7c). According to the raw data of table 2, Muslim and Christian countries present some thirty extreme cases, having over ninety per cent of the population affiliated to a single religion –e.g. Afghanistan, Somalia, and Tunisia are virtually perfectly homogeneous. On average, however, about eighty per cent of the populations is affiliated to a creed of shared beliefs, principles and perceptions, with a general standard deviation of about twenty per cent ($\bar{x}$ = 77,5, s = 18,8). Ethno religionist and Chinese universalist countries are generally amongst the least homogeneous countries – e.g. in China and Mongolia, the largest ethnic groups represent only one third of the national population. In contrast with the generally

[25] The correlation analysis of §4.1.4 revealed that in the group of higher income countries, higher fuels exports are significantly correlated to higher levels of familial patriarchy. For all except inheritance rights, the correlation is even significant at the .01 level (table 15c).

large religious homogeneity in the countries of interest, government favoritism of one particular creed over others differs largely across countries ($\bar{x}$ = 4,799, s = 2,813) (table 7c).

This is also true for the financial means themselves. Table 3a shows that the sample covers countries with GDPPC around $350,- up to countries with a GDPPC over $35.000,- PPP adjusted (constant international U.S. dollar, 2005). In seven out of fourteen countries with a GDPPC over ten-thousand U.S. dollars; namely, Bahrain, Gabon, Kuwait, Oman, Saudi Arabia, Trinidad and Tobago, and the United Arab Emirates, fuels exports approximate contribution to the country's GDP is over 25 per cent. Not all countries are granted this type of natural resources and therefore the curve in the frequency distribution of fuels export is not ideally shaped. More worrisome, however, is the number of missing values, because a linear model will systematically remove cases with missing values (N=97). The Gini index, an index that represents the wealth distribution within countries, captures the theoretical concept in an alternative way. Even though this seems a more appropriate measure when all types of developing countries are of concern, and the distribution is more normal, this variable reduces the number of cases even more (N=76). The scores of countries for which data are available represent neither perfect equality nor inequality within their economies. Unfortunately, wealth is not proportionally distributed across developing countries. All WB income categories[26] are represented in the sample, albeit disproportionally. The GID-DB includes primarily lower income and lower-middle income countries, made up by some thirty upper middle income countries and even a few high income countries. Accordingly, the mean and median give a different impression on the central tendency of the distribution ($\bar{x}$ = 5548,4 and median = 2997,0). The graph is positively skewed. In order to obtain a normal distribution, econometrics commonly mutates numeric expressed variables, such as amounts of dollars, arithmetically. Also in this case, the natural logarithm – the Ln function – of the variable has an approximately normal distribution (figure 3).

Data on life expectancy (figure 4), the rural population (figure 5) and the industrial labor force (not shown) are roughly normal distributed at once. Only life expectancy is slightly negatively skewed (not shown), showing that in developing countries individuals are expected to live between 42 and 81 years and reach the age of 63 on average ($\bar{x}$ = 62, 9, s = 10,32). Remarkable about the size of the rural population ($\bar{x}$ = 52,25, s = 22,64) is the minimum value, implying a complete urbanized population (table 9), namely the special administrative region Hong Kong and Singapore. Latin American and oil endowing countries tend to have high levels of urbanization too (see raw data table 3c). The theory also requires a measure of economic activity that represents industrialization and postindustrialization, such as the share of employment in industry and services, respectively. Table 9 shows that, in both cases, there are many missing values (N=68), which impacts on the potential of this variable in the regression analysis. Moreover, there is much more variance in employment in services than in industry across developing countries, while the distribution of industrial employment approximates perfect normality whereas postindustrial employment deviates slightly from normality.

[26] For operational and analytical purposes, the World Bank applies an economic categorization of countries based on per capita income. Countries with a per capita income below $995,- are classified as low income; with a per capita income between $996,- and $3946,- as lower middle income ; when between $3946,- and $12.195,- as upper middle income; and above $12.196,- as high income countries (http://data.worldbank.org/about/country-classifications).

4.1.2 Dummies

The scores of the indicators of cultural traits are organized along a nominal scale, containing qualitatively different categories to which a name rather than numeric value is attached. SPSS software cannot use categorical data that are not dichotomous and therefore these variables have to be recoded into dummy variables first (Field 2005, 208-10). In this way, it soon became clear that the division of geographic regions was too extensive, and ambitious, to be practical. As a categorization into larger geographic regions would lead to a data analysis that already has been conducted by several scholars, such as Jütting and Morrisson, Huntington's civilizations needs to fill up the gap. In order to define the baseline to which creeds and civilizations can be compared, respectively, the judgment of existing theories and studies is respected and the Islam is chosen as the reference group. In addition, Islam (frequency = 42) seems a valid reference group as it represents the second largest creed behind Christianity (frequency = 58) and the largest civilization (frequency = 41). Subsequently, creeds and civilizations that are not adequately represented in the sample have been placed under umbrella dummy variables (table 7b and 8b). In case of religion, this umbrella variable is too inclusive to draw conclusions on creeds other than Islam and Christianity. In case of civilizations, on the other hand, only the Buddhist, Hindu and Sinic civilization have been recoded into an umbrella dummy variable, leaving opportunity to distinguish between six different civilizations. As an independent dummy, the Western civilization is likely not adequately represented. However, the cultural and geographic discrepancies between these countries and another group of countries might be too large to classify these under the same dummy variable (table 8b).

4.1.3. Correlation Analysis, Part I

A simple linear correlation analysis shows that the prevalence of patriarchal institutions within households is positively correlated, which increases confidence in the convergent validity of the index variable 'familial patriarchy' (table 10). As explained in chapter three, this variable is the unweighted average of the scores on parental authority, inheritance, polygamy and violence against women. The correlation of this index variable with its individual components is obviously too high but not worrisome, because the index and the individual variables are not included in the same regression model. Also regarding the independent variables, some characteristics can be added to the previous section by means of a correlation analysis.

As expected, data show significant correlations between the indicators of the living standards (table 11). For instance, higher levels of GDPPC and industrialization are significantly associated with higher life expectancy ($p < .01$). Likewise, equal distribution of wealth as well as high levels of fuels export are positively associated ($p < .05$), while these are meanwhile positively correlated with post-industrialization – measured as employment in the service sector ($p < .01$). Only the correlation

coefficient of the size of the rural population and all other variables, especially the levels of industrialization, shows a consistent negative correlation. Correlations between cultural traits were not anticipated, entailing that the analysis provides some interesting insights with respect to the cases (table 12). For instance, the Islamic world (r = .202, p < .05) and Latin America (r = .303, p < .001) turn out to be most religious homogeneous whereas African societies (r = -.309, p < .001) are more heterogeneous. Moreover, the more religiously homogenous a people, the more a government favors one creed over others (r = .235, p < .01). This seems to relate to Islamic societies in particular, showing a positive correlation (p< .01) to both the Muslim and Islamic dummy (table 12).

The measures show good convergence with other measures of the same thing, while indicators of cultural traits and living standard do not correlate with one another. The correlations are often insignificant and go every which way, which indicates that the variables indeed measure different constructs (tables 13). Ergo, the correlation analysis also demonstrates the discriminant validity of the measures. Some exceptions are found for Africa, which in almost all fields appears to be correlated to the lowest levels of modernization. While Latin America has significantly highest levels of life expectancy, GDPPC and industrialization compared to Islamic countries, the latter's negative relation[27] with the measure of wealth distribution suggests that wealth is much more equally distributed among individuals or households in Islamic countries[28] – despite the significant correlation with higher levels of fuels export[29]. Oil endowment is highest in Islamic countries (r = .419, p < .001), while a substantially lower correlation coefficient can also be observed for countries where Christianity prevails (table 13a). Another significant correlation exists between higher levels of fuels export and government favoritism of one particular creed (r = .305, p <.01) (table 13a). In turn, government favoritism is most profound in Islamic countries (table 12 and 13a). Nonetheless, oil endowment is more consistently correlated to the indicators of living standards than of cultural traits, showing that oil endowing countries have higher levels of GDPPC and life expectancy, and lower levels of rural population.

4.1.4 Cross-tabulations and Cross-Correlation Analysis, Part II

A simple linear correlation analysis can also provide some preliminary insight on the association between cultural traits or living standard and the prevalence of patriarchal social institutions. Section 2.1.1 states that traditionalism, and so is patriarchal traditionalism, is more prevalent and persistent in some religions and civilizations than others. The correlation analysis demonstrates that indeed familial patriarchy comes through most strongly in Muslim countries. This appears, albeit to a lesser extent, true for Ethno religionist and Christian countries too (correlation tables 14a and cross-tabulations tables 16). However, the crosstabulations (tables 16) indicate a variance in social institutions

[27] A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality, meaning that a negative relation to this variable represents a positive reality of a more equal distribution of wealth.
[28] Table 13b shows, however, that wealth is most equally distributed in orthodox countries, being a legacy of communism.
[29] This calls Spiering et al.'s argument that oil endowment does not elevate the welfare and well-being of the mass and elite fairly into question.

across countries with a similar prevailing creed, which implies that religion alone cannot explain the variation in familial patriarchy. The geographic location of societies is potentially a co-determinant. In this respect, tables 17 show that familial patriarchy is prevalent in most African regions as well as Southern and Western Asian, in particular. Considering the fact that many countries in SSA are Christian too, the results of the correlation and crosstabulation analysis seems in accordance with the finding that Islamic and African civilizations are more patriarchal than Latin American, Orthodox, Hindu, Buddhist, and especially Sinic societies (correlations table 14c and cross-tabulations tables 18). Even though the previous section ascribes both religious homogeneity and government favoritism primarily to the Islamic culture, which is again denoted as being most patriarchal in this paragraph, no cross-correlation can be found between familial patriarchy and religious homogeneity or government favoritism (table 14b).

The literature is also explicit about the modernization process, arguing that traditional institutions are replaced by more modern ones along the evolution of economic development. When analyzing both the lower and higher income group, statistics show a significant correlation between higher levels of GDPPC and lower levels of familial patriarchy, except for parental authority. This type of correlation also exists when analyzing only the group of lower income countries (table 15b), and to a certain extent also for the higher income countries (table 15c). Also the level of industrialization shows some random associations with lower levels of familial patriarch. Yet, the correlations between familial patriarchy and both the percentage of the population living in rural areas and people's life expectancy deserve most attention as these are most significant (table 15a). Although the first is not significantly correlated to each patriarchal institution, the positive correlation recalls theoretical claims that institutions tend to be more traditional in countries with a larger rural population; inheritance ($r = .339$, $p < .001$) and polygamy ($r = .211$, $p < .05$) (table 15a). Even more noticeably is the link with life expectancy, showing a negative correlation for all patriarchal institutions with a significance level lower than .001. This correlation comes through even stronger when solely analyzing the group of lower income countries (15b). In the prose of this research, this finding suggests that familial gender relations tend to be less patriarchal in countries were survival is more secure.

Although these two alternative explanations seem to do much better than GDPPC, it is difficult to write off a variable that has been so much appreciated by renown scientists in the field and therefore this research has no intention of depreciating this variable. Instead, a variable with a complementary quality is included. The descriptive statistics show a positive correlation between fuels export and the individual indicators of patriarchal institutions. The correlation is significant for parental authority ($r = .270$, $p < .01$) and violence against women ($r = .293$, $p < .01$) (table 15a). When separating the lower and higher income groups, this negative correlation does not persist for the lower income countries while becoming more evident for the high income countries (15b and c). The distribution of high income countries is not normal and therefore no opinion can be formed on this finding. Moreover, the high income countries will no longer be separately analyzed. In addition to the inclusion of fuels export, even though no correlation is found, the regression analysis will comprise an indicator of the wealth distribution – the Gini index – as an alternative measure of an elitist society.

4.2 Model Building

In this section, the predictive power of several combinations of predictors is tested. The regression analysis is primarily interested in predicting the index variable 'familial patriarchy'. In the first sub-section, a simple linear regression tests the contribution of each predictor, both to examine their quality and reduce the number of predictors. Subsequently, a multiple regression analysis examines to what extent these explanations can account for the variation in the index variable on familial patriarchy. Then, the analysis is run with the selected indicators of living standards from earlier time periods. Lastly, the prevailing creed is replaced by an alternative indicator, namely civilization. In the final section of this chapter, the statistical assumptions are tested for the best model(s) in order to form a valid opinion about the results.

4.2.1 Simple Linear Regression

In the data exploration, no cross-correlation was found between familial patriarchy and the public presence of a civic religion. In addition, the features and correlations of the indicators of living standards were not equally promising. This might confuse the interpretation of the multiple analysis and therefore the analysis starts off with a simple linear regression analysis. The complementary variables of cultural traits appear indeed insignificant in explaining the variation in the index variable of familial patriarchy. In addition, the tables below show that only few variables are significantly related to familial patriarchy. However, with respect to the total population and the lower income countries (LIC), also the relationship between the rural population as well as industrial –and postindustrial in case of the LICs– employment and familial patriarchy is almost statistically significant ($p < .09$). By contrast, the distribution of wealth turns out to be insignificant while a preliminary multiple model shows that in combination with other variables, the level of industrial employment in particular, reduces the number of cases to forty-eight. Likewise, fuels export leaves only sixty-two cases, which, at a first glance, seems to explain variation in familial patriarchy across the higher income countries (HICs). A test of the statistical assumptions makes clear, however, that no opinion can be formed on this finding. Focusing on the statistical significant relationships for which all statistical assumptions are met, it appears from the R Square and F-Statistic that the contribution of the variables is generally modest, and not very consistent, except for life expectancy and GDPPC. Remarkable is the change of direction in the sign of GDPPC for higher income developing countries. The results of these individual analyses are important for the choices that have to be made in the remainder of this section.

Table 4.2.1. Simple Linear Regression on Patriarchy (for different sample sizes)

		R^2	F	B		| *t* |	Statistical Assumptions
Life Expectancy	*Total (N= 115)*	.352	61,25	-.016	***	7.906	met
	LIC (N= 55)	.492	51,41	-.020	***	7.170	met
	HIC (N= 54)	.085	4,86	-.011	*	1.940	met
Rural Population	*Total (N= 115)*	.063	7,63	.003	**	3.110	met
	LIC (N= 55)	.053	2,95	.004		1.720	met
	HIC (N= 54)	.012	0,62	-.001		0.463	met
GDPPC (Ln)	*Total (N= 109)*	.094	11,04	-.074	***	3.622	met
	LIC (N= 55)	.145	8,96	-.160	**	2.993	met
	HIC (N= 54)	.078	4,42	.110	*	1.900	-
Fuels Export	*Total (N= 95)*	.073	7,35	.00	**	2.618	-
	LIC (N= 44)	.018	0,75	.002		0.868	-
	HIC (N= 45)	.327	22,8	.009	***	4.757	-
Wealth Distribution (Gini_Index)	*Total (N= 74)*	.003	0,24	-.002		0.673	-
	LIC (N= 41)	.039	0,17	.007		1.264	met
	HIC (N= 33)	.015	0,48	-.003		0.913	-
Industrial Employment	*Total (N= 66)*	.049	3,33	-.008		1.885	met
	LIC (N= 23)	.135	3,27	-.019		1.809	met
	HIC (N= 41)	.003	0,10	-.002		0.409	-
Postindustrial Employment	*Total (N= 66)*	.007	0,48	-.001		0.690	met
	LIC (N= 23)	.158	0,39	-.011		1.983	met
	HIC (N= 41)	.071	3,03	.004		1.640	-
Government Favoritism	*Total (N= 113)*	.001	0,06	.002		0.240	-
	LIC (N= 55)	.023	1,23	-.014		1.109	-
	HIC (N= 52)	.109	6,13	.030		2.476	-
Homogeneity P.C.	*Total (N= 113)*	.002	0,26	.000		0.509	-
	LIC (N= 55)	.028	1,53	-.002		1,236	-
	HIC (N= 52)	.034	1,75	.003		1.324	-

*** . Correlation is significant at the 0.001 level (2-tailed).
** . Correlation is significant at the 0.01 level (2-tailed).
* . Correlation is significant at the 0.05 level (2-tailed).

These simple linear regression analyses help to reconsider the inclusion of each predictors to the model once more, because a reliable regression model based on a sample of this size requires to cut the number of predictors (see also §5.3; ¶5)(Field 2005, 169-74)[30]. In this respect, the indicators of oil endowment and wealth distribution are least renown and both pose serious problems. Most profound is the problem that a linear model excludes all cases with missing values, which implies that these indicator reduce the sample size too drastically. Moreover, wealth distribution turned out to be very insignificantly related in both the simple and a preliminary multiple regression whereas statistical assumption were consistently not met in models with fuels exports. The two indicators of the level of industrial employment also suffer from missing values, which is a plausible excuse for its weak presence in the model. Hence, these indicators are not added to the multiple regression models, leaving a sample size of 109 cases. By contrast, life expectancy, GDPPC and the rural population rate are show better features and results for a multiple regression analysis. In addition, strong assumptions have been made on these predictors, which need to be respected and accordingly tested. Hence, the multiple regressions will include these predictors.

[30] Although the sample has been divided in two groups to test the model for a sample that has a perfectly normal distributed dependent variable, unfortunately, the required sample size of this guideline cannot be met when the model is tested for the lower income group (N=55).

4.2.2 Multiple Regression Analysis (full sample)

First, a basic model is built around the most central and conventionally used predictors of traditionalism, namely religion as an indicator of cultural traits and GDPPC as a representation of living standards. It was decided to enter the prevailing creed in the first stage in the hierarchy, in order to consolidate the GAD and WCD movements, the cultural explanations was given priority for once. Ergo, the second stage in the hierarchy comprises GDPPC[31]. Together, in the first basic model (see next page, table 4.2.2), the cultural and economic explanations account for more of the variation in familial patriarchy regarding the full sample than either of the two predictors did in the simple linear regression (R^2= .300; R^2_{adj} = .280 with k = 4, p < .001)[32], while the R-Square Change shows that both make a fairly equal contribution (ΔR^2 = .171 for step 1 (*ps* <.001) and ΔR^2 =.129 for step 2 (*ps* <.001)). The first basic model seemingly meets the most important statistical assumptions for the full sample. In the same model, the negative sign as well as the size of the unstandardized coefficients for the dummies on the type of religion indicate that familial patriarchy is much more prevalent in Muslim than in Christian or religiously different countries. The interpretation of income per capita (B = -.085, p < .001) is more difficult than of the dummy variables, as one per cent increase in GDPPC is associated with a decrease of one per cent of the unstandardized coefficient in Y; namely minus 0,0085. Yet, the formulation of a complete equation is reserved for a model of which the R-square and the F-statistic suggest a prediction of the levels of familial patriarchy that is sufficient for understanding everyday life processes in developing countries.

Second, instead of GDPPC, both alternative representations of living standards are run within the basic model for the full sample (table 4.2.2). When the life expectancy and rural population are included (ΔR^2 =.457), the basic model can account for about sixty-five per cent of the variation (R^2= .645; R^2_{adj}= .631 with k = 5, p < .001). The model suggests that a five year increase in the total life expectancy leads to decrease of one tenth in the level of familial patriarchy (p < .001). Surprisingly, the negative relationship between rural population and patriarchy is statistically significant (p < .01), which implies that women have higher status in countries with a large rural population. Even though the impact of its coefficient is negligible, the direction of the relationship contradicts the expectations as well as the results of the simple linear regression analysis. As also the statistically assumptions are still largely met, not too much attention is devoted to this result. Together with the simple regressions, these results give something to hold on to when analyzing and interpreting slightly more complex models in which predictors also impact on each other.

[31] In a latter phase, the effect of the order was tested by giving priority to the economic explanation; entering GDPPC first and then religion. The sequence of entering did not influence the results.
[32] Three outliers, namely Gabon, Kazachstan, and Togo influenced the results and therefore were excluded from the analysis (N=106).

Table 4.2.2 Multiple Linear Regression on Patriarch (full sample)

			B		| t |
Basic Model I	***Total (N=107)***	*(Constant)*	1.295	***	8.000
		Dummy Christian	-.247	***	5.054
		Dummy Other	-.237	***	3.559
	R^2= .300 R^2adj = .280 F= 14.74***	GDPPC (Ln)	-.085	***	4.361
Basic Model II	***Total (N=113)***	*(Constant)*	2.108	***	12,497
		Dummy Christian	-.309	***	8,904
		Dummy Other	-.207	***	4,429
		Rural Population	-.003	**	2,850
	R^2= .645 R^2adj = .631 F= 48.97***	Life Expectancy	-.021	***	10,355
Religion Model 2000s	***Total (N= 106)***	*(Constant)*	1.787	***	8,032
		Dummy Christian	-.317	***	9,258
		Dummy Other	-.184	**	3,924
		GDPPC (Ln)	-.057	*	2,402
		Rural Population	-.002		1,400
	R^2= .672 R^2adj = .656 F= 41.04***	Life Expectancy	-.024	***	10,528
Civilization Model	***Total (N= 107)***	*(Constant)*	1.554	***	6,122
		Western	-.284	*	3,495
		Orthodox	-.374	***	4,483
		Other	-.255	***	5,537
		Latin American	-.371	***	7,737
		African	-.174	**	2,388
		GDPPC (Ln)	-.029		1,195
		Rural Population	-.001		1,105
	R^2= .664 R^2adj = .636 F= 24.20***	Life Expectancy	-.017	***	5,772

(*p < .05, **p < .01, ***p < .001)

So, the relationships have been examined in both simple and multiple regressions, and the third step concerns a model in which all predictors are included according to a theoretically informed hierarchy. So, the first basic model[33] is extended by the second, where life expectancy and rural population enter in the third stage in hierarchy. This results in the 'Religion Model' (tables 19). The predictive power increases when compared against the second basic model as the predictors account for sixty-seven per cent of the variation (R^2=.672, R^2_{adj} =.656 with k = 6, p < .001) and the F-statistic shows that the final model is significantly better at predicting the outcome than is the mean (table 4.2.2 and table 19b), while the contribution of the first two stages appears to be minimal. Also the R^2 and adjusted R^2 of the model show little shrinkage, predicting that the model could account for approximately two per cent less variance in the outcome when even more cases were observed (Field 2005, 171-2). Yet, it is more important to note that the statistical significance of some predictors has changed, in particular for GDPPC and rural population (see previous page, table 4.2.2). However, the relationship of GDPPC is almost statistically significant at the .01 level (p = .018). A one per cent change in GDPPC is associated with a .0046 change, in the opposite direction, in the levels of familial patriarchy.

[33] Some additional regressions were run to check the influence of the entering sequence. These models showed that a distinct stage of entering GDPPC, a second in hierarchy, was actually not necessary.

The Religion Model is quite satisfactory and therefore provides the basis for building and testing others[34]. The model is, for example, used to test the theoretical suggestion that the effect of development on values might take time to play out (not shown in table 4.2.2, see tables 20 and 21 appendix). Inglehart and Baker (2000, 42), for instance, explain that values are determined by those in the prime of their lives and assume that individuals alter values and attitudes when having experienced better living standards throughout their lives. In this sense, it is interesting to use data that reflect the situation of the childhood of those currently in the prime of their lives, and see whether these make better predictors. Therefore, the data on living standards for the period 2000-04 are replaced by data for 1990-94 and 1980-84 in order to observe whether time is a factor of concern (tables 20 and 21). In these models, data on patriarchy and religion still represent the situation of the late 2000s. The model for the early 1990s (N= 102) still accounts for fifty-six per cent of the variation in the outcome (R^2=.557, $p < .001$). Now, the contribution of GDPPC is statistically significant up to the final model (β = -.318, B = .080, p = .023) whereas the relationship of rural population is still far from being statistically significant, though positive (table 21c). A quite similar picture emerges for the model of the 1980s (N = 83) (table 21a-c). This implies that the fit of the overall model does not improve by earlier measurements of the living standard. If data would have been reported for the dependent variable for these periods too, a time-series analysis would have come in handy for giving new insights in patterns and trajectories. For the time being, however, the linear model shows that there is no reason to assume that historic levels account for more variance than the more recent levels of living standard.

So far, the model only showed increased interest in the socio-economic explanation and therefore the Religion Model is also extended. Like in the simple linear regression analysis, the variables 'religious homogeneity' and 'government favoritism' cannot enhance the multiple regression model (results not shown). While the fit of the overall model seems to improve, albeit only slightly, the coefficients and statistics of change suggest that both predictors make a statistically insignificant contribution and, even more importantly, affect the other predictors irregularly. The coefficient and contribution of religious homogeneity are, though minimally, statistically significant until the socio-economic predictors enter the model. In other words, the complementary value of these predictors is far from convincing. Ergo, the plain version of the Religion Model remains most satisfactory while it is still possible to build an alternative model in which the type of religion is replaced by the type of civilization. Regarding the Religion Model, however, the multiple regression results in an equation (see §3.5) that can predict the variation in levels of familial patriarchy across developing countries in six out of ten cases. The equation below is based on the results for the full sample:

Familial Patriarchy = 1.787 - 0.317 • (Dummy Christian) - 0.184 • (Dummy Other) - .057 • Ln(GDPPC) - 0.002 • (Rural Population) - 0.024 • (Life Expectancy) + Error.

[34] For this reason its statistical assumptions were checked promptly, even though the evaluation is discussed in the second section of this chapter.

The last model in table 4.2.2 includes this alternative representation of cultural traits. Recall from the literature review that, instead of using religion, Inglehart and Baker reintroduced Huntington's classification. Whereas the sample is dominated by two major religions, a more extensive categorization of the sample in civilizations is actually practical. So, another linear model was built, replacing the dummy variables on the prevailing creed by dummy variables on civilization. Regarding the total sample, the fit of the overall model approximately equals that of the Religion Model (R^2=.664, R^2_{adj} = .636 with k = 9, p < .001), but the R-Square change indicates that the cultural explanation dominates the socio-economic one (table 22a). Table 4.2.2 shows that the estimated coefficients of the civilizations are statistically significant. Moreover the negative sign indicates that all are less patriarchal than the reference group; Islamic civilization. For the Latin American and Orthodox civilization, lower levels of familial patriarchy are predicted. Life expectancy appears to have a stable negative effect, showing again little change in the statistical significance and unstandardized coefficient along the different models (B = -.017, p < .001) as well as between the different sample sizes. By contrast, GDPPC cannot be as much appreciated as development research traditionally has done, but several of the mentioned studies might form an explanation[35] regarding the instability of this ready but not necessarily accurate representation of living standards. By means of table 4.2.2, the linear relationship of the model –again in respect of the total sample- can be expressed in the following equation:

Familial Patriarchy = 1.554 - 0.174 • (Dummy African) - 0.255 • (Dummy Other) - 0.374 • (Dummy Orthodox) - 0.371 • (Dummy Latin American) - 0.284 • (Dummy Western) - 0.029 • Ln(GDPPC) - 0.001 • (Rural Population) - 0.017 • (Life Expectancy) + Error.

Although it cannot be said that the civilization to which a country has been classified is more important than is its prevailing creed –actually the former largely encompasses the latter– the sample allows for a more extensive categorization of the former and therefore it is both more practical and probably also more successful in an analysis of all developing countries.

4.2.3 Multiple Regression Analysis (Lower Income countries)

The distribution of the dependent variable deviates from perfect normality, which appeared to result from the non-normal distribution in the higher income countries, and therefore the different models of the previous section are run for the lower income countries (N = 55). Compared

[35] For instance; (1) Boserup warns for the inverted U-curve (see § 2.1; ¶2); (2) Spierings et al. blame the concentration of wealth in a small, conservative ruling elite; (3) many others argue that higher GDPPC may correspond with modern values in (studies that include) Western societies, but that a comparison with non-Western societies is like comparing apples and oranges (see § 1.3 and 3.3)

against the results for the full sample, overall, the model suits the lower income group less well (R^2 = .239, p < .001). The difference between Muslim and Christian (B = -.159, p < .05) developing countries appears to be less profound for this group whereas the unstandardized coefficient of income per capita almost doubles (B = -.156, p < .01) (table 4.2.3). In the second basic model, which account for sixty per cent of the variation (R^2 = .602, p < .001), the same picture emerges for religion. However, a comparison between the first and second basic models of the different sample sizes reveals that this cultural explanation is even more unstable. In other words, a change in the combination of predictors affects the religious explanation significantly in case of this particular group than the full sample (tables 4.2.2 and 4.2.3). By contrast, the regression provides quite the same coefficients for both life expectancy (B = -.021, p < .001) as well as rural population (B = -.002), but the relationship is definitely not statistically significant in case of the latter. Overall, however, the significance levels of the predictors are less convincing than for the full sample, which may result from a smaller number of cases. Moreover, if this smaller group largely comprise Muslim countries, this explains the change in the significance levels between this group and the full sample.

Like religion in the basic models, the unstandardized coefficients show that GDPPC suffers even more from the influence of the combination of indicators in the Religion Model (tables 23). The relationship of both GDPPC and rural population is far from being statistically significant. By contrast, the relationship of life expectancy turns out to be very stable again (B = -.022, p < .001) and the religious explanation only shows some change in statistical significance, compared against the second basic model. The difference in the overall fit of the models for the lower income countries becomes smaller, implying a difference between the results of this particular group and the full sample. This can be observed in the R-Square, but more profound is the smaller value of the F-statistic for both the Religion and Civilization models of the lower income countries. In case of a smaller sample size, the more extensive categorization of civilization entails an inaccurate representation of cases per category and therefore turns out to be a less valuable explanation for this group than for the full sample (table 4.2.3 and tables 24). Accordingly, due to the low significance levels, little can be said about the comparative difference between the different civilizations. Again, only life expectancy appears to have a stable negative effect, showing again little change in the statistical significance and unstandardized coefficient along the different models (B = -.018, p < .001) as well as between the different sample sizes. Although few predictors are statistically significant in both the Religion and Civilization Model, the overall models are.

Table 4.2.3 Multiple Linear Regression on Patriarch (Lower Income Countries)

			B		| *t* |
Basic Model I	***LIC (N= 55)***	*(Constant)*	1.764	***	4.847
		Dummy Christian	-.159	*	2.442
		Dummy Other	-.143		1.691
	R^2= .239 R^2adj = .195 F= 5.35***	GDPPC (Ln)	-.156	**	3.051
Basic Model II	***LIC (N= 55)***	*(Constant)*	1.973	***	8.531
		Dummy Christian	-.174	***	3.641
		Dummy Other	-.076		1.222
		Rural Population	-.002		1.106
	R^2= .602 R^2adj = .570 F= 18.91***	Life Expectancy	-.021	***	7.624
Religion Model 2000s	***LIC (N= 55)***	*(Constant)*	1.777	***	4.456
		Dummy Christian	-.174	**	3.599
		Dummy Other	-.074		1.174
		GDPPC (Ln)	-.032		0.604
		Rural Population	-.001		0.770
	R^2= .605 R^2adj = .565 F= 15.01***	Life Expectancy	-.022	***	6.733
Civilization Model	***LIC (N= 55)***	*(Constant)*	1.424	***	2.892
		Western	-.183		1.970
		Orthodox	-.318	**	2.738
		Other	-.215	**	2.755
		Latin American	-.193		1.777
		African	-.111		1.054
		GDPPC (Ln)	-.044		0.780
		Rural Population	-.001		0.505
	R^2= .616 R^2adj = .550 F= 9.24***	Life Expectancy	-.018	***	4.345

(*p < .05, **p < .01, ***p < .001)

4.3 Model Evaluation

So, both the religion and the civilization model showed quite satisfactory results. However, assumptions and requirements need to be tested before forming an opinion on the predictive power, reliability and validity of the model outcomes. Some of the statistical requirements and assumptions already have been assessed when relevant, such as multicollinearity and the consequences of the ordinal scores of the individual outcome variables. At this point, it is relevant to discuss the statistical assumptions for the models with the best fit, checking for (1) multicollinearity; (2) homoscedasticity of residuals; (3) normality of residuals; and (4) outliers analysis.

There are quite some reasons why the presence of multicollinearity poses a threat to the validity of a multiple regression analysis. The observation that perfect collinearity between two or more predictors makes variables interchangeable is most prominent, because the variance that the second variable accounts for is the same variance accounted for by the first variable which makes it impossible to assess the predictive power of the model as well as the unique estimates of their individual importance. Hence, having uncorrelated predictors is beneficial (Field 2005, 174-5). There are a few guidelines to measure whether there is collinearity in the data, using the VIF and tolerance statistics. If the largest VIF is greater

than 10 and/or tolerance is below .1 then there is serious cause for concerns. Moreover, an average VIF that is substantially greater than 1 and/or tolerance that is below .2 indicate a potential problem (Field 2005, 196). Table 25a and 26a shows the collinearity statistics for the Religion Model for the different sample sizes. For the total sample, the largest VIF is 3.026 and the average VIF is not larger than two. Also the lowest tolerance value is well above .2 . The results for the lower income group, however, appear to meet the statistical assumption of non-multicollinearity even more convincingly (table 26a). Multicollinearity is also not a serious problem for the Civilization Model (tables 27a and 28a), showing neither a VIF and tolerance statistics greater than 10 and below .257, respectively. Even though both GDPPC and life expectancy have high VIF values, the average VIF equals that of the Religion Model (table 27a). Again, the results for the lower income group meet the statistical assumption more convincingly (table 28a).

Another threat to the conclusions that will be drawn based on the regression model is the non-constant variance of the residuals. In a perfect situation with constant variance, the graph of standardized residuals versus standardized predicted values shows a cloud of dots randomly and evenly dispersed around zero (Field 2005, 202). Any situation in which the plot shows any sort of curve represents a non-linear relationship, meaning that the key assumption of a linear regression model (linearity) is broken. The assumption is met for the Religion Model, showing a cloud of dots around zero (figure 9). In this scatterplot, some cases seem clustered. With fewer cases, figure 11 also shows a random and even dispersion. For the Civilization Model (figure 14), the residuals have the pattern that is indicative of a situation in which the assumption of linearity and homoscedasticity has been met, although an imaginary line almost cuts the cloud in half. For the lower income group, the assumption is roughly met despite the lack of a well-shaped cloud (figure 16).

The residuals are also tested on the normality of their distribution. A histogram of normally distributed residuals shows a bell-shape curve in which any deviation is a sign of non-normality. In addition, a normal probability plot also shows up deviations from normality. In a P-P plot, the points represent the observed residuals that represent a normal distribution when all points lie on a straight line (Field 2005, 204). For the Religion Model, the residuals show a small deviation from normality just around zero and just before +1 (figure 10a). The observed residuals present, however, an almost perfectly normal distribution in the normal P-P plot (figure 10b). By contrast, in case of the lower income group, the histogram is more convincing than the P-P plot (figure 12a and b). In case of the Civilization Model, the distribution is roughly normal. However, data are less normally distributed than the residuals of the Religion Model, showing some deficiency of residuals at three points; between -2 and -1; just before 0; and between 0 and 1 (figure 15a). Accordingly, there is a deficiency in the normal P-P plot (figure 15b). For the lower income group, both graphs show several deficiencies, implying that the results of this analysis need to be treated with caution. Nonetheless, the assumption is largely met (figure 17a and b).

As part of the descriptive analysis, an outlier-test was done for all continuous variables. No outliers were found for the dependent variables, i.e. parental authority and the patriarchy index. Similarly, no irregularities were found for life expectancy, religious homogeneity, and government favoritism. By

contrast, GDPPC showed several outliers; Bahrain, Hong Kong, Kuwait, Singapore, and the United Arab Emirates. The analysis was run again without these outliers, but this affected the model insignificantly. The statistical assumption of interest actually concerns outliers in the standardized residuals. In an ordinary sample, 95% of cases are expected to have standardized residuals within two whereas five per cent may have absolute values above two of which no more than one fifth should be above 2.5. For the Religion Model, casewise diagnostics showed that three cases, constituting three per cent of cases as well, had standardized residuals outside of the limits, namely over 2.5 but none above three. The analysis was run without these cases (see footnote 32). The case of Togo also turned out to be the single potential outlier in the smaller sample, but the size of this standardized residual was not worrisome. By contrast, there are no potential outliers for the civilization model, meaning that all statistical assumptions were directly met (table 27b).

5. DISCUSSION

Even though the data analysis produced satisfactory results, an unequivocal answer to the central question is yet to be found but most likely will never be found. Public management and policy tends to be more interested in answers that allow for practical and universal solutions, the type of WID policies and programs, that are as opportunistic as the assumptions of linearity in the neoclassical theory. This research discusses a complex theme for which no specific causes nor direct solutions seem available, but it definitely contributes to development thinking by pointing to the fallacies of crude generalizations that irrevocable originate in neoclassical thinking. For instance, more wealth is not necessarily associated with higher levels of well-being for all. Moreover, while rural people are assumed to be more ignorant or stubborn about women's rights and roles within households than people living in urban areas and working in the industry, this study demonstrates that familial patriarchy is definitely not by definition a characteristic of largely agricultural societies. Likewise, although women tend to be worst off in Islamic countries, intra-religious and interregional variances stress the importance of assessing the need and prospects for engaging religious establishment for individual cases. There are, however, already too many individual case studies in the field that claim uniqueness whereas others –like the GID-DB- wrongly assume that all women want and need the same thing. In other words, more systematic comparative research needs to be done by means of small-N studies that analyze the causes of intra-religious or interregional differences in patriarchal institutions as well as women's perception.

In respect of the latter, the writing process -that focused much on testing the central lens through which development is generally viewed- made me increasingly realize that the measurement of gender equality is biased towards Western standards, ideals, and definition of what is normal and right. This realization makes it difficult to form an ethically and politically valid opinion. Moreover, whereas some measures indeed seem universally undesirable, e.g. unequal parental authority and violence against women, the GID-DB focuses also on very cultural or situational specific social institutions that are solely relevant to some societies while overlooking those who are typical for other societies. This might potentially make Islamic countries stand out as being most women unfriendly, whereas this is a matter of perspective or measurement. In addition to earlier criticism (§3.2.1), this means that an extension of dimensions and themes, ideally based on cultural and situational relevance, would make the GID-DB more accurate. Nonetheless, the GID-DB insurmountably leads to a generalization of women's desires, needs and interest and therefore its use is limited. Surveys like those of the WVS might contribute to whether patriarchal institutions are perceived as problematic, as well as contribute to make specific inferences on the causes of conservatism in individuals, and allows policy makers and development practitioners to understand what women want where. In this case, the international community can support women and their associates in terms of management or policy. In line with the GAD argument, supporting women's movements can generate more successful and sustainable change than any passive or coercive policy will achieve. However, this will be an intensive and time-consuming endeavor and policy makers might decide to focus on more passive and basic empowerment of women, the MDGs.

The different MDGs focus on people's well-being and therein improve the life expectancy of both sexes. The research shows that this is potentially important for reducing familial patriarchy, based on the assumption that existential insecurity causes conservatism. However, this causal inference cannot be made without considering fallacies. First of all, even though the operationalization attempted to minimize the threat of endogeneity, the correlation analysis showed that all measures of familial patriarchy were highly correlated. This might be a sign of a similar correlation with forms of patriarchy that do have economic relevance for women and their off-spring, and thus also for their life expectancy or the national economy. In a large N-study it is impossible to observe if the relationship is reciprocal, or whether one was initially causally relevant, meaning that the relationship is potentially spurious and no opinion should be formed about causality. However, as there are many more elements to the life expectancy, the effect of patriarchy on people's life expectancy is only partial and does not impact on all people equally. In other words, the life expectancy is significant in explaining the prevalence of familial patriarchy. Like the indicators of cultural traits, life expectancy was one of the least specifically defined measures of living standards in a country. This confirms that familial patriarchy depends on a combination of many factors that can be best captured by such broad representations. For this reason, it can be assumed that no extraneous factors have obscured the outcome.

Unfortunately, these comments imply that the answer to the research question is not very specific and therefore has little relevance to policy makers. Nonetheless, further research could find a solution in conducting a small-N study across countries of the same civilization. Even though neither an economic nor a religious elite explains cross-national variation in this large-N study, a small-N study with countries of the same civilization might lead to different conclusions. Intra-cultural case studies are also more appropriate when data are not complete and variables are not relevant for all countries. Even though the results for the Gini index did not provide new insights, the variable has served as a means to test the idea of a small ruling elite more appropriately and accurately than fuels export. At the same time, the Gini index proved criticism on the conventional but controversial GDPPC, which is criticized for not measuring proportionality of development, to be irrelevant in this study. Nevertheless, income seems to provide a very weak indication of people's opportunity to reflect on their value systems. The case of Saudi Arabia, for instance, suggests that number of women –and maybe also men – who had an education or experience abroad, or even the number of Western immigrants, might explain why patriarchy is fading in some developing countries while remaining intact in others.

As an aside note, that does not really relate to any part of the discussion, I would recommend a more advanced statistical program than SPSS – such as "R". Even though the distribution of the computed dependent variable was not truly bimodal and an explanation was found, instead of assessing the model for the two distinct groups, understanding and use of the R-software would have allowed a Generalized Linear Model (GLM). This type of regression analysis is also needed to analyze ordinal data, like the individual representation of familial patriarchy.

6. CONCLUSION

The different models have addressed several theoretical issues and assumptions, providing new insights on the triangular tension between gender, faith and development. Religion turns out to be a very prominent cultural trait in explaining variation in familial patriarchy across developing countries, even though the empirical evidence of large intra-religious differences leaves room for other cultural explanations. Very specific elements of cultural society –such as measures of the imbrication of the prevailing creed in public life- cannot explain cross-national variation at large. Only a more extensive but even broader classification -in terms of the assignment to civilizations which intends to capture shared historical and geographic experiences in addition to religion- accounts consistently for more of the variation in familial patriarchy than religion alone. This suggests that the explanation of conservatism is necessary contingent on the locally specific crucible of manifold historical and cultural factors, which learns that stereotypes based on specific nominators of cultural traits overgeneralize nuanced difference. In the case of religion, for example, the combination with socio-economic factors accounts for much more variation than can religion alone.

Nonetheless, also the different measures of living standards are not equally significant or stable in explaining variation in familial patriarchy across developing countries. For instance, while being possibly relevant in explaining differences between specific cases in a small N-study, industrialization and wealth distribution do not contribute to the explanation of familial patriarchy at large. Urbanization levels constitute part of the prediction, although the contribution is consistently not significant. Income per capita and familial patriarchy are significantly linearly related, in which higher levels of GDPPC are associated with lower levels of patriarchy in social institutions. However, the stability of this predictor across different models and samples as well as the bimodal variance in familial patriarchy across wealthier developing countries suggests that a robust and universal explanation, respectively, is not possible. By contrast, predictions by life expectancy are very robust, suggesting that living standards are a factor in explaining variation in familial patriarchy across developing countries if measured as the extent to which survival is secure, in particular. It follows that some societies, in which existential security has been initially more secure, likely have had inherently less male dominance.

When the answer of the first sub-question is linked up with the second, the most straightforward interpretation is that the persistence of patriarchy depends on the extent to which factors like historical events and the geographic site (have) determine(d) people’s dependence on spiritual guidance and women’s subordination to men as a means to survival. However, the most prominent variables have broad definitions and also the empirical evidence is not sufficient for a truly unequivocal answer. Reality remains more complex and case specific than any set of factors could capture. Therefore, the search for the answer to the research question rather has served the purpose of testing existing knowledge and generating new insights as to polish the theoretical lens through which development is understood. Despite fierce criticism, the neoclassical theory is still prominent in development. For this reason, like in

many previous studies, the evolutionary view of the modernization thesis is a central element of this research. Several assumptions and suggestions of studies that have been based on this thesis as well, have been analyzed in this research.

In short, the modernization thesis maintains that economic development entails large scale, systematic social reform. The most conventional and controversial indicator, i.e. GDPPC, fairly lives up to the expectations raised by the linear relationship described by Forsythe and Korzeniewicz as well as linearity for lower income countries by Dollar and Gatti. This implies that conclusions differ from Morrisson and Jütting, who could not relate GDPPC to either women's LMP or the same type of social institutions included in the study at hand. The modernization thesis also assumes that reflection on and renewal of social institutions are coherent with shifts from agricultural to industrial work or rural to urban residence, but this assumption could not be confirmed. Empirical evidence does undermine, however, the classical assumption that predicts the decline of religiosity when living standards improve. Inglehart and Baker added an indicator in an attempt to grasp the idea beyond these three indicators of living standards in a new fashion, assuming that traditionalism prospers under conflict, disease, hunger, poverty, and the like, because people attempt to maximize their chance of survival in a hazardous world. As stated before, life expectancy is more stable and representative than other measures that seek to approximate living standards. However, as discussed in the previous chapter, it is difficult to make causal inferences based on solely a large N-study.

Whereas the supplementary variable of Inglehart and Baker is quite successful, assumptions on the conservative attitude of a small ruling elite, which generates its power and authority through its control over resources or reference to religious doctrines. This study cannot find enough support for the hypotheses on the impact of oil endowment or wealth distribution, but a small N-study might provide new insights and different results. This assessment would be helpful in explaining variation across Islamic countries, in particular, which consistently turn out to have the highest levels of familial patriarchy. It would be most important but difficult to turn Islamic establishments into transformative forces in poor countries, but this engagement seems to require extra caution and special attention. Yet, several indications of intra-religious variance stress the importance of avoiding such crude generalizations. The cases of SSA and Latin American, both largely Christian, demonstrate that other factors than religion alone explain variance in familial patriarchy. Women face the highest levels of patriarchy in the household within MENA and SSA countries, and the lowest levels in Latin American and Orthodox countries. In Latin America, it is possibly Catholicism that provides individuals the motivations and conceptions for love, charity, compassion, and a sense of women's basic rights. Apart from religion as a personal driving force, and as a legacy of Soviet Communism, findings on the Orthodox countries suggest that public policy can even impact upon the private sphere if a government has the will and capacity to outlaw sex oppression and gender discrimination.

So, in the light of granting the sacred too much power and control over public issues in places where government has either lost or lacks the capacity and authority, the faith-development interface should not overarch the opportunities and prospects of enhancing and investing in government's

willingness and capacity to improve women's situation. So, in some cases it might be particularly beneficial to place both type of actors and therefore the debate outside the national context, and discuss the desires, needs and interests of women with other sacred and secular leaders as well as conservative and progressive thinkers from the same as well as other countries. This is much in accordance with the World Bank's World Faith Development Dialogue (WFDD). And, being aware that national representatives would only commit themselves and each other to a perfect world in a perfect world, such engagements should be encouraged to exchange perspectives and wisdom. In this way, the apparent similarities between countries belonging to the same civilization imply that management can be regional while engagement is best when it is interregional. Changing path-dependent social institutions and power relations will always be a time-consuming and often frustrating endeavour.

When sex oppression and gender discrimination are not culturally embedded in an underlying principle, the government or donor agencies could initiate campaigns, the educational content of books, or tax breaks amongst others in order to change particular types of behavior. However, as the example of Saudi Arabia shows, familial patriarchy is more likely to result from doctrines than from ignorance. The protest in this ultra-conservative country is led by well-educated Saudi women, who obtained their diplomas abroad and experienced gender equality. Such women's movements and other local initiatives are crucial, but there is also room for governments and donor initiatives. Firstly, the willingness and capacity of governments should be enhanced as this gives the opportunity to make existing formal institutions, that are either poorly framed or badly implemented, more effective. Moreover, positive informal institutions can be extended to the national, or even regional, level by transforming these into formal ones. Secondly, the national government and international community can gradually create the right opportunity structure for women's emancipation by raising human capital of men and women equally. This refers to the type of policies and programs of the WID and GAD, such as the MDGs, as it enables ordinary people to become independent of the natural element and authoritarian elites. Lastly, the case of Saudi Arabia demonstrates that at is important to reach and support the intellectual elite. An education or experience of young intellectuals in the more sex neutral donor countries causes the spread of ideas and patriarchal institutions may face popular resistance in the long-run.

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APPENDICES

DATA AND STATISTICS

Master Thesis

International Public Management and Policy

KEEPING FAITH IN DEVELOPMENT:

A Cross-National Assessment Of

the Faith-Development Interface

in Gender-Related Issues.

D.E.M. Bergkamp

American English, Harvard APA style

August 2011

APPENDIX A

DATABASE

CONTENT *p.*

Table 1. Patriarchy in the Private Sphere (2009).

Country	Parental Authority[1]	Inheritance[2]	Polygamy[3]	Violence against women[4]	Patriarchy[5]
Afghanistan	1	0.5	1	1	0.8750
Albania	0,5	0	0	0,75	0,3125
Algeria	1	0,5	0,5	0,75	0,6875
Angola	0,5	0,5	1	0,5	0.6250
Argentina	0	0	0	0,25	0.0625
Armenia	0	0	0	0,75	0.1875
Azerbaijan	0,5	0	0	0,75	0.3125
Bahrain	1	0,5	0	0,75	0,5625
Bangladesh	1	0,5	0,5	0,08	0,5200
Belarus	0	0	0	0,5	0,1250
Benin	1	0,5	0,5	0,75	0,6875
Bhutan	0	0	0,5	0,67	0,1865
Bolivia	0	0	0	0,42	0,1050
Bosnia and Herzegovina	0	0	0	0,5	0,1250
Botswana	0,5	0,5	0,5	0,33	0,4575
Brazil	0	0	0	0,58	0,1450
Burkina Faso	0,5	0,5	1	0,5	0,6250
Burundi	0	0,5	1	0,75	0,5625
Cambodia	0	0	0,5	0,58	0,2700
Cameroon	0,5	0,5	1	0,75	0,6875
Central African Republic	1	0,5	0,5	0,75	0,6875
Chad	1	1	1	0,5	0,8750
China	0	0	0	0,58	0,1450
Colombia	0	0	1	0,75	0,4375
Congo, Dem. Rep.	0,5	0,5	0	0,33	0,3325
Congo, Rep.	0,5	0	0	0,75	0,3125
Costa Rica	0	0	0	0,33	0,0825
Côte d'Ivoire	1	0,5	0,5	0,42	0,6050
Croatia	0	0	0	0,25	0,0625
Cuba	0	0	0	0,5	0,1250
Dominican Republic	0	0	0	0,5	0,1250
Ecuador	0	0	0	0,17	0,0425
Egypt	0,5	0,5	0	0,75	0,4375
El Salvador	0	0	0	0,17	0,0425
Equatorial Guinea	0,5	0,5	1	1	0,7500
Eritrea	0,5	0,5	0,5	0,5	0,5000
Ethiopia	0,5	0,5	0	0,75	0,4375
Fiji	0	0	0	0,75	0,1875
Gabon	1	1	1	1	1,0000
Gambia	1	0,5	1	0,5	0,7500
Georgia	0	0	0	0,75	0,1875
Ghana	0,5	0,5	0,5	0,58	0,5200
Guatemala	0	0	0	0,67	0,1675
Guinea	1	0,5	1	0,5	0,7500
Guinea-Bissau	1	1	1	1	1,0000
Haiti	0,5	0,5	0,5	0,67	0,5425
Honduras	0,5	0	0	0,67	0,2925
Hong Kong SAR, China	0	0	0,5	0	0,1250
India	1	0,5	1	0,33	0,7075
Indonesia	0,5	0,5	0,5	0,67	0,5425
Iran, Islamic Republic of	1	0,5	1	1	0,8750
Iraq	1	0,5	0,5	1	0,7500
Jamaica	0	0	0	0,67	0,1675
Jordan	1	0,5	1	0,25	0,6875
Kazakhstan	0	0	0	0,25	0,0625
Kenya	0,5	0,5	0,5	0,17	0,4175
Korea, D.P. R.	0	0	0	1	0,2500
Kuwait	1	0,5	1	0,5	0,7500
Kyrgyz Republic	0	0,5	0	0,58	0,2700
Lao P.D.R	0	0,5	0,5	0,42	0,3550
Lebanon	0,5	0,5	0,5	0,75	0,5625
Lesotho	1	1	0,5	0,25	0,6875
Liberia	1	0,5	0,5	1	0,7500
Libya	1	0,5	0,5	1	0,7500
Macedonia	0	0,5	0	0,5	0,2500
Madagascar	1	0	0,5	0,75	0,5625
Malawi	0	0,5	0,5	0,75	0,4375
Malaysia	0,5	0,5	0,5	0,42	0,4800
Mali	1	1	1	1	1,0000
Mauritania	0	0,5	1	0,5	0,5000
Mauritius	0	0	0	0,42	0,1050
Moldova	0	0	0	0,42	0,1050
Mongolia	0	0	0,5	0,58	0,2700
Morocco	0	0,5	0,5	0,25	0,3125
Mozambique	0,5	1	1	0,75	0,8125
Myanmar	0	0	0,5	0,75	0,3125
Namibia	0	1	0,5	0,5	0,5000
Nepal	0,5	0,5	0	0,58	0,3950
Nicaragua	0	0	0	0,5	0,1975
Niger	0,5	0,5	1	1	0,7500
Nigeria	0	0,5	1	0,75	0,5625

Oman	1	0,5	0,5	0,75	0,6875
Pakistan	1	0,5	0	0,5	0,5000
Panama	0	n/a	0	0,17	n/a
Papua New Guinea	0	0	1	0,75	0,4375
Paraguay	0	0	0	0,17	0,0425
Peru	0	0	0	0,42	0,1050
Philippines	0	0	0	0,17	0,0425
Puerto Rico	n/a	n/a	0	0,42	n/a
Russian Federation	0	0	0,5	0,25	0,1875
Rwanda	0,5	0,5	0,5	1	0,6250
Saudi Arabia	1	0,5	0,5	1	0,7500
Senegal	1	0,5	1	0,25	0,6875
Sierra Leone	0,5	1	0,5	0,75	0,6875
Singapore	0	0	0,5	0,5	0,2500
Somalia	1	1	1	0,75	0,9375
South Africa	0,5	1	0,5	0,42	0,6050
Sri Lanka	0,5	0,5	0	0,33	0,3325
Sudan	1	1	1	0,75	0,9375
Swaziland	1	0,5	1	0,75	0,8125
Syrian Arab Republic	0,5	0,5	0,5	0,5	0,5000
Tajikistan	0	0,5	0,5	0,5	0,3750
Tanzania	0,5	0,5	1	0,25	0,5625
Thailand	0	0	0,5	0,33	0,2075
Timor-Leste	0	0,5	0,5	0,83	0,4575
Togo	0,5	1	1	0,75	0,8125
Trinidad and Tobago	0	0,5	0	0,33	0,2075
Tunisia	0	0,5	0	0,25	0,1875
Turkmenistan	0,5	n/a	0,5	0,75	n/a
Uganda	0,5	1	1	0,75	0,8125
Ukraine	0	0	0	0,42	0,1050
United Arab Emirates	1	0,5	1	0,75	0,8125
Uruguay	0	0	0	0,42	0,1050
Uzbekistan	n/a	0	0,5	0,75	n/a
Venezuela	0	0	0	0,42	0,1050
Vietnam	0	0	0	0,75	0,1875
West Bank and Gaza[A]	1	0,5	0,5	0,75	0,6875
Yemen	1	0,5	1	0,75	0,8125
Zambia	1	1	1	0,75	0,9375
Zimbabwe	0,5	0,5	1	0,67	0,6675

Source: Gender, Institutions and Development (GID-DB) database 2010. *Data extracted on 23 February 2011 from OECD.Stat.*

Description: This table presents data on the presence of patriarchal institutions per country by the year of 2009. The final scoring of the first two indicators are based on the legal situation, whereas the latter two are based on two components: the existence of a specific legal or customary practice that impacts on gender equality and the proportion that is affected by this practices in terms of a "minority" or "majority" of women that is affected. Measurements vary between indicators. This results in cut-off values for the first three variables. These variables were selected from the GID-DB as neutral and general representations of familial patriarchy. Lower scores represent greater equality whereas higher scores represent greater inequality.

Notes:

(A) More information can be obtained from the Guidelines to the GID-DB, called "Coding of the Social Institutions Variables".

(B) Serbia and Montenegro as well as Chinese Taipei were eliminated from the analysis, because no appropriate data are available. The country name 'Occupied Palestine Territory' has been replaced by the WDI representation 'West Bank and Gaza'.

(C) The abbreviation **n/a** means the information is not available

(1**)** Parental authority measures whether legal and customary practices grant women the same right to be (*i*) a legal guardian of a child during marriage as well as (*ii*) custody rights over a child after divorce (level between 0 = parental authority granted to father and mother equally, 0.5 = (some) women have (some) right, but less than men, and 1= mothers have no rights).

(2) Inheritance measures whether (*i*) widows and (*ii*) daughters have equal legal rights as heirs (level between 0 = inheritance practices favor male and female heirs equally, 0.5 = (some) women have (some) right, but less than men, and 1= inheritance practices are in favor of male heirs).

(3) Polygamy measures the acceptance/legality as well as the prevalence of the practice of marriage in which a men has multiple spouses (level between 0= not accepted/legal, 0.5 = accepted by part of the population (different social groups apply specific marriage laws), and 1=completely accepted/legal).

(4) Violence against women / legal indicator measures the existence of women's legal protection against violent attacks such as rape, assault and sexual harassment. This variable quantifies information on the existence of laws against (*i*) domestic violence, (*ii*) sexual assault or rape, and (*iii*) sexual harassment as well as the prevalence of male violence against spouses. The legal indicator can be interpreted along the following explanation: 0.00 if specific legislation is in place, 0.25 if legislation is in place but of general nature, 0.5 if specific legislation is being planned, drafted or reviewed, and 0.75 if this planned legislation is of general nature; 1.0 captures the absence of any legislation concerning violence against women. The final scoring of this indicator is averaged for both the existence of laws and the prevalence of violence.

(5) Patriarchy is a variable computed from the four individual indicators of patriarchy, being the unweighted average.

Table 2. Culture Traits

Country	Prevailing Creed	Adherents of P.C. (as % of population)	Civilization	Government Favoritism[1] (index 0-10)	Geographic Region
Afghanistan	Muslim	99,7	Islamic	8,3	Southern Asia
Albania	Muslim	61,9	Islamic	1,4	Southern Europe
Algeria	Muslim	97,9	Islamic	8,9	Northern Africa
Angola	Christian	93,8	African	0,2	Middle Africa
Argentina	Christian	92,1	Latin American	8,1	South America
Armenia	Christian	84,8	Orthodox	6,9	Western Asia
Azerbaijan	Muslim	87,7	Islamic	4,4	Western Asia
Bahrain	Muslim	83,6	Islamic	7,8	Western Asia
Bangladesh	Muslim	88,8	Islamic	6,3	Southern Asia
Belarus	Christian	73,8	Orthodox	5,2	Eastern Europe
Benin	Christian	43,8	African	08	Western Africa
Bhutan	Buddhist	84,0	Buddhist	7,9	Southern Asia
Bolivia	Christian	91,8	Latin American	8,0	South America
Bosnia and Herzegovina	Muslim	55,4	Islamic	6,4	Southern Europe
Botswana	Christian	65,1	African	0,6	Southern Africa
Brazil	Christian	90,1	Latin American	0,7	South America
Burkina Faso	Muslim	51,4	African	0,0	Western Africa
Burundi	Christian	82,9	African	0,2	Eastern Africa
Cambodia	Buddhist	85,4	Buddhist	7,9	South-Eastern Asia
Cameroon	Christian	56,6	African	1,1	Middle Africa
Central African Republic	Christian	66,0	African	1,9	Middle Africa
Chad	Muslim	57,3	African	7,0	Middle Africa
China	Chinese	32,1	Sinic	5,2	Eastern Asia
Colombia	Christian	95,7	Latin American	7,7	South America
Congo, Dem. Rep.	Christian	95,4	African	1,0	Middle Africa
Congo, Rep.	Christian	89,8	African	0,0	Middle Africa
Costa Rica	Christian	97,0	Latin American	7,2	Central America
Cote d'Ivoire	Ethno religionist	35,0	African	6,2	Western Africa
Croatia	Christian	91,4	Orthodox	7,6	Southern Europe
Cuba	Christian	59,2	Latin American	1,9	Caribbean
Dominican Republic	Christian	95,0	Latin American	7,6	Caribbean
Ecuador	Christian	97,1	Latin American	1,3	South America
Egypt, Arab Rep.	Muslim	87,1	Islamic	8,3	Northern Africa
El Salvador	Christian	96,5	Latin American	2,8	Central America
Equatorial Guinea	Christian	88,7	African	5,9	Middle Africa
Eritrea	Muslim	49,2	Islamic	2,8	Eastern Africa
Ethiopia	Christian	56,6	African	5,9	Eastern Africa
Fiji	Christian	61,1	Western	1,5	Melanesia
Gabon	Christian	90,6	African	2,0	Middle Africa
Gambia, The	Muslim	86,1	Islamic	3,1	Western Africa
Georgia	Christian	85,1	Orthodox	8,1	Western Asia
Ghana	Christian	61,2	African	3,8	Western Africa
Guatemala	Christian	97,4	Latin American	3,8	Central America
Guinea	Muslim	68,7	Islamic	6,0	Western Africa
Guinea-Bissau	Ethno religionist	44,9	Islamic	0,0	Western Africa
Haiti	Christian	95,3	Latin American	4,3	Caribbean
Honduras	Christian	96,7	Latin American	2,1	Central America
Hong Kong SAR, China	Chinese	54,6	Sinic	4,1	Eastern Asia
India	Hindu	73,0	Hindu	7,0	Southern Asia
Indonesia	Muslim	79,0	Islamic	7,6	South-Eastern Asia
Iran, Islamic Rep.	Muslim	98,6	Islamic	8,8	Southern Asia
Iraq	Muslim	97,3	Islamic	8,0	Western Asia
Jamaica	Christian	84,6	Latin American	0,0	Caribbean
Jordan	Muslim	93,9	Islamic	8,8	Western Asia
Kazakhstan	Muslim	51,6	Orthodox	2,7	Central Asia
Kenya	Christian	81,8	African	5,9	Eastern Africa
Korea, Dem. Rep.	Agnostic	55,7	Sinic	0,4	Eastern Asia
Kuwait	Muslim	86,4	Islamic	7,7	Western Asia
Kyrgyz Republic	Muslim	69,6	Islamic	1,9	Central Asia
Lao PDR	Buddhist	50,4	Buddhist	5,7	South-Eastern Asia
Lebanon	Muslim	58,1	Islamic	7,0	Western Asia
Lesotho	Christian	91,8	African	3,3	Southern Africa
Liberia	Ethno religionist	41,7	African	4,2	Western Africa
Libya	Muslim	96,6	Islamic	8,0	Northern Africa
Macedonia, FYR	Christian	64,6	Orthodox	4,1	Southern Europe
Madagascar	Ethno religionist	48,9	African	3,4	Eastern Africa
Malawi	Christian	79,6	African	3,2	Eastern Africa
Malaysia	Muslim	56,6	Islamic	8,0	South-Eastern Asia
	Muslim	86,8	Islamic	0,2	Western Africa
Mauritania	Muslim	99,1	Islamic	8,3	Western Africa

Mauritius	Hindu	43,9	African	5,4	Eastern Africa
Moldova	Christian	95,9	Orthodox	5,7	Eastern Europe
Mongolia	Ethno religionist	32,2	Buddhist	4,3	Eastern Asia
Morocco	Muslim	98,9	Islamic	7,0	Northern Africa
Mozambique	Christian	52,5	African	0,5	Eastern Africa
Myanmar	Buddhist	74,5	Buddhist	8,9	South-Eastern Asia
Namibia	Christian	88,9	African	0,2	Southern Africa
Nepal	Hindu	67,8	Hindu	5,3	Southern Asia
Nicaragua	Christian	96,2	Latin American	6,8	Central America
Niger	Muslim	92,9	Islamic	3,0	Western Africa
Nigeria	Christian	45,5	African	7,2	Western Africa
Oman	Muslim	88,1	Islamic	7,4	Western Asia
Pakistan	Muslim	96,2	Islamic	8,8	Southern Asia
Panama	Christian	90,5	Latin American	4,9	Central America
Papua New Guinea	Christian	94,8	Western	3,4	Melanesia
Paraguay	Christian	95,5	Latin American	4,2	South America
Peru	Christian	96,5	Latin American	8,1	South America
Philippines	Christian	88,4	Sinic	1,9	South-Eastern Asia
Puerto Rico	Christian	96,7	Latin American	n/a	Caribbean
Russian Federation	Christian	81,3	Orthodox	5,3	Eastern Europe
Rwanda	Christian	86,1	African	2,1	Eastern Africa
Saudi Arabia	Muslim	93,0	Islamic	9,2	Western Asia
Senegal	Muslim	89,0	Islamic	5,0	Western Africa
Sierra Leone	Muslim	46,4	African	1,0	Western Africa
Singapore	Chinese	39,2	Islamic	3,7	South-Eastern Asia
Somalia	Muslim	99,8	Islamic	4,0	Eastern Africa
South Africa	Christian	81,7	African	1,5	Southern Africa
Sri Lanka	Buddhist	78,0	Buddhist	4,0	Southern Asia
Sudan	Muslim	71,4	Islamic	6,2	Northern Africa
Swaziland	Christian	87,6	African	4,3	Southern Africa
Syrian Arab Republic	Muslim	92,8	Islamic	5,7	Western Asia
Tajikistan	Muslim	86,4	Islamic	2,4	Central Asia
Tanzania	Christian	53,2	African	5,3	Eastern Africa
Thailand	Buddhist	86,7	Buddhist	6,7	South-Eastern Asia
Timor-Leste	Christian	84,2	Islamic	1,3	South-Eastern Asia
Togo	Christian	45,7	African	1,8	Western Africa
Trinidad and Tobago	Christian	62,7	Latin American	2,8	Caribbean
Tunisia	Muslim	99,5	Islamic	8,2	Northern Africa
Turkmenistan	Muslim	88,4	Islamic	8,7	Central Asia
Uganda	Christian	85,5	African	1,2	Eastern Africa
United Arab Emirates	Muslim	76,2	Islamic	8,5	Western Asia
Uruguay	Christian	63,9	Latin American	0,0	South America
Uzbekistan	Muslim	82,6	Islamic	7,6	Central Asia
Venezuela	Christian	94,3	Latin American	8,0	South America
Vietnam	Buddhist	49,2	Sinic	3,2	South-Eastern Asia
West Bank and Gaza	Muslim	80,6	Islamic	7,6	Western Asia
Yemen, Rep.	Muslim	99,1	Islamic	5,6	Western Asia
Zambia	Christian	82,1	African	6,7	Eastern Africa
Zimbabwe	Christian	71,5	African	4,1	Eastern Africa

Source: The Association of Religion Data Archives (ARDA), 2010. *Data extracted on 10 March 2011 from the ARDA Website.*

Description: This table presents various data on variables to indicate the cultural traits of a society. Cultural traits reflect similarities and difference between countries value system, which is an organized and codified set of quite consistent personal and cultural dependent beliefs, morals, principles, and perceptions, that has continued over many years and has been be passed on from one generation to the next, whether by family members or by spiritual leaders within the community, governing the daily thoughts, words and actions of members of every human society in a cultural specific and more or less predictable manner.

Definitions:

1. *Prevailing creed* (P.C) is the most accepted set of beliefs, principles and perceptions that strongly influences people's daily attitudes and behavior (2010).
2. *Adherents of P.C.* is the proportion of the population affiliated to the prevailing creed (2010).
3. *Civilization* is a human society with its own social organization and culture, comprising countries who have had similar series of external and internal influences and experiences. Classification is based on Samuel Huntington (1996, 26).
4. *Government Favoritism of Religion* concerns the extent and balance of government funding to the religious sector.
5. *Geographical region* is the grouping of countries as specific sub-areas based on spatial location and composition of countries, based on the UN Statistics Division- Standard Country and Area Codes Classification (2011), Retrieved from unstats.un.org.
6. Ethno religionist is a unit of subgroups of people defining their ethnicity neither exclusively by spiritual creed nor by ancestral heritage, but through a combination of both.

Notes:
(1) The government favoritism index is one of three indexes ARDA researchers developed on religion. The cross-national data and indexes are averages from the extensive coding of the 2003, 2005 and 2008 International Religious Freedom Reports for 196 countries/territories. Ten questions on government funding of religious groups were asked of which four questions attempt to identify whether there is no or equal funding (no score) or imbalanced funding (arbitrary, high score varying between 2-5) to religious groups while the remainder of questions asked if particular projects receive subsidies. Does the government fund religious (1) education; (2) buildings; (3) clergy salary or benefits; (4) print or broadcast media; (5) charity or public service work; (6) practice or mission work (0=No, 1=Yes, but funding is proportional for all, 2= Yes, but funding is not equal for all religions). The raw scores on these questions were rescaled to a range between 0 and 1. These rescaled scores were added and the result multiplied by 2 to create a 0-10 index in which a higher score reflects greater favoritism of a specific religion. According to Grim and Finke (2006) of Pennsylvania State University, using a series of tests to evaluate the data and index, the measures developed are highly reliable and valid.

Table 3a. GDP per capita, PPP (constant 2005 international US$).

Country	1980-4	1990-4	2000-4	WB Classification
Afghanistan	n/a	n/a	692,3	LIC
Albania	4348,0	3048,4	5329,2	UMIC
Algeria	6535,4	5878,8	6442,2	UMIC
Angola	n/a	2599,6	2788,6	LMIC
Argentina	9244,2	8927,0	9570,6	UMIC
Armenia	n/a	2022,4	2907,8	LMIC
Azerbaijan	n/a	3551,0	3014,0	UMIC
Bahrain	19222,4	19946,8	24763, 2	HIC
Bangladesh	614,0	708,2	954,0	LIC
Belarus	n/a	5780,8	6711,0	UMIC
Benin	1183,8	1125,0	1305,4	LIC
Bhutan	1033,5	1888,0	3022,8	LMIC
Bolivia	3326,8	3019,0	3422,8	LMIC
Bosnia and Herzegovina	n/a	1304,0	5416,2	UMIC
Botswana	4006,4	7352,0	10655,0	UMIC
Brazil	6982,4	7223,4	8036,0	UMIC
Burkina Faso	681,8	743,2	964,6	LIC
Burundi	445,8	472,0	347,8	LIC
Cambodia	n/a	748,0	1141,8	LIC
Cameroon	2353,4	1836,0	1897,6	LMIC
Central African Republic	918,6	756,2	708,2	LIC
Chad	680,2	809,6	890,2	LIC
China	603,8	1363,6	3152,0	LMIC
Colombia	5254,0	6287,6	6764,8	UMIC
Congo, Dem. Rep.	755,2	477,0	249,0	LIC
Congo, Rep.	3721,0	3354,4	3287,4	LMIC
Costa Rica	5790,8	6628,6	8263,2	UMIC
Cote d'Ivoire	2443,0	1769,2	1644,6	LMIC
Croatia	n/a	10501,4	13359,8	HIC
Cuba	n/a	n/a	n/a	UMIC
Dominican Republic	3750,2	3978,8	5735,4	UMIC
Ecuador	5602,0	5588,2	5903,4	LMIC
Egypt, Arab Rep.	2626,4	3224,4	4091,6	LMIC
El Salvador	3790,6	4009,4	5354,2	LMIC
Equatorial Guinea	n/a	2002,8	15606,4	HIC
Eritrea	n/a	626,3	684,8	LIC
Ethiopia	597,0	482,6	548,4	LIC
Fiji	3322,6	3492,2	4079,8	UMIC
Gabon	17005,4	14797,6	13067,6	UMIC
Gambia, The	1166,2	1120,4	1087,4	LIC
Georgia	n/a	3239,2	2859,4	LMIC
Ghana	860,0	926,0	1092,6	LIC
Guatemala	3608,2	3452,4	3995,0	LMIC
Guinea	n/a	796,8	912,6	LIC
Guinea-Bissau	1053,2	1248,0	1022,8	LIC
Haiti	n/a	1218,8	1082,0	LIC
Honduras	2691,6	2721,8	2980,0	LMIC
Hong Kong SAR, China	15363,2	26029,0	30836,6	HIC
India	950,6	1292,8	1928,2	LMIC
Indonesia	1467,4	2364,4	2889,0	LMIC
Iran, Islamic Rep.	7114,8	6786,0	8306,6	UMIC
Iraq	n/a	n/a	3456,6	LMIC
Jamaica	5135,6	6399,2	6728,4	UMIC
Jordan	4033,6	3291,8	3811,4	LMIC
Kazakhstan	n/a	5909,6	6730,4	UMIC
Kenya	1336,6	1350,0	1279,0	LIC
Korea, Dem. Rep.	n/a	n/a	n/a	LIC
Kuwait	30186,4	n/a	35690,0	LMIC
Kyrgyz Republic	n/a	1931,0	1605,4	LIC
Lao PDR	854,0	985,2	1440,6	LIC
Lebanon	n/a	7476,8	8965,6	UMIC
Lesotho	802,2	944,0	1159,8	LMIC
Liberia	1582,6	312,4	412,6	LIC
Libya	n/a	n/a	12041,8	UMIC
Macedonia, FYR	n/a	7295,6	7093,2	UMIC
Madagascar	1127,8	942,4	870,6	LIC
Malawi	652,6	621,4	632,8	LIC
Malaysia	5290,4	7576,8	10604,6	UMIC
Mali	704,4	676,2	904,2	LIC
Mauritania	1663,6	1539,0	1583,0	LIC
Mauritius	3982,2	6609,8	9520,8	UMIC
Moldova	n/a	3154,8	1910,2	LMIC
Mongolia	1976,3	1899,0	2195,0	LMIC
Morocco	2301,6	2710,6	3183,0	LMIC
Mozambique	390,4	397,4	574,0	LIC
Myanmar	n/a	n/a	n/a	LIC
Namibia	4700,4	4200,0	4852,6	UMIC
Nepal	594,6	751,6	921,6	LIC
Nicaragua	2733,0	1800,8	2170,2	LMIC

Niger	850,8	624,6	584,8	LIC
Nigeria	1375,8	1437,6	1524,8	LMIC
Oman	11783,0	15745,6	18773,8	HIC
Pakistan	1291,8	1761,6	1970,4	LMIC
Panama	6865,2	6768,6	8246,4	UMIC
Papua New Guinea	1864,0	2047,6	1872,4	LMIC
Paraguay	3958,6	4048,6	3785,8	LMIC
Peru	5863,4	4545,4	5674,6	UMIC
Philippines	2584,8	2309,8	2675,2	LMIC
Puerto Rico	n/a	n/a	n/a	HIC
Russian Federation	n/a	10466,0	9722,4	UMIC
Rwanda	817,8	696,8	715,2	LIC
Saudi Arabia	28921,4	20238,0	19763,6	HIC
Senegal	1490,4	1387,4	1501,6	LMIC
Sierra Leone	794,6	623,6	543,6	LIC
Singapore	15862,6	25899,6	37342,6	HIC
Somalia	n/a	n/a	n/a	LIC
South Africa	8695,8	7577,4	7889,6	UMIC
Sri Lanka	1644,2	2180,8	3160,2	LMIC
Sudan	1032,8	1040,8	1430,4	LMIC
Swaziland	2455,0	3492,8	4119,8	LMIC
Syrian Arab Republic	3390,6	3311,8	3822,6	LMIC
Tajikistan	n/a	2125,0	1192,6	LIC
Tanzania	n/a	852,4	949,8	LIC
Thailand	2386,2	4557,6	5956,6	LMIC
Timor-Leste	n/a	n/a	752,8	LMIC
Togo	952,4	764,4	779,8	LIC
Trinidad and Tobago	14894,2	10764,0	16074,6	HIC
Tunisia	3684,0	4231,8	5797,0	LMIC
Turkmenistan	n/a	3094,4	3209,0	LMIC
Uganda	538,0	550,6	818,0	LIC
United Arab Emirates	80040,6	47230,0	44321,8	HIC
Uruguay	7049,8	7968,4	8669,8	UMIC
Uzbekistan	n/a	1752,4	1741,0	LMIC
Venezuela, RB	10597,6	10186, 2	8997,0	UMIC
Vietnam	790,0	1004,0	1789,2	LMIC
West Bank and Gaza	n/a	n/a	n/a	LMIC
Yemen, Rep.	n/a	1756,2	2105,4	LMIC
Zambia	1468,0	1168,6	1042,8	LIC
Zimbabwe	n/a	n/a	n/a	LIC

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 25 February 2011 from WDI Online.*

Description*:* This table presents data on GDP per capita converted to the international dollars using purchasing power parity rates, and data are in constant 2005 international dollars. This is the sum of gross value added by all resident producers in the economy plus any 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 (WDI 2010). The five-years average values are included in the data analysis. In addition, to give insight in the sample, the World Bank's categorization of countries regarding per capita income is included in the last column. Countries with a per capita income below $995,- are classified as low income; with a per capita income between $996,- and $3946,- as lower middle income ; when between $3946,- and $12.195,- as upper middle income; and above $12.196,- as high income countries. (http://data.worldbank.org/about/country-classifications)

Table 3b. Life Expectancy at Birth (in years), total population

Country	1980-4	1990-4	2000-4	Country	1980-4	1990-4	2000-4
Afghanistan	39.8	41.6	42.1	Lesotho	54.8	59.6	47.2
Albania	70,4	71,9	75,3	Liberia	47,6	49,6	55,5
Algeria	61,2	67,7	70,7	Libya	62,0	69,1	73,0
Angola	41,0	42,3	44,2	Macedonia, FYR	70,0	71,6	73,3
Argentina	70,0	72,0	74,2	Madagascar	48,8	52,2	57,5
Armenia	70,6	67,9	71,8	Malawi	45,6	50,5	50,6
Azerbaijan	65,0	65,3	68,0	Malaysia	67,6	70,7	73,0
Bahrain	68,8	72,7	74,9	Mali	40,6	43,5	46,3
Bangladesh	49,0	55,4	62,7	Mauritania	53,6	55,9	56,4
Belarus	71,0	69,8	68,6	Mauritius	66,5	69,9	71,8
Benin	51,0	54,8	58,9	Moldova	65,2	67,2	67,1
Bhutan	47,6	54,2	63,0	Mongolia	57,2	61,3	64,7
Bolivia	53,6	59,8	63,7	Morocco	59,2	65,2	69,4
Bosnia & Herzegovina	71,0	66,5	74,6	Mozambique	43,0	44,2	47,6
Botswana	61,2	62,9	49,6	Myanmar	57,8	59,1	60,2
Brazil	63,2	67,1	70,8	Namibia	58,8	62,7	57,9
Burkina Faso	45,4	47,9	51,0	Nepal	49,2	55,3	63,2
Burundi	47,4	45,4	47,7	Nicaragua	59,2	65,5	70,6
Cambodia	46,6	55,3	57,7	Niger	39,8	42,3	47,7
Cameroon	52,4	54,6	51,0	Nigeria	45,0	44,5	46,5
Central African Rep.	49,0	48,9	52,9	Oman	62,0	71,0	74,2
Chad	49,2	51,1	53,1	Pakistan	58,4	61,2	64,6
China	66,4	68,7	71,7	Panama	70,6	72,8	74,6
Colombia	66,4	68,7	66,3	Papua New Guinea	52,4	55,4	58,9
Congo, Dem. Rep.	46,8	47,3	47,0	Paraguay	67,0	68,4	70,6
Congo, Rep.	60,0	58,1	53,3	Peru	61,2	66,5	71,4
Costa Rica	73,6	76,2	78,1	Philippines	62,0	66,3	70,1
Cote d'Ivoire	56,4	57,4	55,6	Puerto Rico	74,0	74,9	77,6
Croatia	70,0	71,9	74,4	Russian Federation	67,4	66,7	65,3
Cuba	74,0	74,9	77,2	Rwanda	46,6	28,6	45,5
Dominican Republic	63,8	68,6	71,5	Saudi Arabia	62,8	68,8	71,8
Ecuador	64,2	69,8	74,0	Senegal	48,6	52,6	54,4
Egypt, Arab Rep.	58,0	64,0	68,8	Sierra Leone	42,0	38,9	43,9
El Salvador	57,6	67,5	70,1	Singapore	71,5	75,2	78,7
Equatorial Guinea	43,4	47,4	48,8	Somalia	43,8	44,1	49,0
Eritrea	44,0	49,7	56,8	South Africa	57,8	61,3	53,9
Ethiopia	44,0	47,8	52,3	Sri Lanka	68,6	69,7	72,3
Fiji	64,8	66,8	67,7	Sudan	50,0	53,3	56,6
Gabon	56,0	61,3	59,5	Swaziland	55,6	60,4	47,6
Gambia, The	47,6	51,8	54,4	Syrian Arab Republic	64,2	69,2	72,9
Georgia	69,2	70,3	71,3	Tajikistan	62,6	62,5	64,5
Ghana	53,6	58,3	57,3	Tanzania	50,6	50,4	51,7
Guatemala	58,2	63,3	68,6	Thailand	67,4	68,9	68,2
Guinea	44,4	49,3	54,4	Timor-Leste	38,0	48,0	57,7
Guinea-Bissau	41,2	44,1	46,3	Togo	55,6	58,1	60,3
Haiti	51,4	55,9	59,6	Trinidad and Tobago	67,8	69,1	68,4
Honduras	61,0	67,2	70,8	Tunisia	63,0	70,7	73,0
Hong Kong SAR, China	75,2	77,9	81,4	Turkmenistan	61,4	62,7	64,1
India	56,0	58,8	61,9	Uganda	50,0	46,7	47,7
Indonesia	55,8	62,6	68,3	United Arab Emirates	69,0	74,0	77,0
Iran, Islamic Rep.	59,8	65,6	69,7	Uruguay	70,5	72,8	74,9
Iraq	61,6	66,5	70,1	Uzbekistan	66,0	66,4	67,1
Jamaica	70,4	71,2	71,0	Venezuela, RB	68,5	71,7	73,2
Jordan	63,8	67,9	71,2	Vietnam	58,6	67,2	72,7
Kazakhstan	67,0	67,3	65,8	West Bank and Gaza	n/a	69,4	72,2
Kenya	58,6	59,2	52,2	Yemen, Rep.	48,6	55,4	60,1
Korea, Dem. Rep.	68,4	69,7	66,5	Zambia	52,0	49,6	41,9
Kuwait	71,4	75,4	77,1	Zimbabwe	59,8	58,4	41,8
Kyrgyz Republic	65,0	67,6	68,4				
Lao PDR	49,6	55,9	62,0				
Lebanon	67,0	69,2	71,0				

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 23 February 2011 from WDI Online.*

Description: This table presents 5-years aggregates on life expectancy of the total and male population, respectively, per country, which are used to indicate the independent variable 'living standard' as the extent to which survival is secure. This indicator represents "the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life" (WDI, 2010).

Table 3c. Rural Population (% of total population)

Country	1980-4	1990-4	2000-4	Country	1980-4	1990-4	2000-4
Afghanistan	83.8	81.2	78.0	Lesotho	88,2	84.8	78.6
Albania	65,6	62,8	57,0	Liberia	63,0	53,0	44,2
Algeria	55,0	46,4	38,8	Libya	28,0	24,0	23,2
Angola	73,4	60,2	49,0	Macedonia, FYR	45,8	41,2	36,2
Argentina	16,2	12,4	9,4	Madagascar	80,8	75,6	72,4
Armenia	33,6	33,0	35,4	Malawi	90,4	87,6	84,0
Azerbaijan	47,0	47,4	49,0	Malaysia	56,4	47,8	36,0
Bahrain	13,4	12,0	12,0	Mali	80,8	75,8	71,2
Bangladesh	84,2	79,4	75,6	Mauritania	69,8	60,0	60,0
Belarus	41,2	33,2	29,2	Mauritius	58,0	56,2	57,4
Benin	71,4	64,8	61,0	Moldova	58,2	53,4	56,2
Bhutan	88,8	82,0	72,2	Mongolia	46,8	43,0	43,0
Bolivia	53,0	42,8	37,2	Morocco	57,4	50,4	46,0
Bosnia & Herzegovina	63,8	60,0	55,8	Mozambique	85,4	77,0	67,8
Botswana	79,2	55,2	45,2	Myanmar	76,0	74,6	70,8
Brazil	31,0	24,0	17,6	Namibia	74,4	71,4	66,6
Burkina Faso	89,8	85,6	82,6	Nepal	93,4	90,4	85,8
Burundi	95,4	93,4	91,2	Nicaragua	49,6	47,2	44,8
Cambodia	89,6	86,6	82,0	Niger	86,2	84,4	84,0
Cameroon	66,4	57,4	48,2	Nigeria	70,0	63,4	56,2
Central African Rep.	65,4	71,0	62,0	Oman	48,8	31,8	28,0
Chad	80,8	78,8	75,8	Pakistan	71,4	68,8	66,0
China	79,0	71,0	62,2	Panama	49,0	43,6	32,0
Colombia	36,6	30,4	27,4	Papua New Guinea	86,6	85,4	87,0
Congo, Dem. Rep.	71,6	72,0	69,2	Paraguay	57,0	50,0	43,4
Congo, Rep.	50,4	44,8	41,0	Peru	34,4	30,6	29,0
Costa Rica	55,8	47,0	39,8	Philippines	60,2	49,0	40,0
Cote d'Ivoire	62,6	59,6	55,4	Puerto Rico	32,2	22,0	4,2
Croatia	49,0	45,6	44,0	Russian Federation	29,2	27,0	27,0
Cuba	30,8	26,2	24,0	Rwanda	95,0	93,4	84,6
Dominican Republic	47,8	43,8	36,0	Saudi Arabia	31,4	22,6	19,6
Ecuador	51,2	43,8	38,4	Senegal	63,6	60,4	59,0
Egypt, Arab Rep.	56,0	57,0	57,0	Sierra Leone	69,8	66,6	64,0
El Salvador	54,8	49,0	41,0	Singapore	0,0	0,0	0,0
Equatorial Guinea	71,4	63,6	61,0	Somalia	72,6	69,6	66,0
Eritrea	85,2	84,0	81,6	South Africa	51,2	47,2	42,2
Ethiopia	89,2	86,8	84,6	Sri Lanka	81,6	83,0	84,4
Fiji	62,0	56,8	50,8	Sudan	79,2	71,6	62,0
Gabon	42,2	28,4	18,6	Swaziland	80,6	77,0	76,4
Gambia, The	70,0	59,6	49,0	Syrian Arab Republic	52,8	50,6	47,6
Georgia	47,4	45,4	47,0	Tajikistan	66,2	69,4	74,0
Ghana	68,0	62,2	54,4	Tanzania	84,6	80,4	77,0
Guatemala	62,0	58,2	54,0	Thailand	72,6	70,2	68,4
Guinea	75,2	71,4	68,2	Timor-Leste	82,8	78,6	75,0
Guinea-Bissau	80,4	71,4	70,0	Togo	74,2	68,6	62,2
Haiti	78,4	70,0	61,6	Trinidad and Tobago	89,6	91,2	88,6
Honduras	64,0	59,0	54,8	Tunisia	48,0	40,6	35,8
Hong Kong SAR, China	8,0	0,2	0,0	Turkmenistan	53,4	55,0	53,6
India	76,4	74,2	71,8	Uganda	91,8	88,8	88,0
Indonesia	76,4	67,0	55,6	United Arab Emirates	19,6	21,0	22,0
Iran, Islamic Rep.	48,8	42,2	34,8	Uruguay	14,0	10,4	8,4
Iraq	33,4	30,6	32,6	Uzbekistan	59,0	60,6	63,0
Jamaica	52,6	50,2	47,8	Venezuela, RB	19,8	14,8	9,2
Jordan	37,6	25,4	22,0	Vietnam	80,8	79,0	74,8
Kazakhstan	45,2	44,0	43,4	West Bank and Gaza	36,4	27,6	28,2
Kenya	83,8	81,4	80,0	Yemen, Rep.	82,8	78,0	72,8
Korea, Dem. Rep.	43,0	41,2	39,4	Zambia	60,0	61,6	65,0
Kuwait	4,0	2,0	2,0	Zimbabwe	76,4	69,8	65,4
Kyrgyz Republic	61,4	62,8	64,4				
Lao PDR	87,0	83,8	76,0				
Lebanon	24,0	16,4	14,0				

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 25 February 2011 from WDI Online.*

Description*:* This table shows the 5-years aggregate percentage of the population living in rural areas as defined by national statistical offices. WDI calculated this data as the difference between total population and urban population. This indicator is used to proxy the level of modernization of a country, higher numbers indicating less urbanization and therefore less industrialization.

Table 3d. Employment in Industry or Services (% of total employment)

Country	Industry 2000-4	Services 2000-4	Country	Industry 2000-4	Services 2000-4
Afghanistan	n/a	n/a	Libya	n/a	n/a
Albania	11,0	25,6	Macedonia,	33,3	45,7
Algeria	24,7	54,3	Madagascar	7,0	15,0
Angola	n/a	n/a	Malawi	n/a	n/a
Argentina	22,0	76,8	Malaysia	31,8	52,8
Armenia	16,7	37,7	Mali	17,0	42,0
Azerbaijan	11,6	48,4	Mauritania	n/a	n/a
Bahrain	28,0	68,0	Mauritius	37,4	52,2
Bangladesh	12,0	29,5	Moldova	14,8	38,0
Belarus	n/a	n/a	Mongolia	14,8	40,6
Benin	n/a	n/a	Morocco	20,0	35,7
Bhutan	n/a	n/a	Mozambique	n/a	n/a
Bolivia	18,7	42,7	Myanmar	n/a	n/a
Bosnia and Herzegovina	n/a	n/a	Namibia	18,5	55,5
Botswana	23,3	58,3	Nepal	13,0	20,0
Brazil	20,8	58,4	Nicaragua	16,5	44,5
Burkina Faso	n/a	n/a	Niger	n/a	n/a
Burundi	n/a	n/a	Nigeria	n/a	n/a
Cambodia	9,5	18,5	Oman	11,0	82,0
Cameroon	9,0	23,0	Pakistan	19,6	35,8
Central African	n/a	n/a	Panama	17,2	65,6
Chad	n/a	n/a	Papua New	4,0	23,0
China	17,3	14,0	Paraguay	16,5	51,8
Colombia	19,3	59,8	Peru	32,4	57,6
Congo, Dem. Rep.	n/a	n/a	Philippines	15,6	42,2
Congo, Rep.	n/a	n/a	Puerto Rico	20,6	77,6
Costa Rica	22,4	60,8	Russian	29,4	58,8
Cote d'Ivoire	n/a	n/a	Rwanda	n/a	n/a
Croatia	29,8	54,6	Saudi Arabia	20,7	73,7
Cuba	19,6	57,4	Senegal	n/a	n/a
Dominican Republic	22,8	61,2	Sierra Leone	7,0	25,0
Ecuador	22,8	68,6	Singapore	26,8	72,4
Egypt, Arab Rep.	20,6	49,8	Somalia	n/a	n/a
El Salvador	24,2	55,8	South Africa	25,4	62,4
Equatorial Guinea	n/a	n/a	Sri Lanka	22,3	38,0
Eritrea	n/a	n/a	Sudan	n/a	n/a
Ethiopia	n/a	n/a	Swaziland	n/a	n/a
Fiji	n/a	n/a	Syrian Arab	26,5	43,0
Gabon	n/a	n/a	Tajikistan	18,0	26,0
Gambia, The	n/a	n/a	Tanzania	3,0	15,0
Georgia	8,8	37,6	Thailand	19,6	35,0
Ghana	n/a	n/a	Timor-Leste	n/a	n/a
Guatemala	20,0	40,5	Togo	n/a	n/a
Guinea	n/a	n/a	Trinidad and	28,8	64,4
Guinea-Bissau	n/a	n/a	Tunisia	n/a	n/a
Haiti	n/a	n/a	Turkmenistan	n/a	n/a
Honduras	21,3	41,7	Uganda	8,0	24,0
Hong Kong SAR, China	18,0	81,6	United Arab	33,0	59,0
India	n/a	n/a	Uruguay	n/a	n/a
Indonesia	18,2	37,4	Uzbekistan	n/a	n/a
Iran, Islamic Rep.	n/a	n/a	Venezuela, RB	21,3	68,3
Iraq	18,0	65,0	Vietnam	14,8	23,2
Jamaica	17,2	62,2	West Bank and	27,6	52,2
Jordan	21,8	74,0	Yemen, Rep.	n/a	n/a
Kazakhstan	16,5	48,3	Zambia	6,0	23,0
Kenya	n/a	n/a	Zimbabwe		
Korea, Dem. Rep.	n/a	n/a			
Kuwait	18,0	82,0			
Kyrgyz Republic	13,2	39,8			
Lao PDR	n/a	n/a			
Lebanon	n/a	n/a			
Lesotho	n/a	n/a			
Liberia	n/a	n/a			

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 11 July 2011 from WDI Online*

Description: The level of economic modernization can be measured as the share of employment in non-agricultural labor. Of concern is the employment in publicly or privately held industry or services, where employees receive remuneration for their service. According to the WDI description, industry corresponds to divisions 2-5 (ISIC revision 2) or tabulation categories C-F (ISIC revision 3) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water) while services correspond to divisions 6-9 (ISIC revision 2) or tabulation categories G-P (ISIC revision 3) and include wholesale and retail trade and restaurants and hotels; transport, storage, and communications; financing, insurance, real estate, and business services; and community, social, and personal services.

Table 4a. Oil Endowment, 2000-2004.

Country	Merchandise Export (current US$)	GDP (current US$)	Merchandise Export (% of GDP)	Fuel Export (approx. % of GDP)
Afghanistan	150.862.000,00	4.317.725.954,3	3,5	n/a
Albania	391.604.000,00	5.068.763.024,8	7,7	n/a
Algeria	22.886.000.000,00	64.011.327.802,0	35,8	34,7
Angola	9.153.200.000,00	12.645.685.855,0	72,4	n/a
Argentina	28.535.140.000,00	187.533.475.942,0	15,2	2,6
Armenia	510.132.000,00	2.558.008.575,0	19,9	1,1
Azerbaijan	2.486.703.628,80	6.634.507.684,6	37,5	32,5
Bahrain	6.351.123.000,00	9.074.815.789,8	70,0	50,0
Bangladesh	6.782.600.000,00	50.031.660.775,4	13,6	0
Belarus	9.303.440.000,00	16.130.725.155,0	57,7	12,3
Benin	464.713.600,00	3.007.880.710,8	15,5	0
Bhutan	127.517.200,00	545.197.594,8	23,4	n/a
Bolivia	1.511.578.000,00	8.260.081.262,6	18,3	4,4
Bosnia and Herzegovina	1.055.371.907,80	7.259.812.404,2	14,5	0,9
Botswana	2.786.618.400,00	7.178.592.257,0	38,8	0
Brazil	63.286.560.000,00	583.746.905.345,8	10,8	4,5
Burkina Faso	295.714.600,00	3.618.560.103,6	8,2	0,1
Burundi	40.620.980,00	651.805.347,8	6,2	0
Cambodia	1.945.513.400,00	4.435.322.149,8	43,9	0
Cameroon	2.028.664.441,20	11.990.041.882,0	16,9	8,5
Central African Rep.	142.365.855,60	1.075.549.613,4	13,2	0
Chad	669.800.000,00	2.446.781.271,0	27,4	n/a
China	374.490.200.000,00	1.509.943.198.825,8	24,8	0,7
Colombia	13.308.860.000,00	101.901.911.362,6	13,1	5,0
Congo, Dem. Rep.	n/a	5.357.702.626,4	n/a	n/a
Congo, Rep.	2.586.800.000,00	3.435.726.671,2	75,4	n/a
Costa Rica	5.710.734.000,00	17.061.665.364,8	33,5	0,6
Cote d'Ivoire	5.163.200.000,00	12.333.503.322,4	41,9	5,5
Croatia	5.642.474.000,00	29.039.004.429,8	19,4	2,0
Cuba	1.755.700.000,00	33.988.620.000,0	5,2	0,1
Dominican Republic	5.517.000.000,00	23.753.842.437,4	23,2	1,5
Ecuador	5.724.516.000,00	24.673.851.561,8	23,2	10,4
Egypt, Arab Rep.	6.543.312.811,20	89.418.019.190,4	7,3	3,0
El Salvador	3.046.722.000,00	14.419.718.368,4	21,1	0,5
Equatorial Guinea	2.469.768.600,00	2.666.059.858,4	92,6	n/a
Eritrea	25.150.000,00	741.235.328,2	3,4	n/a
Ethiopia	519.179.600,00	8.542.162.232,4	6,1	0
Fiji	599.600.000,00	2.046.069.307,2	29,3	0
Gabon	2.866.208.954,00	5.589.040.940,4	51,3	35,3
Gambia, The	11.000.400,00	395.303.920,4	2,8	0
Georgia	418.980.600,00	3.757.971.687,4	11,4	0,8
Ghana	2.002.259.200,00	6.588.450.283,0	30,4	1,9
Guatemala	3.763.980.000,00	20.930.580.434,4	18,0	1,3
Guinea	691.846.000,00	3.234.162.977,0	21,4	0,1
Guinea-Bissau	64.000.000,00	325.700.594,6	19,7	0,2
Haiti	321.968.000,00	3.374.855.491,0	9,5	n/a
Honduras	3.759.766.769,00	7.910.708.165,2	47,5	0
Hong Kong SAR, China	217.985.555.438,60	164.790.674.103,8	132,3	1,1
India	54.120.300.000,00	553.118.250.766,0	9,8	0,5
Indonesia	63.360.922.000,00	163.454.599.651,0	38,8	9,9
Iran, Islamic Rep.	30.863.000.000,00	126.356.399.157,2	24,4	19,5
Iraq	14.643.000.000,00	22.379.469.718,5	65,4	61,5
Jamaica	1.243.906.000,00	9.464.794.750,2	13,1	0,2
Jordan	2.785.393.483,80	9.727.542.339,2	28,6	0,1
Kazakhstan	12.028.220.000,00	27.813.323.632,8	43,3	25,7
Kenya	2.177.892.000,00	13.965.361.251,0	15,6	1,8
Korea, Dem. Rep.	977.200.000,00	n/a	n/a	n/a

Country	Merchandise Export (current US$)	GDP (current US$)	Merchandise Export (% of GDP)	Fuel Export (approx. % of GDP)
Kuwait	20.057.000.000,00	43.612.787.270,0	46,0	43,0
Kyrgyz Republic	553.400.000,00	1.726.198.836,4	32,1	7,0
Lao PDR	329.786.000,00	1.998.020.571,2	16,5	n/a
Lebanon	1.411.600.000,00	19.189.386.401,4	7,4	0
Lesotho	408.302.800,00	844.763.924,6	48,3	0
Liberia	169.140.000,00	506.680.013,6	33,4	n/a
Libya	13.850.800.000,00	27.921.311.578,6	49,6	n/a
Macedonia, FYR	1.327.880.000,00	4.162.622.880,8	31,9	1,3
Madagascar	817.122.600,00	4.528.389.579,2	18,0	0,5
Malawi	448.720.400,00	2.235.002.433,6	20,1	0
Malaysia	102.301.575.200,00	104.474.211.837,4	97,9	10,0
Mali	809.686.600,00	3.526.329.424,8	23,0	0,6
Mauritania	359.885.529,60	1.237.086.088,8	29,1	n/a
Mauritius	1.775.500.000,00	5.176.384.237,2	34,3	0
Moldova	691.834.600,00	1.802.005.659,2	38,4	0,2
Mongolia	553.320.000,00	1.358.923.502,0	40,7	0,2
Morocco	8.225.675.600,00	44.386.413.283,6	18,5	0,5
Mozambique	885.169.200,00	4.577.862.543,8	19,3	2,6
Myanmar	2.387.192.000,00	n/a	n/a	n/a
Namibia	1.331.920.000,00	4.471.409.362,2	29,8	0,4
Nepal	708.759.200,00	6.149.023.334,8	11,5	0
Nicaragua	631.021.600,00	4.126.854.455,4	15,3	0,2
Niger	324.600.000,00	2.303.907.177,6	14,1	0,2
Nigeria	23.931.400.000,00	61.720.333.438,6	38,8	38,0
Oman	11.714.980.000,00	21.216.489.128,6	55,2	45,2
Pakistan	10.697.600.000,00	79.958.300.315,6	13,4	0,3
Panama	884.785.800,00	12.562.580.000,0	7,0	0,3
Papua New Guinea	2.060.128.000,00	3.413.098.753,4	60,4	17,8
Paraguay	1.135.618.000,00	6.212.796.122,6	18,3	0
Peru	8.730.926.000,00	59.014.045.050,6	14,8	1,2
Philippines	36.713.304.000,00	78.101.154.199,0	47,0	0,6
Puerto Rico	n/a	64.470.999.040,0	n/a	n/a
Russian Federation	126.779.200.000,00	386.557.214.083,4	32,8	17,3
Rwanda	72.831.800,00	1.759.656.675,2	4,1	0,1
Saudi Arabia	87.468.520.000,00	204.983.412.609,8	42,7	38,1
Senegal	1.151.200.000,00	5.963.029.372,8	19,3	2,7
Sierra Leone	64.301.940,00	892.901.589,8	7,2	n/a
Singapore	148.654.200.000,00	93.914.658.504,0	158,3	13,0
Somalia	n/a	n/a	n/a	n/a
South Africa	34.318.260.000,00	149.953.938.915,0	22,9	2,4
Sri Lanka	5.165.422.000,00	14.025.535.324,2	36,8	0
Sudan	2.355.000.000,00	16.033.662.395,0	14,7	11,1
Swaziland	1.316.362.000,00	1.606.344.439,8	81,9	1,0
Syrian Arab Republic	5.905.405.200,00	21.883.484.270,6	27,0	19,7
Tajikistan	776.980.000,00	1.358.542.469,6	57,2	8,0
Tanzania	1.051.960.000,00	9.982.497.410,2	10,5	0
Thailand	75.740.960.000,00	133.823.688.234,8	56,6	1,5
Timor-Leste	n/a	296.940.000,0	n/a	n/a
Togo	469.200.000,00	1.590.644.152,6	29,5	0,1
Trinidad and Tobago	4.825.762.400,00	10.021.627.039,8	48,2	28,5
Tunisia	7.413.378.000,00	22.720.117.141,2	32,6	3,3
Turkmenistan	3.111.600.000,00	4.743.451.046,8	65,6	53,1
Uganda	543.824.000,00	6.603.583.896,8	8,2	0,3

Country	Merchandise Export (current US$)	GDP (current US$)	Merchandise Export (% of GDP)	Fuel Export (approx. % of GDP)
United Arab Emirates	61.708.829.800,00	81.383.201.780,8	75,8	70,5
Uruguay	2.270.600.000,00	16.612.100.748,0	13,7	0,3
Uzbekistan	3.101.400.000,00	11.402.830.789,2	27,2	n/a
Venezuela	30.775.000.000,00	105.829.263.841,4	29,1	24,2
Vietnam	18.570.460.000,00	36.637.487.762,2	50,7	11,7
West Bank and Gaza	n/a	3.405.889.842,6	n/a	n/a
Yemen, Rep.	n/a	10.736.784.922,2	n/a	93,8
Zambia	1.072.648.000,00	4.077.561.330,2	26,3	0,3
Zimbabwe	1.740.200.000,00	10.332.445.808,0	16,8	0,2

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 10 March 2011 from WDI Online*

Description: This table shows country's economic reliance on the endowment and export of precious natural substances, such as mineral fuels. All values are aggregates for the period 2000-04. By means of the variables 'merchandise exports' and 'GDP', all in current US$, the variable 'merchandise exports' as a share of GDP was created. Since the WDI database also provides data for 'fuel exports (% of merchandise exports)', subsequently, fuel exports as a share of GDP was approximated. Here, fuels comprise SITC section 3 (mineral fuels). Data on Fuels Export are used in the data analysis to represent oil endowment.

Table 4b. Wealth Distribution (Gini Index)

	1990-4	2000-4		1990-4	2000-4
Afghanistan	n/a	n/a	Lao PDR	30.0	33.0
Albania	n/a	29,5	Lebanon	n/a	n/a
Algeria	n/a	n/a	Lesotho	58,0	53,0
Angola	n/a	59,0	Liberia	n/a	n/a
Argentina	45,0	52,0	Libya	n/a	n/a
Armenia	n/a	35,3	Macedonia, FYR	n/a	37,3
Azerbaijan	n/a	37,0	Madagascar	46,0	47,0
Bahrain	n/a	n/a	Malawi	n/a	39,0
Bangladesh	26,0	31,0	Malaysia	48,0	38,0
Belarus	22,0	30,3	Mali	51,0	40,0
Benin	n/a	39,0	Mauritania	50,0	39,0
Bhutan	n/a	47,0	Mauritius	n/a	n/a
Bolivia	42,0	60,0	Moldova	34,0	36,3
Bosnia and Herzegovina	n/a	32,0	Mongolia	n/a	33,0
Botswana	61,0	n/a	Morocco	39,0	41,0
Brazil	59,3	58,0	Mozambique	n/a	47,0
Burkina Faso	51,0	40,0	Myanmar	n/a	n/a
Burundi	33,0	n/a	Namibia	74,0	n/a
Cambodia	38,0	42,0	Nepal	n/a	47,0
Cameroon	n/a	45,0	Nicaragua	56,0	50,0
Central African Republic	61,0	44,0	Niger	39,0	n/a
Chad	n/a	40,0	Nigeria	45,0	43,0
China	n/a	n/a	Oman	n/a	n/a
Colombia	51,0	58,5	Pakistan	31,5	30,0
Congo, Dem. Rep.	n/a	n/a	Panama	57,0	56,3
Congo, Rep.	n/a	n/a	Papua New Guinea	n/a	n/a
Costa Rica	46,3	49,0	Paraguay	40,0	58,0
Cote d'Ivoire	37,0	48,0	Peru	44,5	54,0
Croatia	n/a	31,0	Philippines	43,5	45,0
Cuba	n/a	n/a	Puerto Rico	n/a	n/a
Dominican Republic	51,0	52,0	Russian Federation	48,0	38,0
Ecuador	52,0	62,0	Rwanda	n/a	47,0
Egypt, Arab Rep.	32,0	33,0	Saudi Arabia	n/a	n/a
El Salvador	n/a	51,0	Senegal	54,0	41,0
Equatorial Guinea	n/a	n/a	Sierra Leone	63,0	43,0
Eritrea	n/a	n/a	Singapore	n/a	n/a
Ethiopia	n/a	30,0	Somalia	n/a	n/a
Fiji	n/a	n/a	South Africa	59,0	58,0
Gabon	n/a	n/a	Sri Lanka	32,0	41,0
Gambia, The	n/a	47,0	Sudan	n/a	n/a
Georgia	n/a	39,0	Swaziland	n/a	51,0
Ghana	38,0	n/a	Syrian Arab Republic	n/a	36,0
Guatemala	n/a	55,0	Tajikistan	n/a	33,5
Guinea	43,5	43,0	Tanzania	34,0	35,0
Guinea-Bissau	52,0	36,0	Thailand	46,0	42,3
Haiti	n/a	60,0	Timor-Leste	n/a	40,0
Honduras	55,7	54,0	Togo	n/a	n/a
Hong Kong SAR, China	n/a	n/a	Trinidad and Tobago	40,0	n/a
India	n/a	n/a	Tunisia	40,0	41,0
Indonesia	n/a	n/a	Turkmenistan	35,0	n/a
Iran, Islamic Rep.	43,5	n/a	Uganda	43,0	46,0
Iraq	n/a	n/a	United Arab Emirates	n/a	n/a
Jamaica	39,0	47,0	Uruguay	42,0	45,0
Jordan	43,0	39,0	Uzbekistan	n/a	36,0
Kazakhstan	33,0	33,3	Venezuela, RB	42,0	48,0
Kenya	49,5	n/a	Vietnam	36,0	38,5
Korea, Dem. Rep.	n/a	n/a	West Bank and Gaza	n/a	n/a
Kuwait	n/a	n/a	Yemen, Rep.	39,0	n/a
Kyrgyz Republic	54,0	32,5	Zambia	56,5	46,5
			Zimbabwe	n/a	n/a

Source: World Bank, World Development Indicators (WDI) database 2010. *Data extracted on 11 July 2011 from WDI Online*

Description: The Gini index is a measure of inequality of wealth distribution. The values range between zero and hundred, where lower Gini indices represent higher income equality and vice versa. By means of the Lorenz curve and a hypothetical line of absolute equality, the Gini index approximates the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. The WDI does not mention the proportions of the quartiles (the granularity) used for measurement. While rich countries have generally low Gini indices, developing countries fall over the whole range from low (22) to high (74).

APPENDIX B

STATISTICAL ANALYSIS

Basic Statistics I: *Descriptive Statistics* ***p.***

Basic Statistics II: *Correlations & Crosstabulations* ***p.***

Regression Analysis I: *Model Building* ***p.***

Regression Analysis II: *Model Evaluation* ***p.***

DESCRIPTIVE ANALYSIS

Table 5. Descriptives Patriarchal Institutions

		Parental Authority	Inheritance	Polygamy	Violence	Patriarchy
N	Valid	117	116	119	119	115
	Missing	2	3	0	0	4
Mean		.419	.371	.450	.5850	.4598
Median		.500	.500	.500	.5800	.4575
Std. Deviation		.4202	.3305	.4033	.24312	.27416
Variance		.177	.109	.163	.059	.075
Minimum		.0	.0	.0	.00	.04
Maximum		1.0	1.0	1.0	1.00	1.00

Figure 1. Frequency Distribution Patriarchy

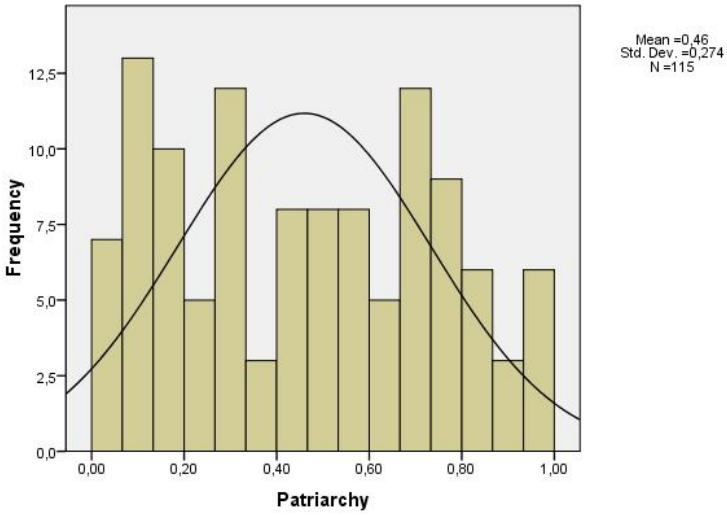

Figure 2. Frequency Distribution Patriarchy – Boundary Income

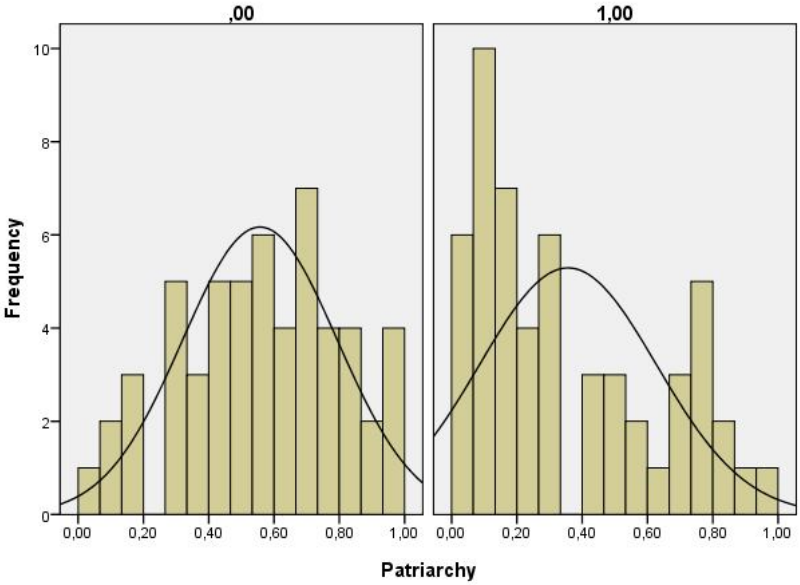

Figure 3. Frequency Distribution Ln GDPPC

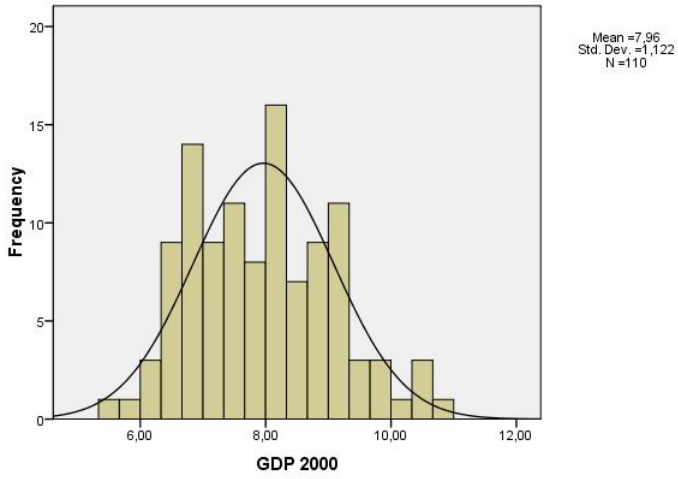

Figure 4. Frequency Distribution Life Expectancy (total population)

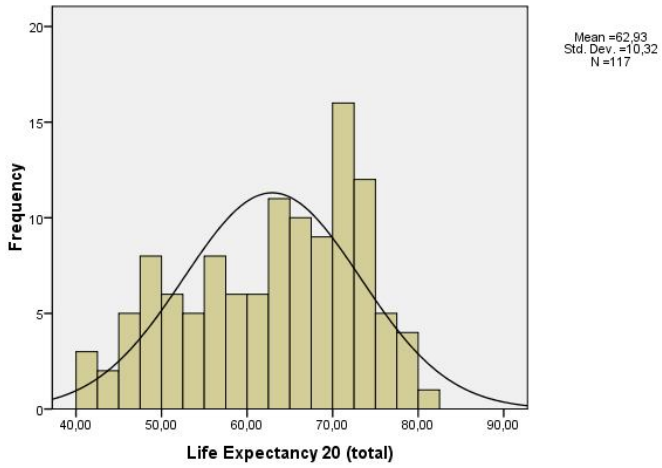

Figure 5. Frequency Distribution Rural Population (total population)

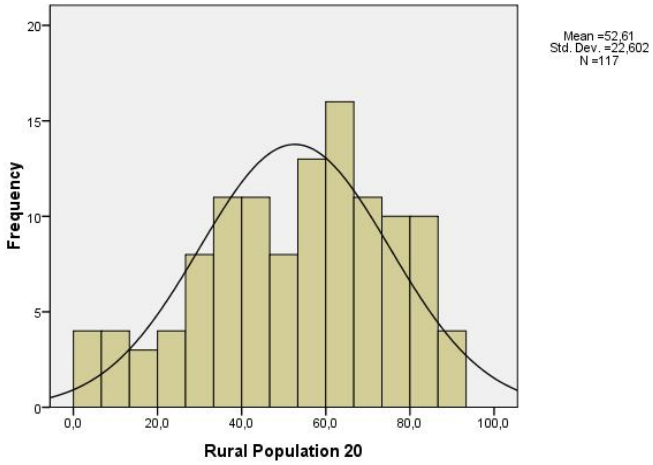

Table 6. Frequencies Geographic Region

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	Melanesia	2	1,7	1,7	1,7
	Eastern Asia	4	3,4	3,4	5,0
	South-Eastern Asia	10	8,4	8,4	13,4
	Southern Asia	8	6,7	6,7	20,2
	Central Asia	5	4,2	4,2	24,4
	Western Asia	14	11,8	11,8	36,1
	Eastern Europe	3	2,5	2,5	38,7
	Southern Europe	4	3,4	3,4	42,0
	Northern Africa	6	5,0	5,0	47,1
	Eastern Africa	14	11,8	11,8	58,8
	Middle Africa	8	6,7	6,7	65,5
	Southern Africa	5	4,2	4,2	69,7
	Western Africa	15	12,6	12,6	82,4
	South America	9	7,6	7,6	89,9
	Central America	6	5,0	5,0	95,0
	Caribbean	6	5,0	5,0	100,0
	Total	119	100,0	100,0	

Figure 6. Geographic Region

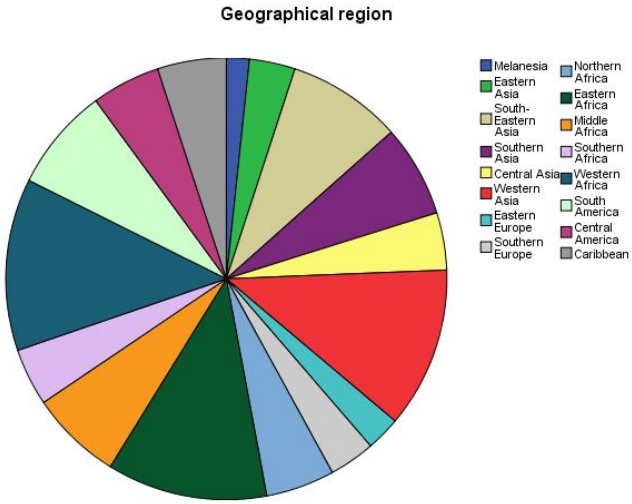

Table 7a. Frequencies Prevailing Creed

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	Muslim	42	35,3	35,3	35,3
	Christian	58	48,7	48,7	84,0
	Buddhist	7	5,9	5,9	89,9
	Hindu	3	2,5	2,5	92,4
	Chinese Universalist	4	3,4	3,4	95,8
	Ethno Religionist	5	4,2	4,2	100,0
	Total	119	100,0	100,0	

Figure 7a. Prevailing Creed

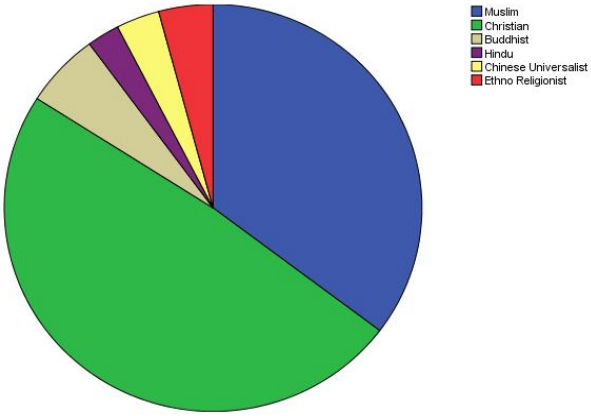

Table 7b. Frequencies Dummy Prevailing Creed

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	Muslim	42	35,3	35,3	35,3
	Christian	58	48,7	48,7	84,0
	Other	19	16,0	16,0	100,0
	Total	119	100,0	100,0	

Figure 7b. Dummy Prevailing Creed

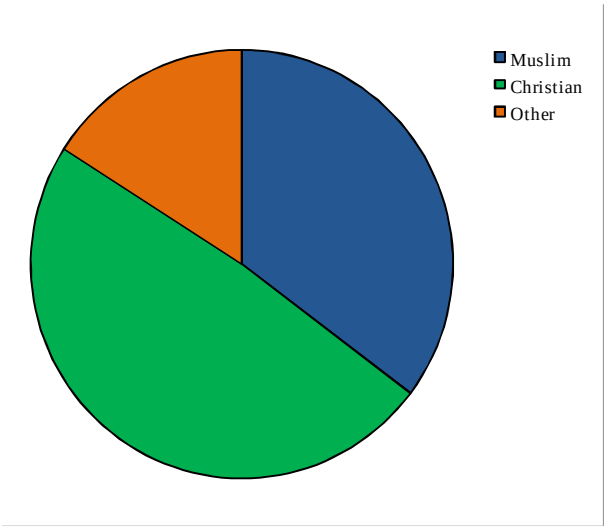

Table 7c. Descriptives Religiosity

		Homogeneity	Government Favoratism
N	Valid	119	118
	Missing	0	1
	Mean	77,488	4,799
	Median	84,800	5,200
	Std. Deviation	18,8333	2,8131
	Variance	354,692	7,914
	Minimum	32,1	,0
	Maximum	99,8	9,2

Table 8a. Frequencies Civilization

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	Islamic	41	34,5	34,5	34,5
	African	33	27,7	27,7	62,2
	Buddhist	7	5,9	5,9	68,1
	Hindu	2	1,7	1,7	69,7
	Sinic	5	4,2	4,2	73,9
	Orthodox	8	6,7	6,7	80,7
	Latin American	21	17,6	17,6	98,3
	Western	2	1,7	1,7	100,0
	Total	119	100,0	100,0	

Figure 8a. Civilization

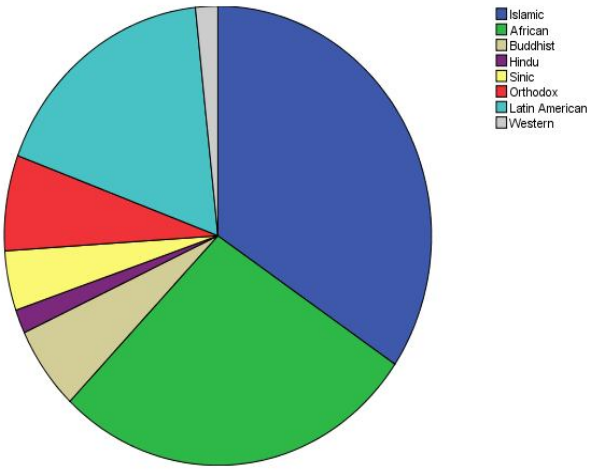

Table 8b. Dummy Civilization

		Frequency	Percent	Valid Percent	Cum. Percent
Valid	Islamic	41	34,5	34,5	34,5
	African	33	27,7	27,7	62,2
	Other	14	11,8	11,8	74,0
	Orthodox	8	6,7	6,7	80,7
	Latin American	21	17,6	17,6	98,3
	Western	2	1,7	1,7	100,0
	Total	119	100,0	100,0	

Figure 8b. Dummy Civilization

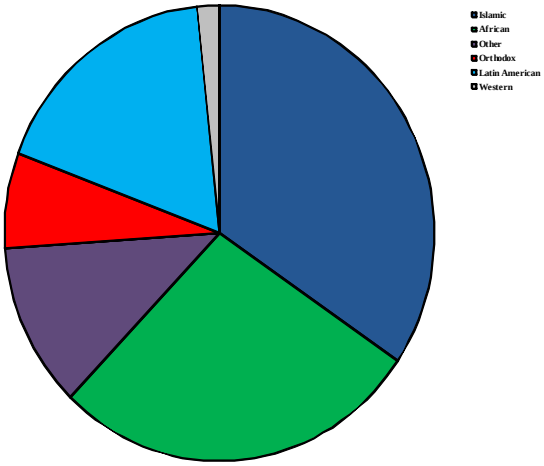

Table 9. Descriptives Economy

		Life Expectancy	Rural Population	GDPPC	Wealth distribution (Gini index)	Employment: Industrial	Postindustrial	Fuels Export
N	Valid	119	119	112	76	68	68	97
	Missing	0	0	7	43	51	51	22
	Mean	62,9287	52,245	7,9844	43,3566	18,9897	48,2985	9,403
	Median	65,2700	55,400	8,0054	42,1500	19,0000	49,1000	1,100
	Std. Deviation	10,32923	22,6398	1,12373	8,64659	7,41020	18,23196	17,4620
	Variance	106,693	512,559	1,263	74,764	54,911	332,404	304,923
	Minimum	41,83	,0	5,52	29,50	3,00	14,00	,0
	Maximum	81,38	91,2	10,70	62,00	37,40	82,00	93,8

CORRELATION ANALYSIS

Table 10. Correlations Patriarchal Institutions

		Parental Authority	Inheritance	Polygamy	Violence	Patriarchy
Parental Authority	Pearson Correlation	1,000	,618**	,531**	,345**	,843**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	116	114	116	116	114
Inheritance	Pearson Correlation	,618**	1,000	,605**	,244**	,824**
	Sig. (2-tailed)	,000		,000	,009	,000
	N	114	115	115	115	114
Polygamy	Pearson Correlation	,531**	,605**	1,000	,306**	,824**
	Sig. (2-tailed)	,000	,000		,001	,000
	N	116	115	118	118	114
Violence	Pearson Correlation	,345**	,244**	,306**	1,000	,535**
	Sig. (2-tailed)	,000	,009	,001		,000
	N	116	115	118	118	114
Patriarchy	Pearson Correlation	,843**	,824**	,824**	,535**	1,000
	Sig. (2-tailed)	,000	,000	,000	,000	
	N	114	114	114	114	114

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 11. Correlations Economic Variables

		Life Exp.	Rural Pop.	GDPPC	Wealth distr.	Industrial	Postindustrial	Fuels Export
Life Expectancy	Pearson Correlation	1,000	-,651**	,715**	-,053	,521**	,559**	,203*
	Sig. (2-tailed)		,000	,000	,649	,000	,000	,046
	N	119,000	119	112	76	68	68	97
Rural Population	Pearson Correlation	-,651**	1,000	-,760**	-,281*	-,446**	-,801**	-,258*
	Sig. (2-tailed)	,000		,000	,014	,000	,000	,011
	N	119	119,000	112	76	68	68	97
GDPPC (Ln)	Pearson Correlation	,715**	-,760**	1,000	,188	,660**	,825**	,380**
	Sig. (2-tailed)	,000	,000		,104	,000	,000	,000
	N	112	112	112,000	76	65	65	95
Wealth distribution (Gini index)	Pearson Correlation	-,053	-,281*	,188	1,000	,156	,411**	-,135
	Sig. (2-tailed)	,649	,014	,104		,285	,003	,278
	N	76	76	76	76,000	49	49	66
Industrial employment	Pearson Correlation	,521**	-,446**	,660**	,156	1,000	,546**	,184
	Sig. (2-tailed)	,000	,000	,000	,285		,000	,145
	N	68	68	65	49	68,000	68	64
Postindustrial employment	Pearson Correlation	,559**	-,801**	,825**	,411**	,546**	1,000	,397**
	Sig. (2-tailed)	,000	,000	,000	,003	,000		,001
	N	68	68	65	49	68	68,000	64
Fuels Export	Pearson Correlation	,203*	-,258*	,380**	-,135	,184	,397**	1,000
	Sig. (2-tailed)	,046	,011	,000	,278	,145	,001	
	N	97	97	95	66	64	64	97,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 12. Correlations Cultural Variables

		Islam	African_	Other	Orthodox	Latin American	Western	Muslim	Christian	Other	Homogeneity	Gov. Favoritism
Islamic	Pearson Correlation	1,000	-,449**	-,265**	-,195*	-,336**	-,095	,871**	-,672**	-,219*	,202*	,325**
	Sig. (2-tailed)		,000	,004	,034	,000	,305	,000	,000	,016	,028	,000
	N	119	119	119	119	119	119	119	119	119	119	118
African	Pearson Correlation	-,449**	1,000	-,226*	-,166	-,287**	-,081	-,340**	,372**	-,065	-,309**	-,359**
	Sig. (2-tailed)	,000		,013	,071	,002	,381	,000	,000	,482	,001	,000
	N	119	119	119	119	119	119	119	119	119	119	118
Other	Pearson Correlation	-,265**	-,226*	1,000	-,098	-,169	-,048	-,270**	-,304**	,767**	-,240**	,050
	Sig. (2-tailed)	,004	,013		,289	,066	,606	,003	,001	,000	,008	,593
	N	119	119	119	119	119	119	119	119	119	119	118
Orthodox	Pearson Correlation	-,195*	-,166	-,098	1,000	-,124	-,035	-,128	,208*	-,117	,015	,087
	Sig. (2-tailed)	,034	,071	,289		,178	,705	,165	,023	,205	,868	,350
	N	119	119	119	119	119	119	119	119	119	119	118
Latin American	Pearson Correlation	-,336**	-,287**	-,169	-,124	1,000	-,061	-,342**	,475**	-,202*	,303**	-,046
	Sig. (2-tailed)	,000	,002	,066	,178		,513	,000	,000	,028	,001	,622
	N	119	119	119	119	119	119	119	119	119	119	118
Western	Pearson Correlation	-,095	-,081	-,048	-,035	-,061	1,000	-,097	,134	-,057	,003	-,110
	Sig. (2-tailed)	,305	,381	,606	,705	,513		,296	,146	,538	,972	,235
	N	119	119	119	119	119	119	119	119	119	119	118
Muslim	Pearson Correlation	,871**	-,340**	-,270**	-,128	-,342**	-,097	1,000	-,720**	-,322**	,164	,329**
	Sig. (2-tailed)	,000	,000	,003	,165	,000	,296		,000	,000	,074	,000
	N	119	119	119	119	119	119	119	119	119	119	118
Christian	Pearson Correlation	-,672**	,372**	-,304**	,208*	,475**	,134	-,720**	1,000	-,425**	,197*	-,329**
	Sig. (2-tailed)	,000	,000	,001	,023	,000	,146	,000		,000	,032	,000
	N	119	119	119	119	119	119	119	119	119	119	118
Other	Pearson Correlation	-,219*	-,065	,767**	-,117	-,202*	-,057	-,322**	-,425**	1,000	-,483**	,019
	Sig. (2-tailed)	,016	,482	,000	,205	,028	,538	,000	,000		,000	,838
	N	119	119	119	119	119	119	119	119	119	119	118
Homogeneity	Pearson Correlation	,202*	-,309**	-,240**	,015	,303**	,003	,164	,197*	-,483**	1,000	,253**
	Sig. (2-tailed)	,028	,001	,008	,868	,001	,972	,074	,032	,000		,006
	N	119	119	119	119	119	119	119	119	119	119	118
Gov. Favoritism	Pearson Correlation	,325**	-,359**	,050	,087	-,046	-,110	,329**	-,329**	,019	,253**	1,000
	Sig. (2-tailed)	,000	,000	,593	,350	,622	,235	,000	,000	,838	,006	
	N	118	118	118	118	118	118	118	118	118	118	118

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 13a. Correlations Economy and Religion

		Life Exp.	Rural Pop.	GDPPC	Wealth distribution	Industrial	Postindustrial	Fuels Export	Muslim	Christian	Other	Gov. Fav.	Homogeneity
Life Expectancy	Pearson Correlation	1,000	-,651**	,715**	-,053	,521**	,559**	,203*	,096	-,150	,079	,346**	,111
	Sig. (2-tailed)		,000	,000	,649	,000	,000	,046	,297	,104	,396	,000	,230
	N	119,000	119	112	76	68	68	97	119	119	119	118	119
Rural Population	Pearson Correlation	-,651**	1,000	-,760**	-,281*	-,446**	-,801**	-,258*	-,049	-,056	,140	-,231*	-,131
	Sig. (2-tailed)	,000		,000	,014	,000	,000	,011	,595	,549	,129	,012	,157
	N	119	119,000	112	76	68	68	97	119	119	119	118	119
GDPPC (Ln)	Pearson Correlation	,715**	-,760**	1,000	,188	,660**	,825**	,380**	,049	-,017	-,042	,288**	,167
	Sig. (2-tailed)	,000	,000		,104	,000	,000	,000	,608	,858	,663	,002	,078
	N	112	112	112,000	76	65	65	95	112	112	112	112	112
Wealth distribution (Gini Index)	Pearson Correlation	-,053	-,281*	,188	1,000	,156	,411**	-,135	-,472**	,504**	-,096	-,162	,397**
	Sig. (2-tailed)	,649	,014	,104		,285	,003	,278	,000	,000	,408	,162	,000
	N	76	76	76	76,000	49	49	66	76	76	76	76	76
Industrial employment	Pearson Correlation	,521**	-,446**	,660**	,156	1,000	,546**	,184	,038	-,003	-,046	,247*	,073
	Sig. (2-tailed)	,000	,000	,000	,285		,000	,145	,757	,983	,712	,044	,555
	N	68	68	65	49	68,000	68	64	68	68	68	67	68
Postindustrial employment	Pearson Correlation	,559**	-,801**	,825**	,411**	,546**	1,000	,397**	,075	,126	-,267*	,210	,292*
	Sig. (2-tailed)	,000	,000	,000	,003	,000		,001	,545	,307	,028	,087	,016
	N	68	68	65	49	68	68,000	64	68	68	68	67	68
Fuels Export	Pearson Correlation	,203*	-,258*	,380**	-,135	,184	,397**	1,000	,434**	-,294**	-,163	,305**	,173
	Sig. (2-tailed)	,046	,011	,000	,278	,145	,001		,000	,003	,110	,002	,090
	N	97	97	95	66	64	64	97,000	97	97	97	97	97
Muslim	Pearson Correlation	,096	-,049	,049	-,472**	,038	,075	,434**	1,000	-,720**	-,322**	,329**	,164
	Sig. (2-tailed)	,297	,595	,608	,000	,757	,545	,000		,000	,000	,000	,074
	N	119	119	112	76	68	68	97	119,000	119	119	118	119
Christian	Pearson Correlation	-,150	-,056	-,017	,504**	-,003	,126	-,294**	-,720**	1,000	-,425**	-,329**	,197*
	Sig. (2-tailed)	,104	,549	,858	,000	,983	,307	,003	,000		,000	,000	,032
	N	119	119	112	76	68	68	97	119	119,000	119	118	119
Other	Pearson Correlation	,079	,140	-,042	-,096	-,046	-,267*	-,163	-,322**	-,425**	1,000	,019	-,483**
	Sig. (2-tailed)	,396	,129	,663	,408	,712	,028	,110	,000	,000		,838	,000
	N	119	119	112	76	68	68	97	119	119	119,000	118	119
Government Favoratism	Pearson Correlation	,346**	-,231*	,288**	-,162	,247*	,210	,305**	,329**	-,329**	,019	1,000	,253**
	Sig. (2-tailed)	,000	,012	,002	,162	,044	,087	,002	,000	,000	,838		,006
	N	118	118	112	76	67	67	97	118	118	118	118,000	118
Homogeneity	Pearson Correlation	,111	-,131	,167	,397**	,073	,292*	,173	,164	,197*	-,483**	,253**	1,000
	Sig. (2-tailed)	,230	,157	,078	,000	,555	,016	,090	,074	,032	,000	,006	
	N	119	119	112	76	68	68	97	119	119	119	118	119,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 13b. Correlations Economy and Civilization

		Life Expectancy	Rural Pop.	GDPPC	Wealth distr.	Industrial	Postindustrial	Fuels Export	Islam	African	Other	Orthodox	LatAm	Western
Life Expectancy	Pearson Correlation	1,000	-,651**	,715**	-,053	,521**	,559**	,203*	,152	-,682**	,139	,177	,376**	,005
	Sig. (2-tailed)		,000	,000	,649	,000	,000	,046	,099	,000	,133	,054	,000	,957
	N	119,000	119	112	76	68	68	97	119	119	119	119	119	119
Rural Population	Pearson Correlation	-,651**	1,000	-,760**	-,281*	-,446**	-,801**	-,258*	-,103	,339**	,161	-,148	-,341**	,097
	Sig. (2-tailed)	,000		,000	,014	,000	,000	,011	,264	,000	,080	,108	,000	,296
	N	119	119,000	112	76	68	68	97	119	119	119	119	119	119
GDPPC (Ln)	Pearson Correlation	,715**	-,760**	1,000	,188	,660**	,825**	,380**	,104	-,387**	-,023	,148	,253**	-,007
	Sig. (2-tailed)	,000	,000		,104	,000	,000	,000	,273	,000	,813	,118	,007	,940
	N	112	112	112,000	76	65	65	95	112	112	112	112	112	112
Wealth distribution	Pearson Correlation	-,053	-,281*	,188	1,000	,156	,411**	-,135	-,462**	,116	-,102	-,331**	,682**	.a
	Sig. (2-tailed)	,649	,014	,104		,285	,003	,278	,000	,318	,383	,003	,000	,000
	N	76	76	76	76,000	49	49	66	76	76	76	76	76	76
Industrial employment	Pearson Correlation	,521**	-,446**	,660**	,156	1,000	,546**	,184	,134	-,284*	-,153	,108	,194	-,249*
	Sig. (2-tailed)	,000	,000	,000	,285		,000	,145	,276	,019	,212	,382	,112	,041
	N	68	68	65	49	68,000	68	64	68	68	68	68	68	68
Postindustrial employment	Pearson Correlation	,559**	-,801**	,825**	,411**	,546**	1,000	,397**	,158	-,297*	-,280*	-,047	,359**	-,171
	Sig. (2-tailed)	,000	,000	,000	,003	,000		,001	,199	,014	,021	,707	,003	,164
	N	68	68	65	49	68	68,000	64	68	68	68	68	68	68
Fuels Export	Pearson Correlation	,203*	-,258*	,380**	-,135	,184	,397**	1,000	,419**	-,195	-,152	-,031	-,139	-,004
	Sig. (2-tailed)	,046	,011	,000	,278	,145	,001		,000	,056	,138	,761	,175	,967
	N	97	97	95	66	64	64	97,000	97	97	97	97	97	97
Islamic	Pearson Correlation	,152	-,103	,104	-,462**	,134	,158	,419**	1,000	-,449**	-,265**	-,195*	-,336**	-,095
	Sig. (2-tailed)	,099	,264	,273	,000	,276	,199	,000		,000	,004	,034	,000	,305
	N	119	119	112	76	68	68	97	119,000	119	119	119	119	119
African	Pearson Correlation	-,682**	,339**	-,387**	,116	-,284*	-,297*	-,195	-,449**	1,000	-,226*	-,166	-,287**	-,081
	Sig. (2-tailed)	,000	,000	,000	,318	,019	,014	,056	,000		,013	,071	,002	,381
	N	119	119	112	76	68	68	97	119	119,000	119	119	119	119
Other	Pearson Correlation	,139	,161	-,023	-,102	-,153	-,280*	-,152	-,265**	-,226*	1,000	-,098	-,169	-,048
	Sig. (2-tailed)	,133	,080	,813	,383	,212	,021	,138	,004	,013		,289	,066	,606
	N	119	119	112	76	68	68	97	119	119	119,000	119	119	119
Orthodox	Pearson Correlation	,177	-,148	,148	-,331**	,108	-,047	-,031	-,195*	-,166	-,098	1,000	-,124	-,035
	Sig. (2-tailed)	,054	,108	,118	,003	,382	,707	,761	,034	,071	,289		,178	,705
	N	119	119	112	76	68	68	97	119	119	119	119,000	119	119
Latin American	Pearson Correlation	,376**	-,341**	,253**	,682**	,194	,359**	-,139	-,336**	-,287**	-,169	-,124	1,000	-,061
	Sig. (2-tailed)	,000	,000	,007	,000	,112	,003	,175	,000	,002	,066	,178		,513
	N	119	119	112	76	68	68	97	119	119	119	119	119,000	119
Western	Pearson Correlation	,005	,097	-,007	.a	-,249*	-,171	-,004	-,095	-,081	-,048	-,035	-,061	1,000
	Sig. (2-tailed)	,957	,296	,940	,000	,041	,164	,967	,305	,381	,606	,705	,513	
	N	119	119	112	76	68	68	97	119	119	119	119	119	119,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

Table 14a. Correlations Patriarchal Institutions and Religion

		Parental Authority	Inheritance	Polygamy	Violence	Muslim	Christian	Other
Parental Authority	Pearson Correlation	1,000	,618**	,531**	,345**	,416**	-,312**	-,113
	Sig. (2-tailed)		,000	,000	,000	,000	,001	,228
	N	116	114	116	116	116	116	116
Inheritance	Pearson Correlation	,618**	1,000	,605**	,244**	,280**	-,103	-,221*
	Sig. (2-tailed)	,000		,000	,009	,002	,275	,018
	N	114	115	115	115	115	115	115
Polygamy	Pearson Correlation	,531**	,605**	1,000	,306**	,262**	-,203*	-,064
	Sig. (2-tailed)	,000	,000		,001	,004	,028	,491
	N	116	115	118	118	118	118	118
Violence	Pearson Correlation	,345**	,244**	,306**	1,000	,139	-,119	-,018
	Sig. (2-tailed)	,000	,009	,001		,134	,200	,844
	N	116	115	118	118	118	118	118
Muslim	Pearson Correlation	,416**	,280**	,262**	,139	1,000	-,720**	-,322**
	Sig. (2-tailed)	,000	,002	,004	,134		,000	,000
	N	116	115	118	118	119	119	119
Christian	Pearson Correlation	-,312**	-,103	-,203*	-,119	-,720**	1,000	-,425**
	Sig. (2-tailed)	,001	,275	,028	,200	,000		,000
	N	116	115	118	118	119	119	119
Other	Pearson Correlation	-,113	-,221*	-,064	-,018	-,322**	-,425**	1,000
	Sig. (2-tailed)	,228	,018	,491	,844	,000	,000	
	N	116	115	118	118	119	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

Table 14b. Correlations with Religious Homogeneity and Government Favoritism

		Parental Authority	Inheritance	Polygamy	Violence	Homogeneity	Gov. Favoritism
Parental Authority	Pearson Correlation	1,000	,618**	,531**	,345**	,018	,149
	Sig. (2-tailed)		,000	,000	,000	,849	,110
	N	116	114	116	116	116	116
Inheritance	Pearson Correlation	,618**	1,000	,605**	,244**	-,042	-,139
	Sig. (2-tailed)	,000		,000	,009	,654	,138
	N	114	115	115	115	115	115
Polygamy	Pearson Correlation	,531**	,605**	1,000	,306**	-,031	,047
	Sig. (2-tailed)	,000	,000		,001	,738	,613
	N	116	115	118	118	118	117
Violence	Pearson Correlation	,345**	,244**	,306**	1,000	-,061	,003
	Sig. (2-tailed)	,000	,009	,001		,510	,976
	N	116	115	118	118	118	117

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

Table 14c. Correlations Patriarchal Institutions and Civilization

		Parental Authority	Inheritance	Polygamy	Violence	Islamic	African	Other	Orthodox	Latin American_	Western
Parental Authority	Pearson Correlation	1,000	,618**	,531**	,345**	,394**	,254**	-,248**	-,275**	-,352**	-,134
	Sig. (2-tailed)		,000	,000	,000	,000	,006	,007	,003	,000	,152
	N	116	114	116	116	116	116	116	116	116	116
Inheritance	Pearson Correlation	,618**	1,000	,605**	,244**	,247**	,448**	-,262**	-,259**	-,417**	-,107
	Sig. (2-tailed)	,000		,000	,009	,008	,000	,005	,005	,000	,257
	N	114	115	115	115	115	115	115	115	115	115
Polygamy	Pearson Correlation	,531**	,605**	1,000	,306**	,262**	,331**	-,121	-,263**	-,388**	-,148
	Sig. (2-tailed)	,000	,000		,001	,004	,000	,193	,004	,000	,109
	N	116	115	118	118	118	118	118	118	118	118
Violence	Pearson Correlation	,345**	,244**	,306**	1,000	,208*	,151	-,128	-,146	-,207*	-,070
	Sig. (2-tailed)	,000	,009	,001		,024	,103	,169	,115	,024	,450
	N	116	115	118	118	118	118	118	118	118	118
Islamic	Pearson Correlation	,394**	,247**	,262**	,208*	1,000	-,449**	-,265**	-,195*	-,336**	-,095
	Sig. (2-tailed)	,000	,008	,004	,024		,000	,004	,034	,000	,305
	N	116	115	118	118	119	119	119	119	119	119
African	Pearson Correlation	,254**	,448**	,331**	,151	-,449**	1,000	-,226*	-,166	-,287**	-,081
	Sig. (2-tailed)	,006	,000	,000	,103	,000		,013	,071	,002	,381
	N	116	115	118	118	119	119	119	119	119	119
Other	Pearson Correlation	-,248**	-,262**	-,121	-,128	-,265**	-,226*	1,000	-,098	-,169	-,048
	Sig. (2-tailed)	,007	,005	,193	,169	,004	,013		,289	,066	,606
	N	116	115	118	118	119	119	119	119	119	119
Orthodox	Pearson Correlation	-,275**	-,259**	-,263**	-,146	-,195*	-,166	-,098	1,000	-,124	-,035
	Sig. (2-tailed)	,003	,005	,004	,115	,034	,071	,289		,178	,705
	N	116	115	118	118	119	119	119	119	119	119
Latin American	Pearson Correlation	-,352**	-,417**	-,388**	-,207*	-,336**	-,287**	-,169	-,124	1,000	-,061
	Sig. (2-tailed)	,000	,000	,000	,024	,000	,002	,066	,178		,513
	N	116	115	118	118	119	119	119	119	119	119
Western	Pearson Correlation	-,134	-,107	-,148	-,070	-,095	-,081	-,048	-,035	-,061	1,000
	Sig. (2-tailed)	,152	,257	,109	,450	,305	,381	,606	,705	,513	
	N	116	115	118	118	119	119	119	119	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 15a. Correlations Patriarchal Institutions and Economy (all countries)

		Parental Authority	Inheritance	Polygamy	Violence	Life Exp.	Rural Pop.	GDPPC	Wealth distr.	Industrial	Postindustrial	Fuels Exp.
Parental Authority	Pearson Correlation	1,000	,621**	,535**	,354**	-,350**	,092	-,173	-,077	-,087	,028	,310**
	Sig. (2-tailed)		,000	,000	,000	,000	,322	,070	,514	,484	,820	,002
	N	117,000	115	117	117	117	117	111	75	67	67	97
Inheritance	Pearson Correlation	,621**	1,000	,609**	,256**	-,585**	,324**	-,346**	-,085	-,104	-,088	,095
	Sig. (2-tailed)	,000		,000	,006	,000	,000	,000	,468	,406	,484	,362
	N	115	116,000	116	116	116	116	110	75	66	66	95
Polygamy	Pearson Correlation	,535**	,609**	1,000	,317**	-,604**	,270**	-,266**	,005	-,265*	-,111	,173
	Sig. (2-tailed)	,000	,000		,000	,000	,003	,005	,964	,029	,369	,090
	N	117	116	119,000	119	119	119	112	76	68	68	97
Violence	Pearson Correlation	,354**	,256**	,317**	1,000	-,302**	,146	-,192*	-,109	-,244*	-,225	,300**
	Sig. (2-tailed)	,000	,006	,000		,001	,114	,042	,349	,045	,065	,003
	N	117	116	119	119,000	119	119	112	76	68	68	97
Life Expectancy	Pearson Correlation	-,350**	-,585**	-,604**	-,302**	1,000	-,651**	,715**	-,053	,521**	,559**	,203*
	Sig. (2-tailed)	,000	,000	,000	,001		,000	,000	,649	,000	,000	,046
	N	117	116	119	119	119,000	119	112	76	68	68	97
Rural Population	Pearson Correlation	,092	,324**	,270**	,146	-,651**	1,000	-,760**	-,281*	-,446**	-,801**	-,258*
	Sig. (2-tailed)	,322	,000	,003	,114	,000		,000	,014	,000	,000	,011
	N	117	116	119	119	119	119,000	112	76	68	68	97
GDPPC (Ln)	Pearson Correlation	-,173	-,346**	-,266**	-,192*	,715**	-,760**	1,000	,188	,660**	,825**	,380**
	Sig. (2-tailed)	,070	,000	,005	,042	,000	,000		,104	,000	,000	,000
	N	111	110	112	112	112	112	112,000	76	65	65	95
Wealth distribution (Gini Index)	Pearson Correlation	-,077	-,085	,005	-,109	-,053	-,281*	,188	1,000	,156	,411**	-,135
	Sig. (2-tailed)	,514	,468	,964	,349	,649	,014	,104		,285	,003	,278
	N	75	75	76	76	76	76	76	76,000	49	49	66
Industrial employment	Pearson Correlation	-,087	-,104	-,265*	-,244*	,521**	-,446**	,660**	,156	1,000	,546**	,184
	Sig. (2-tailed)	,484	,406	,029	,045	,000	,000	,000	,285		,000	,145
	N	67	66	68	68	68	68	65	49	68,000	68	64
Postindustrial employment	Pearson Correlation	,028	-,088	-,111	-,225	,559**	-,801**	,825**	,411**	,546**	1,000	,397**
	Sig. (2-tailed)	,820	,484	,369	,065	,000	,000	,000	,003	,000		,001
	N	67	66	68	68	68	68	65	49	68	68,000	64
Fuels Export	Pearson Correlation	,310**	,095	,173	,300**	,203*	-,258*	,380**	-,135	,184	,397**	1,000
	Sig. (2-tailed)	,002	,362	,090	,003	,046	,011	,000	,278	,145	,001	
	N	97	95	97	97	97	97	95	66	64	64	97,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 15b. Correlations Patriarchal Institutions and Economy (lower income countries)

		Parental Authority	Inheritance	Polygamy	Violence	Life Exp.	Rural Pop.	GDPPC	Wealth distr.	Industrial	Postindustrial	Fuels Export
Parental Authority	Pearson Correlation	1,000	,511**	,367**	,026	-,387**	,054	-,209	,195	-,108	-,259	,036
	Sig. (2-tailed)		,000	,006	,850	,004	,697	,125	,223	,622	,232	,816
	N	55,000	55	55	55	55	55	55	41	23	23	44
Inheritance	Pearson Correlation	,511**	1,000	,536**	,137	-,660**	,287*	-,466**	,103	-,209	-,224	-,006
	Sig. (2-tailed)	,000		,000	,314	,000	,032	,000	,518	,339	,305	,971
	N	55	56,000	56	56	56	56	56	42	23	23	44
Polygamy	Pearson Correlation	,367**	,536**	1,000	,181	-,632**	,233	-,199	,182	-,602**	-,503*	,213
	Sig. (2-tailed)	,006	,000		,181	,000	,084	,140	,248	,002	,014	,165
	N	55	56	56,000	56	56	56	56	42	23	23	44
Violence	Pearson Correlation	,026	,137	,181	1,000	-,246	,073	-,241	,057	-,069	-,097	,143
	Sig. (2-tailed)	,850	,314	,181		,067	,593	,073	,721	,753	,659	,355
	N	55	56	56	56,000	56	56	56	42	23	23	44
Life Expectancy	Pearson Correlation	-,387**	-,660**	-,632**	-,246	1,000	-,395**	,631**	-,280	,615**	,524*	,035
	Sig. (2-tailed)	,004	,000	,000	,067		,003	,000	,072	,002	,010	,823
	N	55	56	56	56	56,000	56	56	42	23	23	44
Rural Population	Pearson Correlation	,054	,287*	,233	,073	-,395**	1,000	-,535**	-,165	-,416*	-,706**	,015
	Sig. (2-tailed)	,697	,032	,084	,593	,003		,000	,296	,049	,000	,924
	N	55	56	56	56	56	56,000	56	42	23	23	44
GDPPC (Ln)	Pearson Correlation	-,209	-,466**	-,199	-,241	,631**	-,535**	1,000	,050	,523*	,646**	,249
	Sig. (2-tailed)	,125	,000	,140	,073	,000	,000		,751	,010	,001	,103
	N	55	56	56	56	56	56	56,000	42	23	23	44
Wealth distribution (Gini index)	Pearson Correlation	,195	,103	,182	,057	-,280	-,165	,050	1,000	-,106	-,076	-,010
	Sig. (2-tailed)	,223	,518	,248	,721	,072	,296	,751		,647	,743	,957
	N	41	42	42	42	42	42	42	42,000	21	21	34
Industrial employment	Pearson Correlation	-,108	-,209	-,602**	-,069	,615**	-,416*	,523*	-,106	1,000	,706**	-,115
	Sig. (2-tailed)	,622	,339	,002	,753	,002	,049	,010	,647		,000	,610
	N	23	23	23	23	23	23	23	21	23,000	23	22
Postindustrial employment	Pearson Correlation	-,259	-,224	-,503*	-,097	,524*	-,706**	,646**	-,076	,706**	1,000	-,181
	Sig. (2-tailed)	,232	,305	,014	,659	,010	,000	,001	,743	,000		,420
	N	23	23	23	23	23	23	23	21	23	23,000	22
Fuels Export	Pearson Correlation	,036	-,006	,213	,143	,035	,015	,249	-,010	-,115	-,181	1,000
	Sig. (2-tailed)	,816	,971	,165	,355	,823	,924	,103	,957	,610	,420	
	N	44	44	44	44	44	44	44	34	22	22	44,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 15c. Correlations Patriarchal Institutions and Economy (higher income countries)

		Parental Authority	Inheritance	Polygamy	Violence	Life Exp.	Rural Pop.	GDP PC	Wealth distr.	Industrial	Postindustrial	Fuels Export
Parental Authority	Pearson Correlation	1,000	,634**	,612**	,625**	-,138	-,160	,246	-,241	-,058	,271	,650**
	Sig. (2-tailed)		,000	,000	,000	,309	,238	,067	,169	,717	,082	,000
	N	56,000	54	56	56	56	56	56	34	42	42	51
Inheritance	Pearson Correlation	,634**	1,000	,544**	,328*	-,321*	,054	,184	-,128	,077	,141	,319*
	Sig. (2-tailed)	,000		,000	,015	,018	,699	,183	,477	,631	,378	,025
	N	54	54,000	54	54	54	54	54	33	41	41	49
Polygamy	Pearson Correlation	,612**	,544**	1,000	,385**	-,303*	-,157	,315*	,037	,016	,322*	,360**
	Sig. (2-tailed)	,000	,000		,003	,023	,249	,018	,834	,919	,037	,009
	N	56	54	56,000	56	56	56	56	34	42	42	51
Violence	Pearson Correlation	,625**	,328*	,385**	1,000	-,263*	,022	,035	-,121	-,158	-,060	,528**
	Sig. (2-tailed)	,000	,015	,003		,050	,874	,797	,495	,318	,708	,000
	N	56	54	56	56,000	56	56	56	34	42	42	51
Life Expectancy	Pearson Correlation	-,138	-,321*	-,303*	-,263*	1,000	-,435**	,304*	-,227	,095	,211	,116
	Sig. (2-tailed)	,309	,018	,023	,050		,001	,023	,197	,549	,180	,416
	N	56	54	56	56	56,000	56	56	34	42	42	51
Rural Population	Pearson Correlation	-,160	,054	-,157	,022	-,435**	1,000	-,558**	-,222	-,062	-,673**	-,236
	Sig. (2-tailed)	,238	,699	,249	,874	,001		,000	,207	,695	,000	,095
	N	56	54	56	56	56	56,000	56	34	42	42	51
GDPPC (Ln)	Pearson Correlation	,246	,184	,315*	,035	,304*	-,558**	1,000	-,019	,307*	,634**	,385**
	Sig. (2-tailed)	,067	,183	,018	,797	,023	,000		,917	,048	,000	,005
	N	56	54	56	56	56	56	56,000	34	42	42	51
Wealth distribution (Gini Index)	Pearson Correlation	-,241	-,128	,037	-,121	-,227	-,222	-,019	1,000	-,063	,429*	-,315
	Sig. (2-tailed)	,169	,477	,834	,495	,197	,207	,917		,750	,023	,080
	N	34	33	34	34	34	34	34	34,000	28	28	32
Industrial employment	Pearson Correlation	-,058	,077	,016	-,158	,095	-,062	,307*	-,063	1,000	,060	-,006
	Sig. (2-tailed)	,717	,631	,919	,318	,549	,695	,048	,750		,706	,971
	N	42	41	42	42	42	42	42	28	42,000	42	41
Postindustrial employment	Pearson Correlation	,271	,141	,322*	-,060	,211	-,673**	,634**	,429*	,060	1,000	,333*
	Sig. (2-tailed)	,082	,378	,037	,708	,180	,000	,000	,023	,706		,033
	N	42	41	42	42	42	42	42	28	42	42,000	41
Fuels Export	Pearson Correlation	,650**	,319*	,360**	,528**	,116	-,236	,385**	-,315	-,006	,333*	1,000
	Sig. (2-tailed)	,000	,025	,009	,000	,416	,095	,005	,080	,971	,033	
	N	51	49	51	51	51	51	51	32	41	41	51,000

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

CROSSTABULATIONS

TABLES 16. CROSSTABULATION PATRIARCHAL INSTITUTIONS AND RELIGION

Table 16a. Parental Authority

		0	0,5	1	Total
Prevailing Creed	Muslim	7	12	22	41
	Christian	33	18	6	57
	Buddhist	6	1	0	7
	Hindu	1	1	1	3
	Chinese Universalist	4	0	0	4
	Ethno Religionist	1	0	4	5
	Total	52	32	33	117

Table 16b. Inheritance

		0	0,5	1	Total
Prevailing Creed	Muslim	5	31	5	41
	Christian	27	21	8	56
	Buddhist	5	2	0	7
	Hindu	1	2	0	3
	Chinese Universalist	4	0	0	4
	Ethno Religionist	2	2	1	5
	Total	44	58	14	116

Table 16c. Polygamy

		0	0,5	1	Total
Prevailing Creed	Muslim	9	17	16	42
	Christian	30	13	15	58
	Buddhist	2	5	0	7
	Hindu	2	0	1	3
	Chinese Universalist	2	2	0	4
	Ethno Religionist	0	4	1	5
	Total	45	41	33	119

Table 16d. Violence

		0	0.08	0.17	0.25	0.33	0.42	0.5	0.58	0.67	0.75	0.8	1	Total
Prevailing Creed	Muslim	0	1	0	5	0	1	11	1	1	15	0	7	42
	Christian	0	0	6	5	4	7	7	2	5	18	1	3	58
	Buddhist	0	0	0	0	2	1	0	1	1	2	0	0	7
	Hindu	0	0	0	0	1	1	0	1	0	0	0	0	3
	Chinese Universalist	1	0	0	0	0	0	1	1	0	0	0	1	4
	Ethno Religionist	0	0	0	0	0	1	0	1	0	1	0	2	5
	Total	1	1	6	10	7	11	19	7	7	36	1	13	119

TABLES 17. CROSSTABULATION PATRIARCHAL INSTITUTIONS AND REGION

Table 17a. Parental Authority

		0	0,5	1	Total
Geographic region	Melanesia	2	0	0	2
	Eastern Asia	4	0	0	4
	South-Eastern Asia	8	2	0	10
	Southern Asia	1	2	5	8
	Central Asia	3	1	0	4
	Western Asia	2	3	9	14
	Eastern Europe	3	0	0	3
	Southern Europe	3	1	0	4
	Northern Africa	2	1	3	6
	Eastern Africa	3	8	3	14
	Middle Africa	0	5	3	8
	Southern Africa	1	2	2	5
	Western Africa	2	5	8	15
	South America	9	0	0	9
	Central America	5	1	0	6
	Caribbean	4	1	0	5
	Total	52	32	33	117

Table 17b. Inheritance

		0	0,5	1	Total
Geographic region	Melanesia	2	0	0	2
	Eastern Asia	4	0	0	4
	South-Eastern Asia	6	4	0	10
	Southern Asia	1	7	0	8
	Central Asia	2	2	0	4
	Western Asia	3	11	0	14
	Eastern Europe	3	0	0	3
	Southern Europe	3	1	0	4
	Northern Africa	0	5	1	6
	Eastern Africa	2	8	4	14
	Middle Africa	1	5	2	8
	Southern Africa	0	2	3	5
	Western Africa	0	11	4	15
	South America	9	0	0	9
	Central America	5	0	0	5
	Caribbean	3	2	0	5
	Total	44	58	14	116

Table 17c. Polygamy

		0	0,5	1	Total
Geographic region	Melanesia	1	0	1	2
	Eastern Asia	2	2	0	4
	South-Eastern Asia	2	8	0	10
	Southern Asia	3	2	3	8
	Central Asia	2	3	0	5
	Western Asia	4	6	4	14
	Eastern Europe	2	1	0	3
	Southern Europe	4	0	0	4
	Northern Africa	2	3	1	6
	Eastern Africa	2	5	7	14
	Middle Africa	2	1	5	8
	Southern Africa	0	4	1	5
	Western Africa	0	5	10	15
	South America	8	0	1	9
	Central America	6	0	0	6
	Caribbean	5	1	0	6
	Total	45	41	33	119

Table 17d. Violence

		0	0.08	0.17	0.25	0.33	0.42	0.5	0.58	0.67	0.75	0.8	1	Total
Geographic region	Melanesia	0	0	0	0	0	0	0	0	0	2	0	0	2
	Eastern Asia	1	0	0	0	0	0	0	2	0	0	0	1	4
	South-Eastern Asia	0	0	1	0	1	2	1	1	1	2	1	0	10
	Southern Asia	0	1	0	0	2	0	1	1	1	0	0	2	8
	Central Asia	0	0	0	1	0	0	1	1	0	2	0	0	5
	Western Asia	0	0	0	1	0	0	2	0	0	9	0	2	14
	Eastern Europe	0	0	0	1	0	1	1	0	0	0	0	0	3
	Southern Europe	0	0	0	1	0	0	2	0	0	1	0	0	4
	Northern Africa	0	0	0	2	0	0	0	0	0	3	0	1	6
	Eastern Africa	0	0	1	1	0	1	1	0	1	8	0	1	14
	Middle Africa	0	0	0	0	1	0	2	0	0	3	0	2	8
	Southern Africa	0	0	0	1	1	1	1	0	0	1	0	0	5
	Western Africa	0	0	0	1	0	1	4	1	0	4	0	4	15
	South America	0	0	2	1	0	4	0	1	0	1	0	0	9
	Central America	0	0	2	0	1	0	1	0	2	0	0	0	6
	Caribbean	0	0	0	0	1	1	2	0	2	0	0	0	6
	Total	1	1	6	10	7	11	19	7	7	36	1	13	119

TABLES 18. CROSSTABULATION PATRIARCHAL INSTITUTIONS AND CIVILIZATION

Table 18a. Parental Authority

		0	0,5	1	Total
Civilization	Islamic	8	10	22	40
	African	5	18	10	33
	Buddhist	6	1	0	7
	Hindu	0	1	1	2
	Sinic	5	0	0	5
	Orthodox	8	0	0	8
	Latin American	18	2	0	20
	Western	2	0	0	2
	Total	52	32	33	117

Table 18b. Inheritance

		0	0,5	1	Total
Civilization	Islamic	5	31	4	40
	African	3	20	10	33
	Buddhist	5	2	0	7
	Hindu	0	2	0	2
	Sinic	5	0	0	5
	Orthodox	7	1	0	8
	Latin American	17	2	0	19
	Western	2	0	0	2
	Total	44	58	14	116

Table 18c. Polygamy

		0	0,5	1	Total
Civilization	Islamic	8	18	15	41
	African	4	14	15	33
	Buddhist	1	6	0	7
	Hindu	1	0	1	2
	Sinic	4	1	0	5
	Orthodox	7	1	0	8
	Latin American	19	1	1	21
	Western	1	0	1	2
	Total	45	41	33	119

Table 18d. Violence

		0	0.08	0.17	0.25	0.33	0.42	0.5	0.58	0.67	0.75	0.8	1	Total
Civilization	Islamic	0	1	0	4	0	1	10	1	1	14	1	8	41
	African	0	0	1	2	2	3	4	1	1	15	0	4	33
	Buddhist	0	0	0	0	2	1	0	2	1	1	0	0	7
	Hindu	0	0	0	0	1	0	0	1	0	0	0	0	2
	Sinic	1	0	1	0	0	0	0	1	0	1	0	1	5
	Orthodox	0	0	0	3	0	1	2	0	0	2	0	0	8
	Latin American	0	0	4	1	2	5	3	1	4	1	0	0	21
	Western	0	0	0	0	0	0	0	0	0	2	0	0	2
	Total	1	1	6	10	7	11	19	7	7	36	1	13	119

LINEAR REGRESSION ANALYSIS

TABLES 19. RELIGION MODEL

Table 19a. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,428[a]	,183	,167	,24368	,183	11,557	2	103	,000
2	,551[b]	,304	,283	,22612	,120	17,621	1	102	,000
3	,820[c]	,672	,656	,15665	,369	56,269	2	100	,000

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC, Life Expectancy, Rural Population

d. Dependent Variable: Patriarchy

Table 19b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,373	2	,686	11,557	,000[a]
	Residual	6,116	103	,059		
	Total	7,489	105			
2	Regression	2,273	3	,758	14,822	,000[b]
	Residual	5,215	102	,051		
	Total	7,489	105			
3	Regression	5,035	5	1,007	41,038	,000[c]
	Residual	2,454	100	,025		
	Total	7,489	105			

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC, Life Expectancy, Rural Population

d. Dependent Variable: Patriarchy

Table 19c. Excluded Variables

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	GDP 2000	-,347[a]	-4,198	,000	-,384	,997	1,003	,814
	Rural Population 20	,314[a]	3,700	,000	,344	,981	1,019	,801
	Life Expectancy 20 (total)	-,673[a]	-10,875	,000	-,733	,969	1,033	,797
2	Rural Population 20	,115[b]	,903	,369	,089	,421	2,373	,421
	Life Expectancy 20 (total)	-,906[b]	-10,466	,000	-,721	,441	2,267	,441

a. Predictors in the Model: (Constant), Dummy Other, Dummy Christian

b. Predictors in the Model: (Constant), Dummy Other, Dummy Christian, GDPPC

c. Dependent Variable: Patriarchy

TABLES 20 & 21. RELIGION MODEL WITH DATA FROM 1990-94 AND 1980-84

Table 20a. Model Summary 1990-94

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,375[a]	,140	,123	,24943	,140	8,091	2	99	,001
2	,545[b]	,297	,275	,22676	,156	21,792	1	98	,000
3	,746[c]	,557	,534	,18191	,260	28,138	2	96	,000

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1990s

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1990s, Rural Population 90, Life Expectancy 90

d. Dependent Variable: Patriarchy

Table 20b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,007	2	,503	8,091	,001[a]
	Residual	6,160	99	,062		
	Total	7,166	101			
2	Regression	2,127	3	,709	13,791	,000[b]
	Residual	5,039	98	,051		
	Total	7,166	101			
3	Regression	3,990	5	,798	24,112	,000[c]
	Residual	3,177	96	,033		
	Total	7,166	101			

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1990s

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1990s, Rural Population 90, Life Expectancy 90

d. Dependent Variable: Patriarchy

Table 20c. Individual Contributions 1990-94

		Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,587	,043		13,522	,000	,501	,673		
	Dummy Christian	-,216	,056	-,407	-3,884	,000	-,326	-,105	,792	1,263
	Dummy Other	-,201	,074	-,283	-2,702	,008	-,349	-,053	,792	1,263
2	(Constant)	1,370	,172		7,952	,000	1,028	1,712		
	Dummy Christian	-,215	,050	-,406	-4,269	,000	-,316	-,115	,792	1,263
	Dummy Other	-,226	,068	-,317	-3,323	,001	-,360	-,091	,787	1,270
	GDPPC 1990s	-,100	,021	-,397	-4,668	,000	-,142	-,057	,992	1,008
3	(Constant)	1,340	,284		4,718	,000	,776	1,903		
	Dummy Christian	-,222	,040	-,419	-5,491	,000	-,303	-,142	,791	1,263
	Dummy Other	-,170	,055	-,239	-3,070	,003	-,279	-,060	,765	1,307
	GDPPC 1990s	-,080	,035	-,318	-2,317	,023	,011	,149	,246	4,067
	Rural Population 90	,000	,001	,026	,229	,819	-,002	,003	,372	2,692
	Life Expectancy 90	-,023	,003	-,858	-7,391	,000	-,029	-,017	,342	2,921

a. Dependent Variable: Patriarchy

Table 21a. Model Summary 1980-84

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,421[a]	,177	,157	,24944	,177	8,627	2	80	,000
2	,538[b]	,290	,263	,23322	,113	12,516	1	79	,001
3	,699[c]	,489	,455	,20049	,199	14,950	2	77	,000

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1980s

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1980s, Life Expectancy 80, Rural Population 80

d. Dependent Variable: Patriarchy

Table 21b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,074	2	,537	8,627	,000[a]
	Residual	4,978	80	,062		
	Total	6,051	82			
2	Regression	1,754	3	,585	10,751	,000[b]
	Residual	4,297	79	,054		
	Total	6,051	82			
3	Regression	2,956	5	,591	14,709	,000[c]
	Residual	3,095	77	,040		
	Total	6,051	82			

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1980s

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC 1980s, Life Expectancy 80, Rural Population 80

d. Dependent Variable: Patriarchy

Table 21c. Individual Contributions 1980-84

		Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,631	,049		12,908	,000	,534	,729		
	Dummy Christian	-,248	,063	-,459	-3,961	,000	-,372	-,123	,767	1,304
	Dummy Other	-,238	,079	-,348	-3,007	,004	-,396	-,081	,767	1,304
2	(Constant)	1,304	,196		6,669	,000	,915	1,693		
	Dummy Christian	-,268	,059	-,495	-4,555	,000	-,384	-,151	,760	1,316
	Dummy Other	-,285	,075	-,416	-3,782	,000	-,434	-,135	,744	1,345
	GDPPC 1980s	-,084	,024	-,341	-3,538	,001	-,131	-,037	,970	1,031
3	(Constant)	1,121	,382		2,932	,004	,360	1,882		
	Dummy Christian	-,240	,051	-,444	-4,717	,000	-,341	-,139	,749	1,335
	Dummy Other	-,190	,067	-,278	-2,837	,006	-,323	-,057	,693	1,442
	GDPPC 1980s	-,082	,043	-,335	-1,929	,057	-,003	,167	,221	4,535
	Rural Population 80	,002	,002	,135	,925	,358	-,002	,005	,313	3,200
	Life Expectancy 80	-,022	,004	-,703	-5,255	,000	-,031	-,014	,371	2,695

a. Dependent Variable: Patriarchy

TABLES 22. CIVILIZATION MODEL

Table 22a. Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,729[a]	,531	,508	,18803	,531	22,885	5	101	,000
2	,741[b]	,549	,522	,18526	,018	4,049	1	100	,047
3	,815[c]	,664	,636	,16162	,115	16,694	2	98	,000

a. Predictors: (Constant), Western, Orthodox, Other, Latin American, African.

b. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC.

c. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 22b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,046	5	,809	22,885	,000[a]
	Residual	3,571	101	,035		
	Total	7,617	106			
2	Regression	4,185	6	,697	20,321	,000[b]
	Residual	3,432	100	,034		
	Total	7,617	106			
3	Regression	5,057	8	,632	24,198	,000[c]
	Residual	2,560	98	,026		
	Total	7,617	106			

a. Predictors: (Constant), Western, Orthodox, Other, Latin American, African.

b. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC.

c. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 22c. Excluded Variables

Excluded Variables[c]

						Collinearity Statistics		
Model		Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Minimum Tolerance
1	GDPPC	-,151[a]	-2,012	,047	-,197	,796	1,256	,674
	Rural Population	,122[a]	1,569	,120	,155	,760	1,317	,681
	Life Expectancy	-,484[a]	-5,673	,000	-,493	,488	2,050	,488
2	Rural Population	,025[b]	,234	,816	,023	,385	2,600	,385
	Life Expectancy	-,637[b]	-5,665	,000	-,495	,272	3,676	,272

a. Predictors in the Model: (Constant), Western, Orthodox, Other, Latin American, African.

b. Predictors in the Model: (Constant), Western, Orthodox, Other, Latin American, African, .GDPPC

c. Dependent Variable: Patriarchy

TABLES 23. RELIGION MODEL FOR LOWER INCOME COUNTRIES

Table 23a. Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,317[a]	,101	,066	,22980	,101	2,911	2	52	,063
2	,489[b]	,239	,195	,21339	,139	9,307	1	51	,004
3	,778[c]	,605	,565	,15689	,366	22,671	2	49	,000

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 23b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,307	2	,154	2,911	,063[a]
	Residual	2,746	52	,053		
	Total	3,054	54			
2	Regression	,731	3	,244	5,353	,003[b]
	Residual	2,322	51	,046		
	Total	3,054	54			
3	Regression	1,847	5	,369	15,010	,000[c]
	Residual	1,206	49	,025		
	Total	3,054	54			

a. Predictors: (Constant), Dummy Other, Dummy Christian

b. Predictors: (Constant), Dummy Other, Dummy Christian, GDPpC

c. Predictors: (Constant), Dummy Other, Dummy Christian, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 23c. Excluded Variables

						Collinearity Statistics		
Model		Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Minimum Tolerance
1	GDPPC	-,373[a]	-3,051	,004	-,393	,998	1,002	,784
	Rural Population	,198[a]	1,516	,136	,208	,985	1,015	,774
	Life Expectancy	-,713[a]	-7,842	,000	-,739	,966	1,035	,767
2	Rural Population	-,005[b]	-,036	,972	-,005	,700	1,429	,700
	Life Expectancy	-,787[b]	-6,717	,000	-,689	,583	1,715	,583

a. Predictors in the Model: (Constant), Dummy Other, Dummy Christian

b. Predictors in the Model: (Constant), Dummy Other, Dummy Christian, GDPPC

c. Dependent Variable: Patriarchy

TABLES 24. CIVILIZATION MODEL FOR LOWER INCOME COUNTRIES

Table 24a. Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,676[a]	,457	,401	,18402	,457	8,234	5	49	,000
2	,678[b]	,459	,391	,18551	,002	,215	1	48	,645
3	,785[c]	,616	,550	,15956	,157	9,441	2	46	,000

a. Predictors: (Constant), Western, Orthodox, Other, Latin American, African.

b. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC.

c. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 24b. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1,394	5	,279	8,234	,000[a]
	Residual	1,659	49	,034		
	Total	3,054	54			
2	Regression	1,402	6	,234	6,788	,000[b]
	Residual	1,652	48	,034		
	Total	3,054	54			
3	Regression	1,882	8	,235	9,242	,000[c]
	Residual	1,171	46	,025		
	Total	3,054	54			

a. Predictors: (Constant), Western, Orthodox, Other, Latin American, African.

b. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC.

c. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC, Rural Population, Life Expectancy

d. Dependent Variable: Patriarchy

Table 24c. Excluded Variables

						Collinearity Statistics		
Model		Beta In	t	Sig.	Partial Correlation	Tolerance	VIF	Minimum Tolerance
1	GDP 2000	-,060[a]	-,464	,645	-,067	,668	1,496	,668
	Rural Population 20	,026[a]	,214	,831	,031	,774	1,292	,735
	Life Expectancy 20 (total)	-,567[a]	-4,219	,000	-,520	,458	2,184	,458
2	Rural Population 20	-,004[b]	-,026	,980	-,004	,573	1,746	,495
	Life Expectancy 20 (total)	-,629[b]	-4,350	,000	-,536	,392	2,549	,392

a. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC.

b. Predictors: (Constant), Western, Orthodox, Other, Latin American, African, GDPPC, Rural Population, Life Expectancy

c. Dependent Variable: Patriarchy

STATISTICAL ASSUMPTIONS

TABLES 25. STATISTICAL ASSUMPTIONS ON THE RELIGION MODEL

Table 25a. Assumption of Multicollinearity

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,608	,040		15,180	,000	,529	,688		
	Dummy Christian	-,243	,052	-,458	-4,645	,000	-,347	-,140	,816	1,225
	Dummy Other	-,222	,071	-,307	-3,112	,002	-,364	-,081	,816	1,225
2	(Constant)	1,269	,162		7,843	,000	,948	1,590		
	Dummy Christian	-,253	,049	-,475	-5,190	,000	-,349	-,156	,814	1,228
	Dummy Other	-,237	,066	-,327	-3,571	,001	-,369	-,105	,814	1,229
	GDPPC	-,082	,020	-,347	-4,198	,000	-,121	-,043	,997	1,003
3	(Constant)	1,787	,222		8,032	,000	1,346	2,228		
	Dummy Christian	-,317	,034	-,597	-9,258	,000	-,385	-,249	,789	1,268
	Dummy Other	-,184	,047	-,254	-3,924	,000	-,277	-,091	,784	1,276
	GDPPC	-,057	,024	-,239	-2,402	,018	,010	,103	,330	3,026
	Rural Population	-,002	,001	-,128	-1,400	,165	-,004	,001	,394	2,535
	Life Expectancy	-,024	,002	-,938	-10,528	,000	-,029	-,020	,413	2,422

a. Dependent Variable: Patriarchy

Figure 9. Assumption of Homoscedasity

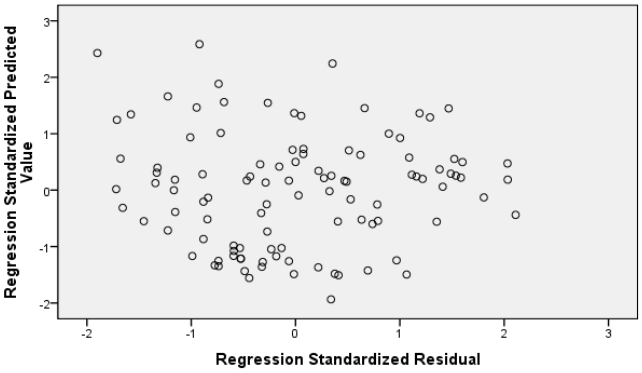

Figure 10a. Assumption of Normality of Residuals

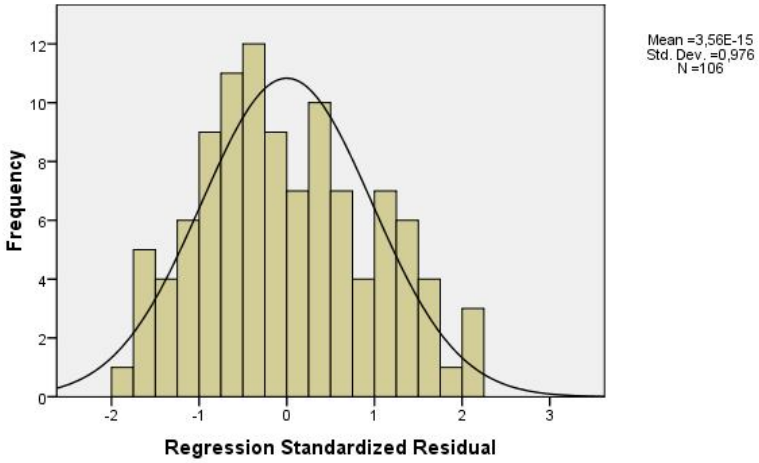

Figure 11b. Normal P-P plot: Assumption of Normality of Residuals

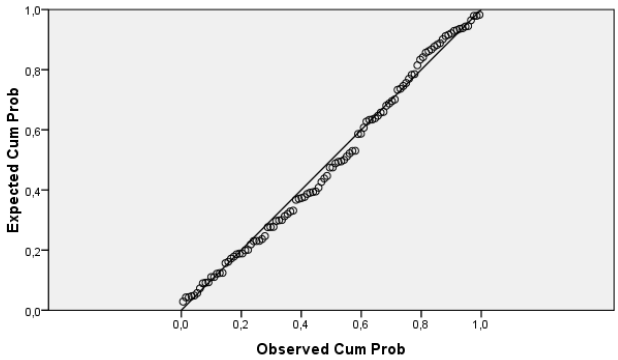

Table 25b. Assumption of Outliers

Case Number	Std. Residual	Patriarchy	Predicted Value	Residual
11	2,109	,69	,3571	,33043
50	2,032	,88	,5567	,31831
108	2,034	,81	,4939	,31864

a. Dependent Variable: Patriarchy

TABLES 26. STATISTICAL ASSUMPTIONS ON THE RELIGION MODEL FOR THE LOWER INCOME COUNTRIES

Table 26a. Assumption of Multicollinearity

		Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,664	,054		12,264	,000	,556	,773		
	Dummy Christian	-,161	,070	-,342	-2,305	,025	-,301	-,021	,786	1,273
	Dummy Other	-,154	,091	-,252	-1,700	,095	-,336	,028	,786	1,273
2	(Constant)	1,764	,364		4,847	,000	1,033	2,494		
	Dummy Christian	-,159	,065	-,337	-2,442	,018	-,289	-,028	,786	1,273
	Dummy Other	-,143	,084	-,233	-1,691	,097	-,312	,027	,784	1,275
	GDPPC	-,156	,051	-,373	-3,051	,004	-,259	-,054	,998	1,002
3	(Constant)	1,777	,399		4,456	,000	,976	2,579		
	Dummy Christian	-,174	,048	-,368	-3,599	,001	-,271	-,077	,770	1,299
	Dummy Other	-,074	,063	-,121	-1,174	,246	-,200	,052	,763	1,310
	GDPPC	-,032	,053	-,076	-,604	,549	-,074	,138	,508	1,970
	Rural Population	-,001	,002	-,083	-,770	,445	-,005	,002	,692	1,446
	Life Expectancy	-,022	,003	-,796	-6,733	,000	-,029	-,016	,576	1,735

a. Dependent Variable: Patriarchy

Figure 12. Assumption of Homoscedasity

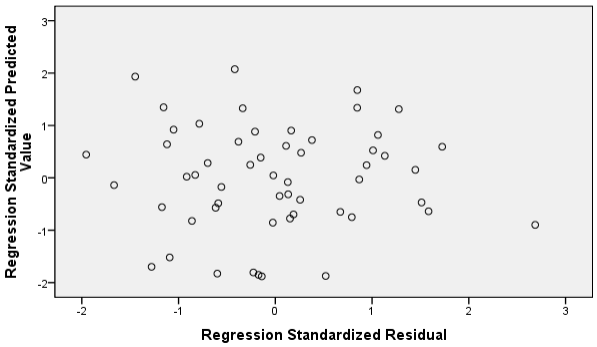

Figure 13a. Assumption of Normality of Residuals

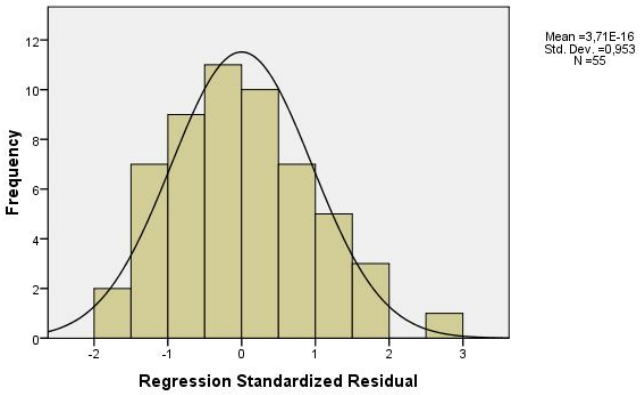

Figure 13b. Normal P-P plot: Assumption of Normality of Residuals

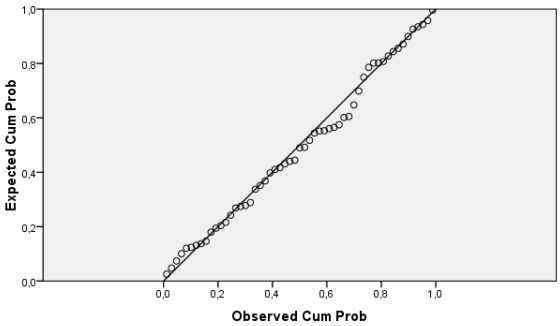

Table 26b. Assumption of Outliers

Case Number	Std. Residual	Patriarchy	Predicted Value	Residual
106	2,686	,81	,3912	,42134

a. Dependent Variable: Patriarchy

TABLES 27. STATISTICAL ASSUMPTIONS ON THE CIVILIZATION MODEL

Table 27a. Assumption of Multicollinearity

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,595	,031		19,252	,000	,534	,656		
	African_	,013	,046	,022	,286	,776	-,078	,104	,766	1,305
	Other	-,318	,062	-,376	-5,085	,000	-,442	-,194	,850	1,176
	Orthodox	-,437	,078	-,405	-5,642	,000	-,591	-,284	,900	1,111
	Latin American	-,434	,054	-,609	-8,032	,000	-,541	-,327	,809	1,236
	Western_	-,283	,137	-,143	-2,070	,041	-,553	-,012	,967	1,034
2	(Constant)	,888	,149		5,975	,000	,593	1,183		
	African	-,020	,048	-,035	-,425	,672	-,116	,075	,674	1,483
	Other	-,327	,062	-,386	-5,294	,000	-,449	-,204	,846	1,182
	Orthodox	-,423	,077	-,392	-5,524	,000	-,576	-,271	,893	1,120
	Latin American	-,419	,054	-,587	-7,790	,000	-,526	-,312	,793	1,261
	Western	-,291	,135	-,148	-2,164	,033	-,558	-,024	,966	1,035
	GDPPC	-,036	,018	-,151	-2,012	,047	-,071	,000	,796	1,256
3	(Constant)	1,554	,254		6,122	,000	1,050	2,058		
	African	-,174	,050	-,296	-3,495	,001	-,273	-,075	,478	2,093
	Other	-,255	,057	-,301	-4,483	,000	-,367	-,142	,759	1,317
	Orthodox	-,374	,068	-,347	-5,537	,000	-,508	-,240	,875	1,143
	Latin American	-,371	,048	-,519	-7,737	,000	-,466	-,275	,761	1,314
	Western	-,284	,119	-,144	-2,388	,019	-,520	-,048	,941	1,063
	GDPPC	-,029	,024	-,122	-1,195	,235	-,019	,077	,327	3,054
	Rural Population	-,001	,001	-,107	-1,105	,272	-,004	,001	,363	2,754
	Life Expectancy	-,017	,003	-,667	-5,772	,000	-,023	-,011	,257	3,895

a. Dependent Variable: Patriarchy

Figure 14. Assumption of Homoscedasity

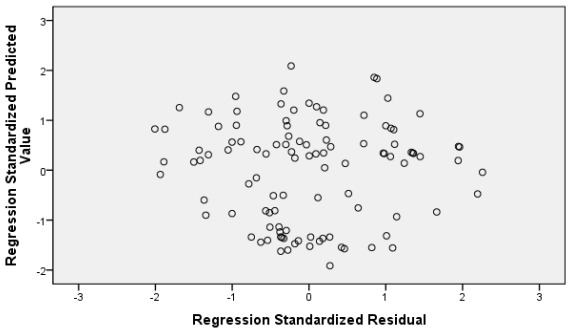

Figure 15a. Assumption of Normality of Residuals

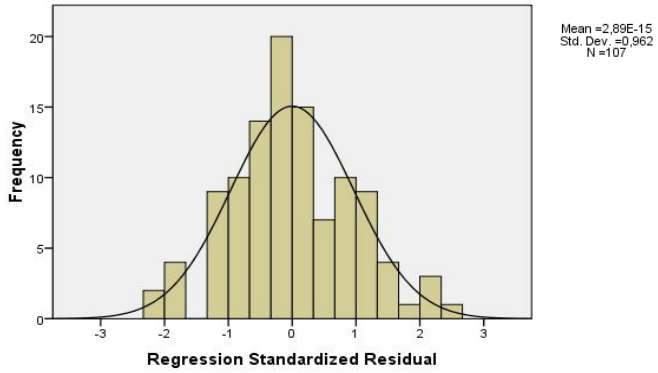

Figure 15b. Normal P-P plot: Assumption of Normality of Residuals

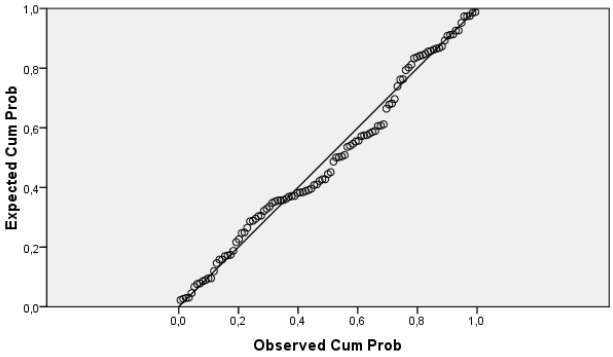

Table 27b. Assumption of Outliers

Case Number	Std. Residual	Patriarchy	Predicted Value	Residual
26	-2,007	,31	,6369	-,32439
48	2,196	,71	,3526	,35486
104	2,259	,81	,4474	,36511

a. Dependent Variable: Patriarchy

TABLES 28. STATISTICAL ASSUMPTIONS ON THE CIVILIZATION MODEL FOR THE LOWER INCOME COUNTRIES

Table 28a. Assumption of Multicollinearity

		Unstandardized Coefficients		Standardized Coefficients			95% Confidence Interval for B		Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	,660	,045		14,798	,000	,571	,750		
	African	-,022	,058	-,047	-,384	,702	-,140	,095	,736	1,359
	Other	-,342	,083	-,484	-4,141	,000	-,508	-,176	,812	1,232
	Orthodox	-,500	,115	-,482	-4,343	,000	-,732	-,269	,899	1,112
	Latin American	-,340	,115	-,328	-2,954	,005	-,572	-,109	,899	1,112
	Western_	-,223	,189	-,126	-1,177	,245	-,603	,158	,962	1,040
2	(Constant)	,839	,387		2,166	,035	,060	1,618		
	African	-,030	,061	-,064	-,494	,623	-,153	,093	,680	1,470
	Other	-,334	,085	-,472	-3,915	,000	-,505	-,162	,775	1,290
	Orthodox	-,481	,123	-,464	-3,898	,000	-,729	-,233	,796	1,256
	Latin American	-,328	,119	-,316	-2,751	,008	-,568	-,088	,854	1,172
	Western	-,211	,193	-,120	-1,096	,279	-,598	,176	,945	1,058
	GDP PC	-,025	,054	-,060	-,464	,645	-,135	,084	,668	1,496
3	(Constant)	1,424	,492		2,892	,006	,433	2,414		
	African	-,111	,056	-,233	-1,970	,055	-,224	,002	,594	1,684
	Other	-,215	,079	-,304	-2,738	,009	-,373	-,057	,675	1,481
	Orthodox	-,318	,115	-,306	-2,755	,008	-,550	-,086	,674	1,483
	Latin American	-,193	,109	-,186	-1,777	,082	-,411	,026	,762	1,312
	Western	-,183	,173	-,104	-1,054	,298	-,532	,166	,862	1,160
	GDPPC	-,044	,057	-,106	-,780	,440	-,070	,159	,455	2,200
	Rural Population	-,001	,002	-,061	-,505	,616	-,005	,003	,566	1,767
	Life Expectancy	-,018	,004	-,637	-4,345	,000	-,026	-,010	,388	2,580

a. Dependent Variable: Patriarchy

Figure 16. Assumption of Homoscedasity

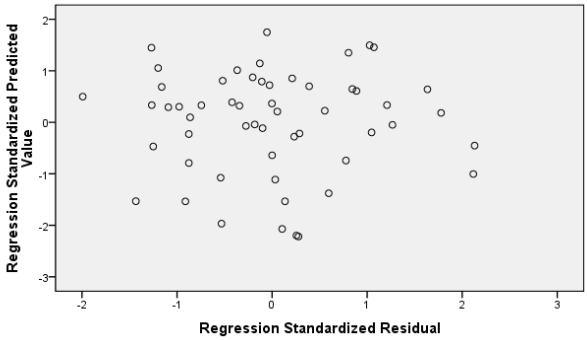

Figure 17a. Assumption of Normality of Residuals

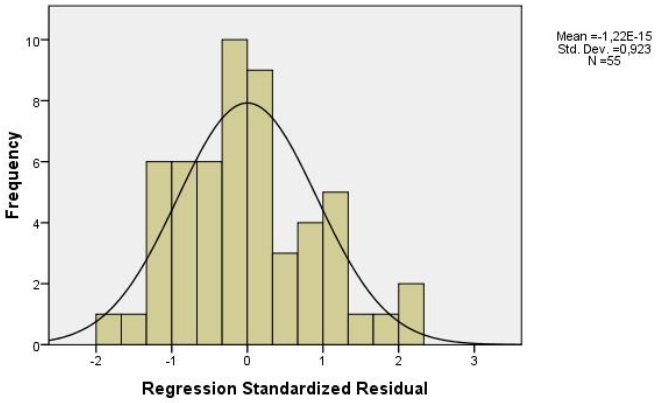

Figure 17b. Normal P-P plot: Assumption of Normality of Residuals

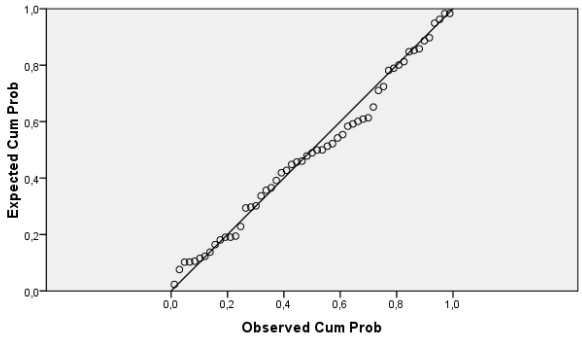

Table 28b. Assumption of Outliers

Case Number	Std. Residual	Patriarchy	Predicted Value	Residual
48	2,117	,71	,3697	,33776
104	2,130	,81	,4726	,33988

a. Dependent Variable: Patriarchy