Global Economy Journal

Volume 10, *Issue* 3 2010 *Article* 1

An Economic IslamicityIndex (EI^2)

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Abstract

Given the post-9/11 climate of global uncertainty, suspicion, hostility, and fear, interest in the relationship between religion and economics, politics, and social behavior has been rekindled. In particular, there has been considerable attention afforded to the impact of religion on economic, social, and political development and vice versa. However, before the impact of religion on economic performance or the impact of economic performance on religion can be examined, one should first ascertain the religiosity of a country. In this case, "how Islamic are Islamic countries?" or "what is their degree of 'Islamicity?"' In this paper, we assess, on a very preliminary basis, the adherence of Islamic countries to Islamic economic teachings and develop an Economic IslamicityIndex (EI^2) to assess the extent that self-declared Islamic countries adhere to Islamic doctrines and teachings. We do this by measuring 208 countries' adherence to Islamic Economic principles using as proxies 113 measurable variables.

KEYWORDS: economic development, oil, Islam, religion

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INTRODUCTION

Given the post-9/11 climate of global uncertainty, suspicion, hostility and fear, interest in the relationship between religion and economics, politics, and social behavior has been rekindled. It is not only the rapid increase of Islamic fundamentalism, but also, for example, the rise of the American evangelical movement, the confusion and commotion of religion in former communist countries of the dismantled U.S.S.R. including religious ethnic conflicts, and creeping Protestantism in traditionally catholic South America, that has fueled this revival.[1] In particular, there has been considerable attention on the role of religion in economics, with a number of economists exploring the relationship between religion and economic performance.

Economists generally agree that there are many determinants of economic growth and that "successful explanations of economic performance have to go beyond narrow economic variables to encompass political and social forces."[2] Religion is one such force. Sociologists generally concur that a person's everyday decisions (including economic and financial decisions) are in part influenced by their belief system. It then stands to reason that institutionalized religion may play a significant role in what is generally considered "secular realms of government and politics."[3] While it is generally agreed that religion affects economic, social, and political decisions, academics, however, are struggling between two schools of thought. The essence of the disagreement of how to investigate the role of religiosity in economic development is whether religion should be the dependent or independent variable in such a relationship. If religion is viewed as a dependent variable, then it would imply that the level of economic development e.g. standard of living, or government interference in the marketplace, impacts the degree of religiosity e.g. church or mosque attendance and other faith based rituals. If, however, religion is treated as an independent variable, then it is the degree of religiosity that influences the political economy i.e. economic performance, productivity, work ethics, and resulting social developments.

However, no matter which hypothesis one adopts, one must first ascertain whether the country or countries in question follow the teachings and doctrines of their professed religion, and then to what extent. In this paper we propose to measure the degree of religiosity of Islamic countries. Only then can one embark

[1] Iannaccone, Laurence, "Introduction to the Economics of Religion," **Journal of Economic Literature** (September 1998), pp. 1465-1496.
[2] Barro, Robert J., "Spirit of Capitalism: Religion and Economic Development," **Harvard International Review: Religion (**2004).
[3] Center of the Economic Study of Religion (2008).

on an analysis to assess the correlation between Islam and economic performance, standard of living, and development in general.[4]

Today the religion under the microscope is Islam. From historians such as Bernard Lewis (Lewis, 2002)[5] to economists such as Robert Barro (McCleary and Barro, 2006)[6], academics have attempted not only to frame the methodology but have also tried to assess the relationships between religion and economic development. We ask what we believe to be the precursor question to the linkage between Islam and economics -- "to what extent do self-declared countries actually behave like Islamic countries i.e. following Islamic economic teachings as laid out in the Quran and practiced by the Prophet?" In other words, are these countries truly Islamic or are they Islamic in label only? We believe that only once this question is addressed can one begin to measure and/or claim empirically that Islam either deters or enhances economic performance.

We attempt to discern if Islamic economic principles are conducive to free markets and strong economic performance or are they, in fact, a deterrent. If non-Islamic, rich and developed, countries such as the United States, Germany, or Japan, are performing well under principles embraced by Islam, then we could conclude that Islam is not a deterrent to good economic performance. We do this by measuring the adherence of 208 countries, Islamic and non-Islamic, to Islamic economic principals, using 113 measurable variables as proxies for Islamic teachings (instead of relying on generalized religious surveys as is the current practice) to create an Economic Islamicity Index (EI^2).[7] The 208 countries are

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[4] Even then one should be cautious in attempting to correlate the essence of Islam (or for that matter of any religion) and its impact on economic development by the actions of those who are labeled Muslims at any given point in time. Measuring the success of country through Islamic institutions and best practices and governance is another gauge.

[5] Lewis, Bernard, **Root Causes: What Went Wrong: Western Impact and Middle Eastern Response (**New York: Oxford University Press, 2002).

[6] McCleary, Rachel M. and Robert Barro, "Religion and Economy," **Journal of Economic Perspectives,** Vol. 20, No. 2, (Spring 2006), pp. 49-72.

[7] EI^2 is part of a larger ongoing work (part two of a series) that entails an overall IslamicityIndex or I^2. The basic premise of developing an IslamicityIndex is that before the impact of religion on economic, political, or social performance or the impact of economic, political, or social performance on religion can be examined, one must first ascertain the extent of adherence of a country to its professed religion -- in this case "How Islamic are Islamic countries or what is their degree of "Islamicity?" The IslamicityIndex (I^2) encompasses measurements of the following four individual indices: (1) Economic IslamicityIndex (EI^2), (2) Legal and Governance IslamicityIndex (LGI^2), (3) Human and Political Rights IslamicityIndex (HPI^2), and (4) International Relations IslamicityIndex (IRI^2**).** With the above four indexes combined we created the overall IslamicityIndex: $I^2 = (EI^2)+(LGI^2)+(HPI^2)+(IRI^2)$. The first part of this series "How Islamic Are Islamic Countries? An Islamicity Index" by S. Rehman and H. Askari was published in the Global Economy Journal, Vol. 10, Issue 2, Berkeley Electronic Press, May 2010 (http://www.bepress.com/gej). In Part II, this article presented here, we develop the economic teachings of Islam in more detail as a significant part of the Quran is devoted to economics as

additionally broken into a number of sub-groups for a more through comparison: High, Upper-Middle, Lower-Middle, and Low Income Countries, OECD Countries, Non-OECD Countries, Persian Gulf Countries, OIC Countries, and Non-OECD Non-OIC Countries.[8]

It should be noted that a nation's religiosity or degree of religiousness is complex and controversial. Some might argue that holding countries and their governments accountable to a degree of religiousness is unreasonable, while others may argue that perhaps if countries identify themselves primarily as a republic built on the tenets of a specific religion then some accountability may be in order, using traditional methods of political, economic and social performance. This seems especially appropriate for those governments whose initial and/or current existence was based on religion, for example, Iran, Pakistan and Saudi Arabia. Still, such a study is riddled with problems as, for example, the question of what constitutes a religious state – a government's self-declaration of ruling under religious law, the establishment of an official state religion, or more than 50 percent of the population practicing, or claiming to belong to, a particular religion, etc.[9] For example there are only seven declared Islamic states (Afghanistan, Bahrain, Iran, Mauritania, Oman, Pakistan, Yemen) and only twelve countries that have declared Islam as the state religion (Algeria, Bangladesh, Egypt, Iraq, Kuwait, Libya, Malaysia, Maldives, Morocco, Qatar, Tunisia, United Arab Emirates). For these and other reasons we have taken an all-encompassing approach and have included countries whose governments profess Islamic teaching as the guiding, or one of the primary, principle for governance. The grouping that best represents such a classification of Islamic countries is the 57 members of the Organization of Islamic Conference[10] or OIC. These 56 countries and the Palestinian Authority have either (a) governments who have adopted Islam as the official state religion, or (b) Islam as their primary religion,

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were the documented teachings of the Prophet (on good economic and social practices to follow.)

[8] OIC refers to the Organization of Islamic Conference, discussed below.

[9] Please note that we have not made a distinction between Sunni and Shia Muslim countries. Approximately 10-15% of the world's Muslims are Shia with the largest concentration in Iran, followed by Iraq. Shia Muslims are in the majority in Iran, Iraq, Bahrain and, according to some estimates, Yemen. There are, however, large Shia communities in a number of countries including Afghanistan, Azerbaijan, India, Kuwait, Lebanon, Pakistan, Qatar, Syria, Turkey, Saudi Arabia, and the United Arab Emirates.

[10] OIC is comprised of Palestinian Authority and the following 56 countries: Afghanistan, Albania, Algeria, Azerbaijan, Bahrain, Bangladesh, Benin, Brunei, Burkina-Faso, Cameroon, Chad, Comoros, Cote d'Ivoire, Djibouti, Egypt, Gabon, Gambia, Guinea, Guinea-Bissau, Guyana, Indonesia, Iran, Iraq, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Libya, Malaysia, Maldives, Mali, Mauritania, Morocco, Mozambique, Niger, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, Senegal, Sierra Leone, Somalia, Sudan, Suriname, Syria, Tajikistan, Togo, Tunisia, Turkey, Turkmenistan, Uganda, United Arab Emirates, Uzbekistan, and Yemen.

or (c) a significant Muslim population, or (d) simply declared themselves as an Islamic republic. We investigate how religious the 56[11] OIC countries are by measuring and assessing to what extent these countries follow Islamic economic principles. The problem then is how to assess whether country X is following economic tenants of its religion and can, therefore, be labeled a truly Islamic country in (or for that matter a Catholic country.) We develop an "Economic IslamicityIndex"[12] or EI^2 based on 113 economic and related social variables (proxies).[13]

It is useful to shed some light on how economically Islamic are self-declared Islamic countries. This is particularly important today since there is a growing misconception in Western media and academia that any shortcomings by these self-declared Islamic countries and their governments can be directly, or at least indirectly, attributed to Islam and that such shortcomings are a sign of some deficiency in Islam. Such conclusions are put forward by a number of academics including Bernard Lewis (2003) and Timur Kuran (2007). Lewis blames Islam for lack of development and modernization in the Arab world, in its increasingly dogmatic rejection of modernity by many in the Islamic world, and in favor of a return to "a sacred past;" while Kuran argues that Islam and the Quran inhibit economic development due to "…factors invoked as sources of retardation include fatalism, personalism, laziness, lack of curiosity, mistrust of science, superstition, conservatism, and traditionalism…"[14] As to be expected, while some support the conclusions of Kuran and Lewis, others do not.[15] Abbas Mirakhor is one economist who vigorously rejects their claims (Mirakhor 2003 and 2007, and Mirakhor and Askari 2010):

> "A survey of the literature on Islamic economics over the past few decades reveals a reasonable degree of agreement on at least two important and fundamental issues. The first concerns what Islam itself is about: 'Justice and Equity'…"[16]

[11] We only have data for 56 of the 57 OIC members as no reliable data is available for the Palestinian Authority.
[12] Economic IslamicityIndex, Economic IslamicityIndex, and EI^2 © Copyright 2010.
[13] It should be noted that some of the variables and ranking are derived from economic surveys, such as the World Bank's "Doing Business Index".
[14] Kuran, Timur, **"Economic Underdevelopment in the Middle East: The Historical Role of Culture, Institutions, and Religion,"** Department of Economics, Duke University, (September 2007), p.1.
[15] Mirakhor, Abbas, "**A Note on Islamic Economics,"** Islamic Research and Training Institute, IDB Lecture Series No.20. Islamic Development Bank, (2007), p.26.
[16] Ibid, pp. 10-12.

DOI: 10.2202/1524-5861.1680

> "There is no avoiding the fact that in Islam all behavior is rules-based, that ethical values underline the rules…"[17]
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> "…we have cited considerable evidence that Islam not only does not rule out economic progress, but that it clearly endorses several of the basic factors cited frequently by Western commentators as essential in historic economic transformation – private property, recognition of the profit incentive, a tradition of hard work, a link between economic success and eternal reward. Thus Islam seems unlikely to rule out rapid economic growth or even the construction of a strong system more or less capitalist in essence. On the other hand, Islamic principles cannot readily, if at all, be reconciled with economic "progress" that is contradicted by blatant economic and social injustice in the context of general social welfare[18] … Work, however, is not only performed for the purpose of satisfaction of needs and wants, but it is considered a duty and an obligation required of all members of society." [19] This stands in stark contrast to Kuran's conclusions.

It is this very fundamental difference of opinions that underscores the need for settling the prior question, namely how Islamic (i.e. "Islamicity") are countries that are "labeled" as Islamic, so that shortcomings are appropriately attributed to governments and their policies, to culture, to the religion, or to some other combination of factors.

CURRENT FRAMEWORK FOR INVESTIGATING RELIGION AND ECONOMIC ACTIVITY

While there is a resurgence of research into the economics of religion, it is an academic field that has gone through long gaps of silence. Adam Smith ([1759], 2002; [1776], 1965) addressed the role of religion in economics over two centuries ago, most eloquently and directly in his less quoted work, **Theory of Moral Sentiments**, which we quote extensively here:

> "The regard to those general rules of conduct is what is properly called a sense of duty, a principle of the greatest consequence in human life, and the only principle by which the bulk of mankind are capable of directing their actions… Without this sacred regard to general rules, there is no man whose conduct can be much depended upon. It is this which constitutes the most essential difference between a man of principle and honor and a worthless

[17] Ibid, pp. 13.
[18] Mirakhor, Abbas, **The General Characteristics Of An Islamic Economic System,** (New York: Global Scholarly Publication, 2003), pp. 45-46.
[19] Ibid, p.14.

> fellow. . . Upon the tolerable observance of these duties depends the very existence of human society, which would crumble into nothing if mankind were not generally impressed with a reverence for those important rules of conduct. This reverence is still further enhanced by an opinion which is first impressed by nature, and afterward confirmed by reasoning and philosophy, that those important rules of morality are the commands and *Laws* of the Deity, who will finally reward the obedient, and punish the transgressors of their duty. . . The happiness of mankind as well as of all other rational creatures seems to have been the original purpose intended by the Author of Nature when he brought them into existence. No other end seems worthy of that supreme wisdom and benignity which we necessarily ascribe to him;….. But, by acting according to the dictates of our moral faculties, we necessarily pursue the most effectual means for promoting the happiness of mankind, and may therefore be said, in some sense to co-operate with the Deity, and to advance, as far as is in our power, the plan of providence. By acting otherwise, on the contrary, we seem to obstruct, in some measure, the scheme, which the Author of Nature has established for the happiness and perfection of the world, and to declare ourselves, if I may say so, in some measure the enemies of God. Hence we are naturally encouraged to hope for his extraordinary favor and reward in the one case, and to dread his vengeance and punishment in the other. . . When the general rules which determine the merit and demerit of actions comes thus to be regarded as the *Laws* of an all-powerful being, who watches over our conduct, and who, in a life to come, will reward the observance and punish the breach of them—they necessarily acquire a new sacredness from this consideration. That our regard to the will of the Deity ought to be the supreme rule of our conduct can be doubted of by nobody who believes his existence. The very thought of disobedience appears to involve in it the most shocking impropriety."[20]

In the mid-1970s there was activity in the field of religion and economics with the groundbreaking work of Corry Azzi and Ronald Ehrenberg (1975), and now we are again witnessing a surge of academic activity on this topic, beginning in the 1990s and mushrooming in the aftermath of September 11, 2001.[21] The study of religion and economic behavior provides insights into economic theory on "…several levels: generating information about a neglected area of non-market behavior; showing how economic models can be modified to address questions about belief, norms, and values; and exploring how religion (and, by extension, morals and culture) affect economic attitudes and activities of individuals, groups

[20] Smith, **Theory of Moral Sentiments**, pp.186-198.
[21] Iannaccone, "Introduction to the Economics of Religion."

DOI: 10.2202/1524-5861.1680

and societies."[22] It has even reached the borders of the theory of "rational choice." Some economists are attempting to prove that people tend to be as rational in their choice of religion as in buying and selling commodities and that the "producers," i.e. mosques, churches and synagogues, compete for customers (converts). This has even been applied (Berman 2007 and Iannaccone 2004) to suicide bombers in that they tend to be "motivated young men" (be they Muslim Arab or Shinto Japanese), and not depressed or brainwashed, and share a sense of obligation i.e. "multi-aid society"[23] and that the "supply" cannot be curtailed, and if we want to reduce suicide bombings the "demand" should be disrupted by disabling the "firms"[24] that sponsor such activity.[25]

Iannaccone (1989) in his insightful overview of the literature on religion and economics essentially believes the field is broken into "…three major line[s] of inquiry…..[(a)] the line of research that interprets religious behavior from an economic perspective, applying microeconomic theory and techniques to explain patterns of religious behavior among individuals, groups, and cultures...[(b)] studies of economic consequences of religion…[and (c)] theological principals and sacred writing to promote or criticize economic policies … [sometimes known as] religious economics…[or] Islamic economists…[26]"

Most of the current academic work revolves around two schools of thought: using the degree of religiosity as a dependent or independent variable. As stated above, if religion is viewed as a dependent variable, then it would imply that level of economic development i.e. standard of living, or government interference in the marketplace, impacts the degree of religiosity i.e. church or mosque attendance and other faith based rituals. If, however, religion is treated as an independent variable, then it is the degree of religiosity that influences the political economy, which is economic performance, productivity, work ethics, and resulting social developments.

Religions as the Dependent Variable

When the degree of religiosity (i.e. church or mosque attendance and other faith based rituals) is viewed as the dependent variable, the implication is that

[22] Ibid.
[23] Eli Berman and David D. Laitin, **"Religion, Terrorism and Public Goods: Testing the Club Model,**" (working paper) (December 2007).
[24] Iannaccone, Laurence, **"The Markets for Martyrs,"** presented at the 2004 Meetings of the American Economic Association, San Diego, CA.
[25] "Economists are Getting Religion," **Business Week** (December 6, 2004).
[26] Iannaccone, **"Introduction to the Economics of Religion."**

religiosity is affected by the level of economic development i.e. standard of living, or government interference in the marketplace. This view of religion is often analyzed under the umbrella of the "Secularization Hypothesis,"[27] which applies the "following theory to religiosity…as economies develop and get richer, people supposedly become less religious…" which can be, for example, "measured either by participation in organized religion (e.g., church attendance) or by certain indicators of religious belief."[28] It essentially states that economic progress diminishes the role and influence of organized religion. Secularization Hypothesis is embodied in the better-known "Modernization Theory" which states that a society's structure, institutional, and systemic make-up continually alters as the level of development and wealth of country changes. These changes occur as a country attempts "alleviate poverty and create rational market economies."[29]

The Secularization Hypothesis is, however, controversial. It is widely accepted that the United States stands as the noticeable exception to the Secularization Hypothesis as it is not only very rich but also very religious. For example, "American Church membership rates have risen throughout most of the past two centuries – from 17% of the population at the time of the Revolution to 34% by the mid-1800s, to more than 60% today."[30] Moreover, studies such as Greenly (1989), Iannaccone (1991), Warner (1993), have claimed that the theory is simply incorrect. Iannaccone (1998) states that the "classic secularization pattern," i.e. degree of religiosity declines with economic development and standard of living increases, has only occurred in a few of the Western European countries (France, Germany, and Britain).

Religion as the Independent Variable

The most popular competing theory of religiosity focuses on "markets and supply-side forces"[31] -- it treats religion as an independent variable. If religion is treated as an independent variable, then it is the degree of religiosity that influences economic behavior i.e. economic performance, productivity, work ethics, and resulting social developments. Although the role of religion was discussed by Adam Smith over two centuries ago, it was Max Weber's famous

[27] Barro, Robert J., "Spirit of Capitalism: Religion and Economic Development," **Harvard International Review: Religion,** Vol. 25 (4), (Boston, MA, Winter, 2004).
[28] Barro, Robert and Joshua Mitchell, "Religious faith and Economic Growth: What Maters Most-Belief or Belonging?" **Heritage Lectures**, Heritage Foundation, No. 841, (November 17, 2003), p.2.
[29] Ibid.
[30] Iannaccone, "Introduction to the Economics of Religion."
[31] Barro and Mitchell, "Religious faith and Economic Growth".

DOI: 10.2202/1524-5861.1680

treatise in 1905 that brought the impact of religion to prominence and gave rise to the famous notion of the "protestant work ethic" embodying this direction of causation.[32] In essence, Weber claimed that the degree of religiosity influenced the "…willingness to work and to be productive…[33]" and that might impact the economy and its productivity. Weber's theory has many advocates, for example, Jacques Delacroix (1992) stated that:

> "…[t]he Protestant Reformation triggered a mental revolution which made possible the advent of modern capitalism. The worldview propagated by Protestantism broke with traditional psychological orientations through its emphasis on personal diligence, frugality, and thrift, on individual responsibility, and through the moral approval it granted to risk-taking and to financial self-improvement."[34]

In addition, there are studies that correlate economic behavior and performance to religion at the level of individuals and households, e.g. Jewish American's on average have higher incomes than non-Jewish Americans (Chiswick 1983). There are also observed correlations between degree of religiosity and social behavior, affecting marriage and divorce rates, crime, alcoholism and the like. Nonetheless, although religion matters in economic activity, its impact, however, is neither consistent nor uniform. For example, according to Iannaccone (1998):

> "…it affects some behavioral outcomes (such as earnings, education, and economic attitudes) much less than others; many effects vary across denomination (and often strongest in sectarian groups); and some effects, such as life satisfaction, related most strongly to levels of beliefs, whereas others, such as physical health and most form of deviance, relate more strongly to levels of involvement… [But] religious effects do not reduce to a single unobserved factor, such as goodness, conservatism, credulity, or risk aversion – a finding that motivates the search for more sophisticated models of religious behavior."[35]

[32] Weber, Max, **The Protestant Ethic and the Spirit of Capitalism**, (translated by Talcott Parsons), (London: Allen & Unwin, [1905] 1930).
[33] Barro and Mitchell, "Religious faith and Economic Growth", p.3.
[34] Delacroix, Jacques, "A Critical Empirical Test of the Common Interpretation of the Protestant Ethic and the Spirit of Capitalism," Leuven, Belgium: International Association of Business and Society, 1992, p.4 as stated in Iannaccone, "Introduction to the Economics of Religion".

[35] Iannaccone, "Introduction to the Economics of Religion."

Thus it is not surprising that this view of religion, affecting economic performance, political outcome, and social mores, is as equally controversial as its counterpart, the Secularization Hypothesis.

Moreover, there is also much debate on the influence and the role of governments in the marketplace. For example, the "Religion Market Model" tries to understand the manner in the state and church interact. It postulates that by virtue of the manner in which government interacts with religion, it influences individual faith-based participation and beliefs. The range of government involvement is very extensive, from mandating an official national religion, to subsidizing religious activities, to discouraging religious practices altogether. This institutional-dimension assumes that governments shape religious activity by either encouraging or discouraging it, and thereby affecting economic behavior. In the same vein, the government's level of involvement in the economy in general, or influence in the creation and running of institutional and systemic features in the marketplace, would in turn impact and influence religious beliefs and activities and therefore the economy. The implication here is that government polices on, and interactions with, religion impacts economic efficiency. Adam Smith discusses this in his "Wealth of Nations" concluding that religious monopolies, i.e. the Anglican Church in the United Kingdom or the Catholic Church in a predominantly Catholic country, like all monopolies, tend to be inefficient.[36]

A quick glance at the literature would reveal that most academics are engaged in the popular use of religion as an independent variable in such analysis -- the methodology is filtered through the individual-dimension on economics and religion, i.e. on the impact of individuals or a society's religious beliefs on economic performance. Much of this work, however, has assumed, in our view erroneously, that religious beliefs are automatically and closely tied to work ethics, trust, honesty, and thrift. The individual-dimension research assumes that individual religious beliefs (for example in heaven or hell, etc), participation in formal religious rituals (attendance of formal services, frequency of private prayer, etc) and values (work ethic, honesty, etc) shape individual characteristics that in turn impact economic performance, i.e. productivity. Another dimension of this approach is the role of organized religions and their influence on, for example, governments, is thought to influence financial markets and other regulatory and legal frameworks in an economy. Praying five times a day or going to church on Sundays does not make a person necessarily a good or productive Muslim or Christian, as, for example, the same person may be simultaneously stealing and not fulfilling his or her obligations under binding contracts, whilst still praying. Conclusions have to be carefully drawn when tying the degree of

[36] Barro and Mitchell, "Religious faith and Economic Growth."

DOI: 10.2202/1524-5861.1680

religious fervor, for example, work ethic or honesty, to economic productivity and standards of living. Much of the work on religion and economics emphasizes the link of religion to work ethics using the human element (Weber 1905 [1930])[37].

Even more disconcerting is the fact that it is generally believed that degrees of outward displays or expressions of religiosity can measure real adherence of individuals to religious doctrines and teachings, and that this can be measured by using standard analytical tools, such as mass surveys. First, individual surveys querying, for example, how many times a person prays or attends church (or Mosque) does not necessarily reflect the actual adherence of the individual, or for that matter of the collective society, to work ethics, trust, honesty, and thrift (non-opulent living); and even more to the point the relationship of these variables to church attendance are almost impossible to measure directly. This linking of generic "How Religious Are You" surveys to productivity (i.e. GDP per capita) are riddled with multicollinearity and causal limitations. Research conducted on generally popularly held beliefs about religion, for example, the Puritan work ethic and productivity, are akin to the decades old (now politically incorrect) theories of the impact of hot versus cold climates on productivity in Africa and Northern Europe.

Even more troublesome is the fact that most of the data used for such empirical analysis is limited and unreliable (specially in Arab countries) and generally stems from only a few sources, the World Values Survey (1981-84, 1990-93,1995-97, and 1999-2003), International Social Survey Program (1990-93 and 1998-2000), the Gallup International Millennium Survey (1999), and World Christian Encyclopedia (1982, 2001). Moreover, most of these studies correlate the degree of religiosity to only one economic performance variable – standard of living or GDP per capita.

ECONOMIC ISLAMICITY

How Islamic are Islamic countries or what is their degree of economic "Islamicity?" Before attempting to answer this question one must first summarize (and concur on) the basic economic principles in Islam, which we have derived directly from the Quran and the documented practices and sayings of the Prophet.

Basic Islamic Principles[38]

Islam is a rules-based religion. Unlike most other major religions, Islam explicitly affords detailed economic guidelines for creating a successful and just economic system. It is generally accepted that the central economic tenant of

[37] Weber, **The Protestant Work Ethic and the Spirit of Capitalism** (London: Allen and Unwin, 1905 [1930]).

[38] For an extensive discussion of Islam and economic development, see Mirakhor and Askari (2010).

Islam is to develop a prosperous economic and egalitarian social structure in which all people (men and women) can maximize their intellectual capacity, preserve and promote their health, and actively contribute to the economic and social development of society. Economic development and growth, along with social justice, are the foundational elements of an Islamic economic system. It is presumed that governments and individuals are obligated to use their reason to formulate and implement strategies that enhance, and simultaneously eliminate factors hindering, society's intellectual development, economic progress, and social freedom.

The goals of Islam for the society are the welfare of all its members and socioeconomic justice. All members of an Islamic society must be given the same opportunities to advance; in other words, a level playing field, including access to the natural resources provided by Allah. For those for whom there is no work and for those that cannot work, society must afford the minimum required for a dignified life: shelter, food, healthcare and education. The rights of future generations must be preserved. Thus Islam advocates an environment where behavior is molded to support the goals of an Islamic society: societal welfare and socioeconomic justice, with the goal of making humankind one, confirming the Unity of Allah's creation. It is with the Unity of Creation as the goal that the Quran advocates risk sharing as the foundation of finance to enhance trust.

A truly Islamic economic system is a market based system, but with entrenched Islamic behavior and goals (objectives/rules/institutions) attributed to consumers, producers and to government (authorities), and with institutions and scaffolding that very much resembles the modern view of development as developed by Amartya Sen (Nobel Laureate in Economics)[39]. Based on the Islamic vision, we expect the Islamic solution (if authentically implemented) to differ in the following important ways from the conventional economic system: greater degree of justice in all aspects of economic management, higher moral standard, honesty and trust exhibited in the marketplace and in all economic transactions, poverty eradication, a more even distribution of wealth and income, no hoarding of wealth, less opulence in consumption, no exploitive speculation, risk sharing as opposed to debt contracts, better social infrastructure and provision of social services, better treatment of workers, higher education expenditures relative to GDP, higher savings and investment rates, higher degree of environmental preservation, and vigilantly supervised markets. It would be expected that these differences would be reflected in higher quantitative and qualitative economic growth if the Islamic rules and objectives were adopted. One would expect a higher rate of growth as higher investment rate, higher educational

[39] Amartya Sen is Thomas W. Lamont University Professor, and Professor of Economics and Philosophy, at Harvard University.

DOI: 10.2202/1524-5861.1680

expenditures, higher social awareness, better functioning markets, higher level of trust, and institutions that have empirically been shown to be critical for growth.

In an earlier paper[40] we rated Islamic countries in three additional dimensions to the economic: the legal system and governance; human and political rights; and, the realm of international relations In this paper, we take an in-depth look at only economic systems and policies and the concept of economic-social justice.

Our task of creating an Economic IslamicityIndex is made somewhat easier as compared to a "Catholicity Economic Index," because Islam is a rules-based religion and the official book, the Quran, is much more explicit than the Bible about the principles, rules, and regulation that govern all facets of human life and society (public and private) i.e. prayer, self-discipline, legal jurisdictions, individual rights, economic structure, taxation, commercial and personal contracts, and financial dealing, among many others.[41] Moreover, the Prophet's life and practices in establishing the earliest Islamic society in Medina provides the perfect benchmark for all Muslim societies. But we recognize that there are still conflicts in interpreting Islamic doctrines.

THE ECONOMIC ISLAMICITYINDEX (EI^2)

The EI^2 index ranks the self-declared Islamic nations by the degree that their policies, achievements, and realities are in accordance to a set of Islamic economic principles. While it is difficult in a short paper to capture in sufficient detail the essence of Islamic economics (principles, guidelines, policies, justice, etc), we nonetheless aggregate economic teachings into three principal goals for an Islamic economic system: (a) achievement of economic justice and achievement of sustained economic growth, (b) broad-based prosperity and job creation, and (c) adoption of Islamic economic and financial practices.

In turn, we disaggregate these three central teachings of Islam into twelve areas of fundamental economic principles: 1) Economic opportunity and economic freedom; 2) Justice in all aspects of economic management i.e. property rights and the sanctity of contracts (Quran 2:188 and 4:29, and Al-Hakimi et al. 1989, Vol. 2, 448-459 and Vol. 1, 18684-1)[42]; 3) Better treatment of workers including job creation and equal access to employment; 4) Higher education expenditures relative to GDP including equal access to education); 5) Poverty eradication, aid, and providing basic human needs, no hoarding of wealth i.e.

[40] Rehman, S and H. Askari, "Islamicity Index: How Islamic are Islamic Countries?" **Global Economy Journal**, May Issue, Vol. 2, 2010.
[41] This is true of Judaism as well because of the Torah's explicit instructions of daily personal, financial, and commercial life.
[42] Chapter and Verse from the Quran.

economic equity, and less opulence in consumption (Al-Hakimi et al. 1989, Vol. 1, 18684-1 and Quran 89:15-18, 30:37-42, 34:34-36, 4:33, 3:180, 4:36-37, and 92:5-11); 6) A more even distribution of wealth and income Quran 54:49, 13:8, 65:3, and 15:21; and Al-Hakimi et al. 1989, Vol. 1, 18684-1); 7) Better social infrastructure and provision of social services through taxation and social welfare; 8) Higher savings and investment rates i.e. management of natural and depletable resources; 9) Higher moral standard, honesty and trust exhibited in the marketplace and in all economic interactions i.e. less corruption (Quran 13:11 and 17:16); 10) Islamic Financial System I: risk sharing as opposed to debt contracts i.e. a supportive financial system and elimination of speculation (Quran 2:275 and 4:29); 11) Islamic Financial System II: financial practices that includes the abolition of interest (Quran 2:275 and 2:275); and 12) Higher trade/GDP, higher foreign aid/GDP and higher degree of environmental preservation and vigilantly supervised markets i.e. overall state effectiveness in achieving economic prosperity -- general economic prosperity (Kenneth Cragg, 2006, 27-49 and Al-Hakimi et al. 1989, Vol. 3, 155-177). It should be noted that the above 12 principles of Islamic economics is only one possible delineation of the “Islamic economic vision.”

Methodology of the Economic IslamicityIndex (EI^2)

In designing the methodology of the Economic IslamicityIndex (EI^2), we use the twelve dimensions (A-L) of Islamic economic principles and further sub-divide them assigning them specific proxies that ultimately make-up the variables for the EI^2 (see Table I).

It should be noted that while there is clearly some overlap among the twelve economic principles not only in content but also in terms of cause and effect, they still serve to highlight the areas of economic and social success or deficiency among the Islamic countries. Each of the twelve identified Islamic economic principles (dimensions) and their various sub-categories have been given an equal weight in the Index. Each dimension (A-L) has it own unique set of sub-categories that are defined by a set of 113 proxies represented by measurable variables (see Appendix 1). It should also be noted that it is problematic to precisely capture each of the twelve dimensions of Islamic economic principles (and categories) with various variables serving as proxies. The proxies are not ideal indicators of the Islamic principles in question; in the future, for a refined IslamicityIndex we hope to develop new indicators or proxies that more closely represent each of these twelve dimensions. Moreover, there is a great deal of missing data in such indices, in areas such as, income distribution, almsgiving, taxation, and financial systems. Thus, we are compelled at this stage in our work to use a number of readily available proxies to capture the

DOI: 10.2202/1524-5861.1680

TABLE I: THE TWELVE DIMENSIONS (AREAS A-L) AND SUB-CATEGORIES OF ISLAMIC ECONOMICS

DIMENSION	ISLAMIC ECONOMIC CATEGORY	SUB-CATEGORY
Area A:	Economic Opportunity And Economic Freedom	*A) Gender Equality Indicators* *B) Other Non-discriminatory Indicators* *C) Labor Market Indicators* *D) Ease of Doing Business Indicators* *E) Economic Freedom Indicators* *F) Business and Market Freedom Indicator*
Area B:	Justice in all aspects of economic management i.e. property rights and the sanctity of contracts	*A) Property and Contract Rights*
Area C:	Better treatment of workers including job creation and equal access to employment	*A) Equal employment and Job Creation*
Area D:	Higher education expenditures relative to GDP including equal access to education	*A) Education Index Indicator* *B) Education Public Expenditures Indicator* *C) Education Equality Indicator* *D) Education Effectiveness Indicator*
Area E:	Poverty eradication, aid, and providing basic human needs, no hoarding of wealth i.e. economic equity, and less opulence in consumption	*A) Poverty Effectiveness Indicator* *B) Provision of Healthcare Indicators* *C) Alms/Charity Indicator*
Area F:	A more even distribution of wealth and income	*N/A*[43]
Area G:	Better social infrastructure and provision of social services through taxation and social welfare	*A) Fiscal Freedom Indicator* *B) Tax Level Indicator* *C) Taxation Level Indicator* *D) Freedom From Government Indicator*
Area H:	Higher savings and investment rates i.e. management of natural and depletable resources	*A) Quality of Economic Spending* *B) Savings Indicator*
Area I:	Higher moral standard, honesty and trust exhibited in the marketplace and in all economic interactions i.e. less corruption	*A) Transparency International Indicator* *B) Freedom from Corruption Indicator*
Area J:	Islamic Financial System I: no exploitive speculation and risk sharing as opposed to debt contracts i.e. a supportive financial system	*A) Investment Freedom + Financial Freedom* *B)Banking Sector Indicator* *C) Financial Market Risk Indicator* *D) Investment, Portfolio, & Capital Flows Indicator*
Area K:	Islamic Financial System II: financial practices that includes the abolition of interest	*A) Absence of Interest Indicator*
Area L:	Higher trade/GDP, higher foreign aid/GDP and higher degree of environmental preservation and vigilantly supervised markets i.e. overall state effectiveness in achieving economic prosperity -- general economic prosperity	*A) Macro Economic Indicator* *B) Economic Development Success Indicator* *C) Degree of Globalization & Trade Indicator* *D) General Prosperity Indicator*

[43] No reliable proxy could be used for Area F: "A more even distribution of wealth and income" as the data generally available to measure economic equity (for example, the Gini Coefficient) is sporadic and inconsistent.

manifestation of most of these principles. The proxies include conventional economic performance ranking by established sources, such as the World Bank Development Indicators, United Nations Human Development Index data, Heritage Foundation Economic Freedom Index, CPI's Transparency International data, and Freedom House data, to name but a few. It should be noted that despite using well-documented and well-established international indices as proxies to measure the performance of countries, an additional limitation to the methodology is that it assumes that these indices have indeed "measured" those twelve sub-areas correctly and with the best available data. For future refinement of the IslamicityIndex, we intend to also address the appropriate weights to be used in deriving the index. Our index should be seen as only the first step in a long journey requiring new proxies and more refined index construction.

The Proxies for the 12 EI^2 Economic Principles

The twelve dimensions of Islamic economic principles and their respective categories, and subcategories are represented through a series of 113 quantitative economic and social proxies derived from our economic and social database. See Appendix 1 for a summary of the Islamic economic categories, sub-categories and their proxy variables.

RESULTS OF THE EI^2 RANKING

The results of the Economic Islamicity EI^2 Index can be seen in Table II, ranking 208 countries according to the 12 Islamic economic principals mentioned earlier, which are represented through 113 different proxies. These very preliminary results would indicate that the so-called and self-declared Islamic countries have not by-and-large adhered to Islamic principles. The average ranking of Islamic countries is 133 for the group of 56 Islamic countries. Islamic countries as a whole did not fare very well in an index that measures the degree of economic Islamicity. The highest ranked Islamic country is Malaysia (ranked 33rd), followed in order by Kuwait, Kazakhstan, Brunei, Bahrain, United Arab Emirates, and Turkey (see Table II).

TABLE II
ECONOMIC ISLAMICITY EI^2 INDEX
(OIC countries are highlighted[44])

No. of Countries	COUNTRIES	EI^2 RANK
1	Ireland	1
2	Denmark	2
3	Luxembourg	3
4	Sweden	4
5	United Kingdom	4
6	New Zealand	6
7	Singapore	7
8	Finland	8
9	Norway	9
10	Belgium	10
11	Austria	11
12	Hong Kong, China	12
13	Canada	13
14	Australia	14
15	Netherlands	15
16	United States	15
17	France	17
18	Cyprus	18
19	Chile	19
20	Iceland	20
21	Japan	21
22	Estonia	22
23	Switzerland	23
24	Lithuania	24
25	Czech Republic	25
26	Germany	26
27	Israel	27
28	Spain	28
29	Portugal	29
30	Slovenia	30
31	Korea, Rep.	31
32	Latvia	32
33	Malaysia	33
34	Italy	34

[44] Only 56 of the 57 OIC countries are included in this data set. Significant data on the Palestinian Authority was not available and, as such, it was not included.

35	Slovak Republic	35
36	Thailand	36
37	Costa Rica	37
38	Bahamas, The	38
39	Barbados	39
40	Northern Mariana Islands	40
41	Hungary	41
42	Kuwait	42
43	Greece	43
44	Malta	44
45	Russian Federation	45
46	Cayman Islands	46
47	Armenia	47
48	Poland	48
49	Mexico	49
50	Croatia	50
51	Seychelles	51
52	Bosnia and Herzegovina	52
53	Panama	53
54	Kazakhstan	54
55	Brunei	55
56	Colombia	56
57	Monaco	57
58	Bulgaria	58
59	Dominica	59
60	Mauritius	60
61	Bahrain	61
62	China	62
63	Uruguay	63
64	Trinidad and Tobago	64
65	United Arab Emirates	64
66	Botswana	66
67	Brazil	67
68	Argentina	68
69	Netherlands Antilles	69
70	El Salvador	70
71	Turkey	71
72	Tunisia	72
73	Namibia	73
74	Jordan	74
75	Romania	75
76	New Caledonia	76

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77	San Marino	77
78	Peru	78
79	St. Lucia	79
80	Azerbaijan	80
81	Philippines	81
82	Oman	82
83	Kiribati	83
84	South Africa	84
85	Ukraine	84
86	Mongolia	86
87	Lebanon	87
88	Ghana	88
89	Puerto Rico	89
90	Moldova	90
91	Saudi Arabia	91
92	Turkmenistan	92
93	Jamaica	93
94	Belarus	94
95	Maldives	95
96	Kyrgyz Republic	96
97	India	97
98	Bolivia	98
99	Uganda	99
100	Aruba	100
101	Antigua and Barbuda	101
102	Georgia	102
103	St. Vincent and the Grenadines	103
104	Indonesia	104
105	Albania	105
106	Korea, Dem. Rep.	106
107	Sri Lanka	107
108	Macedonia, FYR	108
109	Guyana	109
110	Vietnam	110
111	Cambodia	111
112	Qatar	111

113	Cuba	113
114	Venezuela, RB	114
115	St. Kitts and Nevis	115
116	Ecuador	116
117	Serbia and Montenegro	117
118	Vanuatu	118
119	Honduras	119
120	Morocco	120
121	Fiji	121
122	Madagascar	122
123	Nicaragua	123
124	Faeroe Islands	124
125	Andorra	125
126	Macao, China	126
127	Guatemala	127
128	Dominican Republic	128
129	Egypt, Arab Rep.	128
130	Grenada	130
131	Algeria	131
132	Uzbekistan	132
133	Paraguay	133
134	Tonga	134
135	Belize	135
136	Swaziland	136
137	Cape Verde	137
138	Lesotho	138
139	Iran, Islamic Rep.	139
140	Palau	140
141	Bangladesh	141
142	Mozambique	142
143	Gabon	143
144	Tanzania	144
145	Pakistan	145
146	Ethiopia	146
147	Tajikistan	147
148	Iraq	148
149	Afghanistan	149
150	Solomon Islands	150
151	Gambia, The	151
152	Senegal	152
153	Virgin Islands (U.S.)	153
154	Kenya	154

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155	Djibouti	155
156	Suriname	156
157	Timor-Leste	157
158	Nepal	158
159	Bhutan	159
160	Nigeria	160
161	Rwanda	160
162	Samoa	162
163	Malawi	163
164	Mali	164
165	Channel Islands	165
166	Equatorial Guinea	166
167	Burkina Faso	167
168	Syrian Arab Republic	168
169	Sao Tome & Principe	169
170	Central African Rep	170
171	Guinea	171
172	Liechtenstein	172
173	Angola	173
174	Libya	174
175	Lao PDR	175
176	Benin	176
177	Myanmar	177
178	Burundi	178
179	Isle of Man	179
180	Yemen, Rep.	180
181	Cameroon	181
182	Mauritania	182
183	Zambia	183
184	Papua New Guinea	184
185	Micronesia, Fed. Sts.	185
186	Zimbabwe	186
187	Chad	187
188	Niger	188
189	West Bank and Gaza	189
190	Sudan	190
191	Congo, Rep.	191

192	Eritrea	191
193	Marshall Islands	193
194	Haiti	194
195	Togo	195
196	Liberia	196
197	Comoros	197
198	Congo, Dem. Rep.	198
199	Somalia	199
200	Sierra Leone	200
201	Cote d'Ivoire	201
202	Guinea-Bissau	202
203	French Polynesia	203
204	Guam	204
205	Bermuda	205
206	Mayotte	206
207	American Samoa	207
208	Greenland	208
	Average	**104.46**

The results of the Economic IslamicityIndex EI^2 of 208 countries where additionally broken into various sub-categories of countries to afford richer comparisons. Table III provides a summary of the EI^2 Index rank averages of all countries and the following subgroups: High, Upper-Middle, Lower-Middle, and Low Income Countries, OECD and Non-OECD Countries, OIC Countries, and Non-OECD Non-OIC Countries, and Persian Gulf Countries.

If the Islamic countries (OIC) are compared with OECD countries, the disparities are even more pronounced. For example, the average EI^2 rank amongst the OECD countries is 24 while (as mentioned above) it is 133 for the Islamic countries (See Table III). One could argue that a fairer comparison would be to non-OECD and Middle Income countries. However, even then the Islamic countries do not perform well as a group (see Table III). When compared with the 178 non-OECD countries (average rank 118), the 41 Upper-Middle Income countries (average rank 83), and the 123 Non-OECD Non-OIC countries (average rank 111), the Islamic countries group (OIC) performance is the worst, with an average rank of 133.

DOI: 10.2202/1524-5861.1680

TABLE III
EI^2 Ranking Averages Of All Countries And Various Sub-Groups
(High, Upper-Middle, Lower-Middle, and Low Income Countries, OECD Countries, Non-OECD Countries, Persian Gulf Countries, OIC Countries, and Non-OECD Non-OIC Countries)

SUB-GROUPS (# OF COUNTRIES)	AVERAGE EI^2 RANK
OECD[45] (30)	24.37
HIGH INCOME[46] (60)	60.27
UPPER MIDDLE INCOME[47] (41)	83.10
PERSIAN GULF (7)	93.71
NON-OECD NON-OIC (123)	110.81
LOWER MIDDLE INCOME[48] (55)	115.75
NON-OECD (178)	117.96
OIC (56)[49]	132.82
LOW INCOME[50] (54)	160.48

We are not unduly surprised by the fact that the OECD countries (and High Income countries) perform better in this ranking. The OECD countries average rank was 24 while the High Income countries average rank was 60 compared to the OIC average rank of 133. It is to be expected that the OECD countries would perform better in our index as Islamic economic principles are not only compatible with, but also promote, free markets and good economic governance (however, the issue of equity is somewhat more complex and has not been addressed in our index because of data limitations). Thus the highly industrialized countries high ranking in an Economic IslamicityIndex underscores that Islam indeed advocates that governments are duty-bound to provide good economic governance, policy and end results i.e. measurable economic performance equity, modest living and equal opportunity for all.

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[45] The Organization for Economic Cooperation and Development (OECD) is a unique forum made up essentially (but not exclusively) of the 31 most highly industrialized (rich) market democracies that produce around 60% of the world's goods and services. They include: Australia, Austria, Belgium, Canada, Chile, Czech, Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Republic of Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

[46] High Income countries are classified as US$10,066 as per the World Bank.

[47] Upper-Middle Income countries are classified as US$826-$10,065 as per the World Bank.

[48] Lower-Middle Income countries are classified as US$826-$10,065 as per the World Bank.

[49] Only 56 of the 57 OIC countries are included in this data set. Significant data on the Palestinian Authority was not available and, as such, it was not included.

[50] Low Income Countries are classified as US$825 or less as per the World Bank.

CONCLUSION

Our very preliminary results show that Islamic countries are not as Islamic, at least in the realm of economics, as one might expect; instead it appears that the most developed countries tend to place higher on this Islamic Economic Index. In fact, our finding reflect the harsh reality that although the total population of the 56 OIC countries is about 1.5 billion (approximately 22% of the world population) they currently generate only 6% of the world's GDP and 9% of global exports[51]. The average OIC per capita income was US$3,600 (in ppp, 2006)[52] while the average of the rest of the developing world was about US$5,600 (in ppp, 2006)[53]. To further illustrate the disappointing level of economic development in the Islamic world, we can compare the OIC GDP of US$3.2 trillion (2007) with that of the United States, which stood at US$13.9 trillion (2007)[54]. This essentially means that the entire Islamic world's GDP is approximately only 23% of that of the United States.

Given our results and other economic data, one can tentatively surmise that the lack of economic development can be attributed to age-old problems of developing countries, such as inefficient institutions, bad economic policies, corruption, and other traditional developing country diseases. It is, in fact, the shortcoming of the governments, not the religion, that account for the dismal economic development in the Middle East (even those blessed, or cursed, with oil). This is further reinforced by the content of the twelve Islamic economic principles represented by 113 economic proxies. If examined closely, all twelve Islamic economic principles promote good governance and good economic and social policies.

We must again emphasize that these are preliminary results that not only require data directly tied to Islamic economic principles but also require extensive refinement of the EI^2 as well. It is difficult at this time to draw more concrete conclusions other than to say that it is our belief that most self-declared Islamic countries have not adopted economic and financial policies that are in conformity with Islamic teachings.

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[51] OIC SESRIC data, 2007.
[52] In Purchasing Power Parity.
[53] Ibid.
[54] Ibid.

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APPENDIX 1:
SUMMARY OF ISLAMIC ECONOMIC CATEGORIES, SUB-CATEGORIES AND THEIR PROXY VARIABLES

Dimension	ECONOMIC PRINCIPLES	SUBCATEGORY	PROXY
A	**ECONOMIC OPPORTUNITY AND ECONOMIC FREEDOM**		
		A. Gender Equality Indicators	Proxy 1: United Nations Human Development Index Of Female Economic Activity Rate (% Ages 15 And Older) Proxy 2: United Nations Human Development Index Of Gender Empowerment Measure (GEM) Rank
		B. Other Non-discriminatory Indicators	Proxy 3: United Nations Human Development Index Of International Convention On The Elimination Of All Forms Of Racial Discrimination Proxy 4: United Nations Human Development Index Of The International Covenant On Economic, Social And Cultural Rights
		C. Labor Market Indicators	Proxy 5: Fraser Institute Economic Freedom Of The World Index Of Impact Of Minimum Wage Proxy 6: Fraser Institute Economic Freedom Of The World Index Of Hiring And Firing Practices Proxy 7: Fraser Institute Economic Freedom Of The World Index Of Share Of Labor Force Whose Wages Are Set By Centralized Collective Bargaining Proxy 8: Fraser Institute Economic Freedom Of The World Index Of Unemployment Benefits Proxy 9: Fraser Institute Economic Freedom Of The World Index Of Labor Freedom
		D. Ease of Doing Business Indicators	Proxy 10: World Bank Ease Of Doing Business Ranking Of Starting A Business Proxy 11: World Bank Ease Of Doing Business Ranking Of Dealing With Licenses Proxy 12: World Bank Ease Of Doing Business Ranking Of Employing Workers Proxy 13: World Bank Ease Of Doing Business Ranking Of Registering Property Proxy 14: World Bank Ease Of Doing Business Ranking Of Getting Credit Proxy 15: World Bank Ease Of Doing Business Ranking Of Protecting Investors Paying Taxes Proxy 16: World Bank Ease Of Doing Business Ranking Of Trading

			Across Borders Proxy 17: World Bank Ease Of Doing Business Ranking Of Enforcing Contracts Proxy 18: World Bank Ease Of Doing Business Ranking Of Closing A Business
		E. Economic Freedom Indicators	Proxy 19: Fraser Institute Economic Freedom Of The World Index Of Price Controls Proxy 20: Fraser Institute Economic Freedom Of The World Index Of Burden Of Regulation Proxy 21: Fraser Institute Economic Freedom Of The World Index Of Time With Government Bureaucracy Proxy 22: Fraser Institute Economic Freedom Of The World Index Of Starting A New Business Proxy 23: Fraser Institute Economic Freedom Of The World Index Of Irregular Payments
		F. Business and Market Freedom Indicator	Proxy 24: The Heritage Foundation Index Of Economic Freedom Of Business Freedom Proxy 25: The Heritage Foundation Index Of Economic Freedom Of Monetary Freedom Proxy 26: Fraser Institute Economic Freedom Of The World Index Of Protection Of Intellectual Property
B	**JUSTICE IN ALL ASPECTS OF ECONOMIC MANAGEMENT I.E. PROPERTY RIGHTS AND THE SANCTITY OF CONTRACTS**		
		A. Property and Contract Rights	Proxy 27: The Heritage Foundation Index Of Economic Freedom Of Property Rights
C	**BETTER TREATMENT OF WORKERS INCLUDING JOB CREATION AND EQUAL ACCESS TO EMPLOYMENT**		
		A. Equal employment and Job Creation	Proxy 28: World Bank Development Indicators Of Unemployment, Total (% Of Total Labor Force) Proxy 29: World Bank Development Indicators Of Labor Force, Female (% Of Total Labor Force)
D	**HIGHER EDUCATION EXPENDITURES RELATIVE TO GDP INCLUDING EQUAL ACCESS TO EDUCATION**		
		A. Education Index Indicator	Proxy 30: United Nations Human Development Index Of Education Index

		B. Education Public Expenditures Indicator	Proxy 31: United Nations Human Development Index Of Public Expenditure On Education (% Of GDP) Proxy 32: United Nations Human Development Index Of Public Expenditure On Education (As % Of Total Government Expenditure)
		C. Education Equality Indicator	Proxy 33: World Bank Development Indicators Of Ratio Of Girls To Boys In Primary And Secondary Education (%)
		D. Education Effectiveness Indicator	Proxy 34: World Bank Development Indicators Of Literacy Rate, Adult Total (% Of People Ages 15 And Above)
E	**POVERTY ERADICATION, AID, AND PROVIDING BASIC HUMAN NEEDS, NO HOARDING OF WEALTH I.E. ECONOMIC EQUITY, AND LESS OPULENCE IN CONSUMPTION**		
		A. Poverty Effectiveness Indicator	Proxy 35: World Bank Development Indicators Of Malnutrition Prevalence, Height For Age (% Of Children Under 5) + World Bank Development Indicators Of Malnutrition Prevalence, Weight For Age (% Of Children Under 5) Proxy 36: United Nations Human Development Index Of Life Expectancy At Birth (Years)
		B. Provision of Healthcare Indicators	Proxy 37: United Nations Human Development Index Of Health Expenditure Per Capita (PPP US$) Proxy 38: United Nations Human Development Index Of Physicians (Per 100,000 People) + World Bank Development Indicators Of Physicians (Per 100,000 People) Proxy 39: United Nations Human Development Index Of Public Expenditure On Health (% Of GDP) Proxy 40: United Nations Human Development Index Of Public Health Expenditure (% Of GDP) Proxy 41: United Nations Human Development Index Of Tuberculosis Cases - Prevalence (Per 100,000 People) Proxy 42: World Bank Development Indicators Of Health Expenditure Per Capita (Current US$) Proxy 43: World Bank Development Indicators Of Health Expenditure, Private (% Of GDP) Proxy 44: World Bank Development Indicators Of Health Expenditure, Public (% Of GDP) Proxy 45: World Bank Development Indicators Of Health Expenditure, Total (% Of GDP)
		C. Alms/Charity Indicator	Proxy 46: World Bank Development Indicators Of Aid (% Of Central Government Expenditures)

F	**A MORE EVEN DISTRIBUTION OF WEALTH AND INCOME**		
		N/A	No Reliable Proxy Available
G	**BETTER SOCIAL INFRASTRUCTURE AND PROVISION OF SOCIAL SERVICES THROUGH TAXATION AND SOCIAL WELFARE**		
		A. Fiscal Freedom Indicator	Proxy 47: The Heritage Foundation Index Of Economic Freedom Of Fiscal Freedom
		B. Tax Level Indicator	Proxy 48: Fraser Institute Economic Freedom Of The World Index Of Top Marginal Income Tax Rate (And Income Threshold At Which It Applies) Proxy 49: Fraser Institute Economic Freedom Of The World Index Of Top Marginal Income And Payroll Tax Rate (And Income Threshold At Which The Top Marginal Income-Tax Rate Applies) Proxy 50: World Bank Development Indicators Of Highest Marginal Tax Rate, Corporate Rate (%) Proxy 51: World Bank Development Indicators Of Highest Marginal Tax Rate, Individual (On Income Exceeding, US$) Proxy 52: World Bank Development Indicators Of Highest Marginal Tax Rate, Individual Rate (%) Proxy 53: World Bank Development Indicators Of Other Taxes (% Of Revenue) Proxy 54: World Bank Development Indicators Of Taxes On Income, Profits And Capital Gains (% Of Revenue) Proxy 55: World Bank Development Indicators Of Taxes On Income, Profits And Capital Gains (% Of Total Taxes) Proxy 56: World Bank Development Indicators Of Total Tax Payable By Businesses (% Of Gross Profit)
		C. Taxation Level Indicator	Proxy 57: World Bank Development Indicators Of Tax Revenue (% Of GDP) + World Bank Development Indicators Of Gross National Expenditure (% Of GDP)
		D. Freedom From Government Indicator	Proxy 58: The Heritage Foundation Index Of Economic Freedom Of Freedom From Government
H	**HIGHER SAVINGS AND INVESTMENT RATES I.E. MANAGEMENT OF NATURAL AND DEPLETABLE RESOURCES**		
		A. Quality of Economic Spending	Proxy 59: Fraser Institute Economic Freedom Of The World Index Of General Government Consumption Spending As A % Of Total Consumption

			Proxy 60: Fraser Institute Economic Freedom Of The World Index Of Government Enterprises And Investment As A % Of Total Investment Proxy 61: World Bank Development Indicators Of Adjusted Savings: Energy Depletion (% Of GNI) Proxy 62: World Bank Development Indicators Of Private Investment In Energy (Current US$) Proxy 63: World Bank Development Indicators Of Private Investment In Telecoms (Current US$) Proxy 64: World Bank Development Indicators Of Private Investment In Transport (Current US$) Proxy 65: World Bank Development Indicators Of Private Investment In Water And Sanitation (Current US$) Proxy 66: World Bank Development Indicators Of Subsidies And Other Transfers (% Of Expense) Proxy 67: World Bank Development Indicators Of Transfers And Subsidies As A % Of GDP Proxy 68: World Bank Development Indicators Of Subsidies And Other Transfers (Current LCU)
		B. Savings Indicator	Proxy 69: World Bank Development Indicators Of Adjusted Savings: Net National Savings (% Of GNI)
I	**HIGHER MORAL STANDARD, HONESTY AND TRUST EXHIBITED IN THE MARKETPLACE AND IN ALL ECONOMIC INTERACTIONS I.E. LESS CORRUPTION**		
		A. Transparency International Indicator	Proxy 70: Transparency International Corruption Perceptions Index (CPI)
		B. Freedom from Corruption Indicator	Proxy 71: Fraser Institute Economic Freedom Of The World Index Of Freedom From Corruption
J	**ISLAMIC FINANCIAL SYSTEM I: NO EXPLOITIVE SPECULATION AND RISK SHARING AS OPPOSED TO DEBT CONTRACTS I.E. A SUPPORTIVE FINANCIAL SYSTEM**		
		A. Investment Freedom + Financial Freedom	Proxy 72: The Heritage Foundation Index Of Economic Freedom Of Investment Freedom Index Proxy 73: The Heritage Foundation Index Of Economic Freedom Of Financial Freedom Index
		B. Banking Sector Indicator	Proxy 74: Fraser Institute Economic Freedom Of The World Index Of Freedom To Own Foreign Currency Bank Accounts Domestically And

			Abroad Proxy 75: Fraser Institute Economic Freedom Of The World Index Of Difference Between Official Exchange Rate And Black-Market Rate Proxy 76: Fraser Institute Economic Freedom Of The World Index Of Foreign Ownership/Investment Restrictions Proxy 77: Fraser Institute Economic Freedom Of The World Index Of Restrictions On Proxy 78: The Freedom Of Citizens To Engage In Capital Market Exchange With Foreigners Proxy 79: Fraser Institute Economic Freedom Of The World Index Of Ownership of banks Proxy 80: Fraser Institute Economic Freedom Of The World Index Of Competition Proxy 81: Fraser Institute Economic Freedom Of The World Index Of Extension of credit Proxy 82: Fraser Institute Economic Freedom Of The World Index Of Interest Rate Controls/Negative Real Interest Rates Proxy 83: World Bank Development Indicators Of Financial Information Infrastructure Index Proxy 84: World Bank Development Indicators Recurring Earning Power, % Proxy 85: World Bank Development Indicators Of Bank Capital To Assets (%)
		C. Financial Market Risk Indicator	Proxy 86: The PRS Group International Country Risk Guide (ICRG) of Country Financial Market Risk Index
		D. Investment, Portfolio, & Capital Flows Indicator	Proxy 87: World Bank Development Indicators Of Domestic Credit To Private Sector (% Of GDP) Proxy 88: World Bank Development Indicators Of Foreign Direct Investment, Net Inflows (% Of GDP) Proxy 89: World Bank Development Indicators Of Foreign Direct Investment, Net Outflows (% Of GDP) Proxy 90: World Bank Development Indicators Of Gross Private Capital Flows (% Of GDP) Proxy 91: World Bank Development Indicators Of Portfolio Investment, Excluding LCFAR (BOP, Current US$) Proxy 92: World Bank Development Indicators Of Portfolio Investment, Bonds (PPG + PNG) (NFL, Current US$) Proxy 93: World Bank Development Indicators Of Portfolio investment, Equity (DRS, Current US$) Proxy 94: World Bank Development Indicators Of Stocks Traded, Total Value (% Of GDP)
K	**ISLAMIC FINANCIAL SYSTEM II:**		

	FINANCIAL PRACTICES THAT INCLUDES THE ABOLITION OF INTEREST		
		A. Absence of Interest Indicator	Proxy 95: Bankscope Data On Non-Interest Income/Assets, (%)
L	**HIGHER TRADE/GDP, HIGHER FOREIGN AID/GDP AND HIGHER DEGREE OF ENVIRONMENTAL PRESERVATION AND VIGILANTLY SUPERVISED MARKETS I.E. OVERALL STATE EFFECTIVENESS IN ACHIEVING ECONOMIC PROSPERITY -- GENERAL ECONOMIC PROSPERITY**		
		A. Macro Economic Indicator	Proxy 96: Fraser Institute Economic Freedom Of The World Index Of Money Growth Proxy 97: Fraser Institute Economic Freedom Of The World Index Of Standard Deviation Of Inflation Proxy 98: Fraser Institute Economic Freedom Of The World Index Of Inflation Rate (Most Recent Year) Proxy 99: World Bank Development Indicators Of Total Debt Service (% Of Exports Of Goods, Services And Income) Proxy 100: World Bank Development Indicators Of Multilateral Debt Service (% Of Public And Publicly Guaranteed Debt Service) Proxy 101: World Bank Development Indicators Of Long-Term Debt (DOD, Current US$)
		B. Economic Development Success Indicator	Proxy 102: United Nations Human Development Index (HDI)
		C. Degree of Globalization & Trade Indicator	Proxy 103: Fraser Institute Economic Freedom Of The World Index Of Taxes On International Trade Proxy 104: Fraser Institute Economic Freedom Of The World Index Of Mean Tariff Rate Proxy 105: Fraser Institute Economic Freedom Of The World Index Of Standard Deviation Of Tariff Rates Proxy 106: Fraser Institute Economic Freedom Of The World Index Of Non-Tariff Trade Barriers Proxy 107: Fraser Institute Economic Freedom Of The World Index Of Compliance cost of importing and exporting Proxy 108: Fraser Institute Economic Freedom Of The World Index Of Size Of The Trade Sector Relative To Expected Proxy 109: World Bank Development Indicators Of Patent Applications, Nonresidents Proxy 110: World Bank Development Indicators Of Patent Applications, Residents
			Proxy 111: World Bank Development Indicators Of Taxes On International Trade (% Of Revenue)
		D. General Prosperity Indicator	Proxy 112: World Bank Development Indicators Of GDP (PPP) Growth (Annual %) From 1994-2005 Proxy 113: GDP Per Capita PPP (In $)

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