Measuring Deprivation from *Maqāşid* al-Sharīʿah Dimensions in OIC Countries: Ranking and Policy Focus⁽¹⁾

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Abstract. While economists have established the link between values and economy, it has been ignored in popular measures of socio-economic development. The paper proposes a complementary values-based index to existing value-neutral indices on socio-economic development and formulates a 3-stage policy to reduce deprivation from maqāşid al-Sharī'ah (the objectives of Islamic law) dimensions in OIC (Organization of Islamic Cooperation) countries by setting up absolute and relative policy targets. It explores the policy focus for *magasid* al-Sharī ah (MS) dimensions by ranking OIC countries using recent World Values Survey (WVS wave 6). The paper contributes by extending the frontiers of knowledge in multiple ways. It is the first to propose the use of an MS index from a policy perspective. It outlines selection criteria for choosing indicators within Sharī'ah perspective. It constructs a Maqāsid al-Shari ah Deprivation Perception Index (MSDPI), using the Alkire-Foster dual-cut-off counting methodology, which is easily replicable using data from a single publicly available authentic source. The results show not only the ranking of countries but also points out the dimensions in which improvements are required for comprehensive development by setting absolute and relative targets for policy intervention.

Keywords: Maqāșid al-Sharīʿah, Multidimensional Poverty, Welfare, Policy.

JEL Classification: D06, O11.

KAUJIE Classification: B5, H47, N5.

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1. Introduction

Limitations with unidimensional measures of wellbeing have led to the construction of a number of multidimensional indices. Among these, the Human Development Index (HDI) and Multidimensional Poverty Index (MPI) have received considerable attention, assessment, and criticism. However, both of these indices are value-neutral in the sense that they do not cover violations or deprivations in moral and ethical dimensions. These considerations are regarded as a part of human rights. In contrast to this, many leading economists and scholars have shown a positive link between religious values and the economy (Weber, 2010), economic growth and religious beliefs (Barro & McCleary, 2003), and religious values and behavior in economic development (Jacob & Osang, 2010), among others. Given the foregoing compelling evidence of strong links between the economy and values, it is hard to understand why the popular indices of well-being evaluation have ignored this aspect.

Islam, which is a continuation and completion of the monotheistic religions, provides a law of dos and don'ts called Sharī'ah. Scholars who examine Shari ah rules observe that essentially all dos and don'ts that are in Sharī'ah are for the protection and continuity of human society. They find that these rules are there for the protection of five major aspects or dimensions: protection of faith, life, intellect, posterity, and property. Protecting these five dimensions is tantamount to satisfying the spiritual as well as material needs which in-turn lead to a balanced (moderate) society. Any discrepancy in satisfying these two needs within the Sharī'ah framework leads to a degradation of that society. In this paper, we develop a criterion to select indicators from a Sharī'ah perspective.

It should be clear at the outset that we attempt to make the multidimensional index as simple as possible. The popularity, practicality, and simplicity of measures like GDP per capita, the Human Development Index, and the Multidimensional Poverty Index is reflected in their widespread use in policy discussions. Constructing a complex index using a number of indicators and various data sources would lead to vague policy prescriptions. Moreover, these types of indices are not easily replicable. The second contribution and emphasis of this paper is to construct an index suited to Muslim countries in particular, and non-Muslims countries in general. There have been many good attempts to construct MS based indices but the authors of these indices try to generalize them so that their indices can fully cover non-Muslim countries as well. This might be good for comparison but not useful for policy prescription. We argue that Muslim countries have some special features, cultures, and values that are completely alien to non-Muslim countries. However, we can apply our criteria to evaluate non-Muslim countries from our perspective.

The paper is divided into six sections. After the introduction in section 1, section 2 highlights the meaning, importance, and development of *maqāşid* al-Sharī'ah. Section 3 reviews the relevant literature while section 4 discusses the data sources and methodology of constructing the index and the steps involved in obtaining the policy scores. In section 5 we discuss the results and their implications, and the last section concludes the paper with policy implications.

2. The Concept of Maqāșid Al-Sharīʿah

Maqāşid al-Sharī ah means the goals and ends of Sharī ah to achieve *maşlaḥah*, the public interest. According to al-Ghazali, as quoted in Masud (1977), *maşlaḥah* is defined as follows:

In its essential meaning (*aşlan*) it [*maşlaḥah*] is an expression for seeking something useful (*manfaʿah*) or removing something harmful (*maqlarrah*).... What we mean by *maşlaḥah* is the preservation of the *maqsūd* (objective) of the law (*shar*) which consists of five things: preservation of religion, of life, of reason, of descendants and of property. What assures the preservation of these five principles (usull) is *maşlaḥah* and whatever fails to preserve them is *mafsadah* and its removal is *maşlaḥah*. (pp. 152-153)

According to Masud (1977), Shatibi divides the *maqāsid* into *darūrī* (necessary), *hājī* (complementary), and *taḥsīnī* (commendable) categories. The *darūrī* category consists of protection of the following five, as also mentioned by al-Ghazali: *dīn* (religion), *nafs* (self), *nasl* (progeny), *māl* (property) and *`aql* (intellect). Where protection (preservation)

of these five objectives is divided into positive and preventive manners of protection. The positive manner of protection includes *ibādāt* (rituals, worship), *ādāt* (habits, customs) and *muʿāmalāt* (transactions) whereas the preventive manner of protection includes *jināyāt* (penalties) like *qiṣās* (retaliation) and *diyāt* (blood money) for the protection of *nafs*, and *hadd* (punishment, say, for drinking intoxicants) for the protection of *'aql*.

The prominent classical scholars in this field who formally developed the theory of *maqāşid* are: al-Juwayni (d. 478/1085), al-Ghazali (d. 505/1111), and al-Shatibi (d. 790/1388), among others (for detail see, Kamali, 1999). Earlier, Imam Malik (d. 179/796) and Imam Abu Hanifah (d. 150/767) also discussed these concepts but indirectly through *maşlaḥah mursalah*⁽²⁾ and *istiḥsān*⁽³⁾ respectively (Siddiqi, 2014).

However, some classical, as well as contemporary scholars, have proposed extensions to the classical list of *maqāşid*. For example, addition of protection of honor (*al-'ird*) by Shihab al-Din al-Qarafi (d. 684/1285), fulfillment of contracts, preservation of the ties of kinship, honoring the rights of one's neighbor, etc. by Ibn Taymiyyah (d. 728/1328), social welfare and support (*al-takāful*), freedom, human dignity and human fraternity by Yusuf al-Qaradawi (Kamali, 1999).

Kamali (1999) highlights the importance of *maqāşid* as follows:

At a time when some of the important doctrines of $usvar}al_diffiqh$ such as general consensus (ijma), analogical reasoning (qivas) and even ijtihad seem to be burdened with difficult conditions, . . . , the maqāsid have become the focus of attention as it tends to provide a ready and convenient access to the Sharī'ah. (pp.18-19)

Nyazee (2000) argues that *maşlaḥah* is the most important and comprehensive instrument for *ijtihād* in modern times. Hence *maşlaḥah* and *maqāṣid* al-Sharī ah need to be understood clearly so that they can be applied conveniently to new situations. One such situation is the need to assess the socioeconomic condition of Muslim countries from a Sharī ah perspective. This need can be fulfilled by using positive and preventive means of protection of the five *maqāşid* in order to achieve *maşlaḥah*. In the next section, we review some of the attempts in this direction.

3. Brief Literature Review

There have been many good attempts to construct an index with religious and ethical perspective of socioeconomic development in Muslim countries. For example, Dar (2004) develops an Ethics-Augmented Human Development Index, Anto (2009) constructs the Islamic Human Development Index, and Rehman and Askari (2010) introduce the Islamicity Index. However, these indices have a strong correlation with existing popular value-neutral indices and hence ranking of countries on the basis of these indices is not significantly different.

Relatively recently, Muslim scholars have started theorizing and operationalizing interactions between Islamic values and socio-economic development on the basis of *maqāsid* al-Sharī'ah. Chapra (2008) has been a leading theoretical work in this area. This was followed by a number of studies on the subject. Recently, a series of seminars were also held in Saudi Arabia, Indonesia, and Malaysia (referred to hereafter as Round I, Round II, and Round III respectively) conducted by the Islamic Research and Training Institute (IRTI) of the Islamic Development Bank (IDB) on the construction of the magāsid al-Sharī'ah Index (MSI). In this series of seminars, 41 studies were presented. Below we review some of these empirical studies that are directly relevant to our study.

These studies (seminar papers, volume 1, April 2014; volume 2, June 2014 and volume 3, June 2015; the latter two of these volumes have been published as: Ali, Ismail, & Tohirin, 2017; Ismail, Ali, & Hameed, 2017) including earlier studies can be categorized in the following five groups:

 Studies focusing explicitly on constructing MSI theoretically and empirically (Round I: Amirud-Din; Bedoui; Ghazal & Zulkhibri; Mili, M.; Kasri and Ahmed; Fuad & Jaya; Ali & Hasan. Round II: Oladapo & Surajudeen; Ascarya & Sukmana; Round III: Nizam & Larbani; Ramli, Ismail, & Tasrif).

⁽²⁾ A *maşlahah* not explicitly supported by the text (Masud, 1977, p. 345)

⁽³⁾ To decide in favor of something which is considered good by the jurist against the conclusion that may have been reached by analogy (Masud, 1977, p. 344)

- Studies suggesting a methodology of constructing MSI without empirical analysis (Round I: Khan, F.; Salman & Dzolkarnaini; Zaman et al.; Esen & Esen; Larbani & Nizam; Aydin, N.; Rasool & Salleh. Round II: Shaikh, S.; Hapsari & Herianingrum; Khan & Bahari; Nizam & Larbani; Ali & Kishwar; Ankhika, Y.; Qureshi & Azid; Mohammad, M; Beik & Arsyianti; Sholihin, M.; Cokrohadisumarto, W.; Khamis et al.; Kusuma, K.; Wibowo, K.; Round III: Qureshi & Azid; Sukmana & Rahmawati; Jan et al.)
- Studies that construct an index based on Islamic teachings as a whole without explicitly constructing an MSI (Dar, 2004; Anto, 2009; Rehman & Askari, 2010; Round I: Mukhtar, Nihal, Rauf, Wasti, & Qureshi, Fuad & Jaya)
- Studies which develop only one dimension of MS as an index (Round II: Yusof, S. Round III: Khan & Bahari)
- 5) Studies that develop MSI for Islamic banking and finance (Round II: Reni, Mukhlis, and Cholisni; Ngalim & Ismail; Nugrohowati & Tohirin)

Two approaches stand out clearly from this work: derivation of MSI from existing national level indices, and construction of MSI from household/ individual level surveys. The former is better suited for cross-country comparison and the latter is more useful for policy targeting since it is not practical to suggest a common policy on the basis of crosscountry comparison whereas it is very useful to recommend a country-specific policy on the basis of national level surveys. However, none of these studies, to the best of our knowledge, provides a framework for policy targeting. The present study is an attempt to fill this important gap.

In what follows, we briefly discuss some of the studies relevant to our work and point out their weaknesses, and highlight our contribution. Since indicators are inputs for the construction of an index (output) using a certain method, an index is as good as the indicators, while the method contributes to technical soundness of an index. Therefore, we evaluate only the indicators used in different studies. Since the objectives of laws are to provide a minimum level of protection, it is relatively easier to measure and compare progress towards achievement of that minimum than measuring and comparing progress across societies through variables that do not have an upper bound. Therefore, we intend to gauge the progress in terms of attainment of minimum threshold for each *maqsad* (objective) of Sharī'ah. In the following review, therefore, we italicize those indicators which we think are among the basic requirements of Sharī'ah. Comments are made after giving the list of indicators used by all studies reviewed here.

Amir-uddin (Round I) takes the following indicators for the five dimensions. He divides the indicators into three levels – (a) necessity, (b) complementary, and (c) embellishment: Faith protection (a. *Importance of religion in life*, b. *şalāh, fasting, ḥajj, zakāh*, c. *şadaqah*); Life protection (a. average life expectancy, b. freedom from malnutrition, c. life satisfaction); Lineage protection (a. child mortality rate, b. homicide rate, c. environmental safety); Intellect protecttion (a. primary education, b. secondary education, c. tertiary education); and Property protection (a. \$1.25 poverty line, b. \$2 poverty line, c. property security).

Eddine and Bedoui (Round I) choose the following indicators for the five dimensions: Faith protection (Absence of corruption, civil justice, multidimensional poverty, environment); Life protection (Dignity and human rights, life security, fundamental rights, mental peace and happiness, crime and anomie); Lineage protection (Health, education, shelter, family); Intellect protection (Freedom of thought and expression, creativity, High quality of education); and Property protection (Freedom of enterprise, employment and selfemployment opportunities, GDP per capita).

Ghazal and Zulkhibri (Round I) select the following indicators: Faith protection (*percentage of total expenditure in religious education*, overall ranking in the corruption index); Life protection (universal human rights index, incidence of crime); Lineage protection (*divorce rate*); Intellect protection (primary enrolment rate, secondary enrolment rate); and Property protection (international property rights index).

Mili (Round I) considers the following indicators: Faith protection (*percentage of total expenditure in religious education*, governmental favoritism of religious index, government regulation of religious index); Life protection (health care, human rights and crime indices, poverty gap); Lineage protection (*divorce rate*, child mortality rate); Intellect protecttion (primary enrollment rate, secondary enrollment rate, public spending on education as a percentage of GDP); and Property protection (international property rights index, inclusive wealth index).

Kasri and Ahmed (Round I) choose the following indicators: Faith protection (*prayers and fasting*, *Islamic/Qur'ānic studies*, *charity*, *hajj*); Life protecttion (Health consumption, access to healthcare, health awareness, sickness frequency); Lineage protection (Social: better future for family, harmony, *un-Islamic or anti-social activities*, participation in community activities); Intellect protection (Education: access to school, school attendance, basic knowledge from school, academic/school achievement); and Property protection (Economy: skill, employability, income, purchasing power, savings).

Ali and Hasan (Round I) select the following indicators: Faith protection (attendance in religious services, frequency in prayer, religious, non-religious or atheist person, belief in God); Life protection (freedom of choice in life, preferred not to go out at night, victim of crime last year, immediate family victim of crime last year, a war involving my country, a terrorist attack, a civil war, gone without enough food to eat, felt unsafe from crime in your home); Lineage protection (Justifiable: homosexuality, prostitution, abortion, divorce, sex before marriage, parents beating children); Intellect protection (not being able to give my children a good education, highest level of education, alcohol consumption in streets, drug sale in streets); and Property protection (satisfaction with financial situation, occurrence of robberies, worry about losing job or not finding a job, income group).

Ascarya and Sukmana (Round II) use the following indicators: Faith protection (fulfill socioeconomic and political obligations, patience, mutual care, prudence, *justice, equity, tolerance, spirit-moral uplift, thriftiness*); Life protection (dignity, mental peace-happiness, employment and self-employment opportunities, family-social solidarity, life security, trust, self-respect, social equality); Lineage protection (family integrity, minimum crime-anomie, healthy environment, *moral-worldly education*, improvement in technical management, need-fulfillment, *intellectual moral development, proper upbringing*); Intellect protection (governance, quality affordable education, finance, education, library research facility, reward on creative work, research); and Property protection (*honesty*, *removal of poverty*, income-wealth, mutual trust, honor, saving-investment, property, optimum development).

Nizam and Larbani (Round III) identify the following indicators: Faith protection (% of people who: believe in Allah and His messenger, heaven, hell, angels, predestination, performed hajj, say they are religious, pay zakāh, pray 5 times a day, and fast during Ramadan, religious tolerance, universal brotherhood (tolerance for immigrants), discrimination and violence against minorities, preserving fundamental rights, order and security, regulatory enforcement, civil justice, criminal justice); Life protection (personal rights, personal freedom and choice, death by suicide, hospital beds per 10000 population, natural growth rate of population, death by violence, healthy life, personal safety, smoking prevalence rate, HIV prevalence rate, tuberculosis, safe sanitation, health expenditure % of GDP, clean air, physicians per 10000 population, clean water, global peace index); Lineage protection (immunization, fertility rate, crude death rate, life expectancy rate, refugee population, nutrition and basic medical care, child mortality, dead kids per women, tolerance for homosexuality, respect for women, modern slavery, human trafficking and child marriages); Intellect protection (adult literacy rate, primary school enrolment, secondary school enrolment, gender parity in education, number of documents published, citable documents, citations, self-citations, citations per document, access to information and communication, Global Innovation Index 2014, number of property rights, patents applications, per capita wine consumption, vinevard acreage); and Property protection (shelter, sufficient to drink, sufficient food, percentage of population: giving money to charity, who have volunteered time, who have helped a stranger. Good governance, free from corruption. Islamic finance country index. employment, labor freedom, unemployment (%), biodiversity, renewable water resources, renewable energy, agriculture, income distribution (Gini coefficient), genuine savings, GDP per capita/CO2 emissions per capita, ease of doing business index, access to electricity, broadband subscribers/100 population, fiscal freedom, business freedom, monetary freedom, financial freedom, investment, trade freedom, public debt as a % of GDP, FDI inflow, banks capital to assets ratio, deposit interest rate, lending rate)

Ramli, et al. (Round III): Faith protection (corruption, crimes); Life protection (socio-political freedom, safe and healthy environment); Lineage protection (child mortality, life expectancy, fertility rate); Intellect protection (expected years of schooling for schooling age children, mean years of schooling for adults aged 25 and older); and Property protection (GNI per capita adjusted for PPP)

Dividing the indicators into three levels is a good contribution by Amiruddin. However, most of the indicators in this study and other studies are valueneutral except for faith protection in a few studies. Hence these indices have a positive correlation with existing popular value-neutral indices like the HDI and MPI. In this sense, these indices supplement rather than complement existing indices. We outline a selection criterion on the basis of Sharī'ah for choosing indicators in the methodology section to rectify this weakness. Moreover, some of these studies use a large number of indicators for each dimension (for example, Nizam & Larbani). Similarly, some studies use a large number of data sources (for example, Eddine & Bedoui; Nizam & Larbani). Using a large number of indicators and/or a large number of data sources makes it difficult, if not impossible to replicate or update that index. Moreover, an index made up of a large number of indicators is not useful for policy purposes. Very few studies use survey data (for example, Mukhtar et al.: Kasri & Ahmed: Fuad & Java; Ali & Hasan; Oladano & Surajudeen). Survey data, particularly a representative sample, is more appropriate for policy purposes. Our study attempts to construct a simple (few indicators), easily replicable (single online data source), Sharī'ah-based (indicators are selected using a criterion based on Sharī'ah), and policy-oriented (based on nationally representative sample) index.

4. Data and Methodology

4.1 Data and Variable Description

The latest World Values Survey (WVS) for 2014 is used to construct the *Maqāşid* al-Sharī'ah Deprivation Perception Index (MSDPI) using the Alkire-Foster (AF) dual-cut-off methodology⁽⁴⁾. This methodology is now very common in multidimensional measurement of well-being and its detail can be found in Alkire and Foster (2011). The counting approach to multidimensional poverty has also been recently recommended in the Atkinson's Report of the Commission on Global Poverty (2017), titled 'Monitoring Global Poverty', by the World Bank.

The indicators for each MS dimension are selected from the WVS questionnaire in the light of axioms developed in Ali and Hasan (2014). However, indicators for some axioms like spending on *zakāh* and *şadaqāt*, *ḥalāl* earning, and inheritance could not be found in the WVS. The questions (variables) for each dimension are given in Table 1 with possible policy options.

Most of the studies on the MS index use some type of factor/principal components analysis to decide on the indicators for each dimension. We argue that this mechanical way of selecting indicators is not appropriate in this case as there is a clear guidance from Islamic laws and principles on choosing most of the indicators for *maqāṣid* al-Sharīʿah.

Table (1) summarizes the information given in WVS 2010-2014 on indicators used for each dimension of MS (protection of faith, life, intellect, posterity, and property). The indicators are selected in the light of a theoretically plausible link between an indicator and the dimension concerned. The policy options are proposed to address deprivation in each dimension.

⁽⁴⁾ The detail of data collection and sampling procedure is given on the website: worldvaluessurvey.org.

Dimension	Variable code	Indicator hint (see full question text in WVS 2010- 2014)	Policy options			
	V145	attendance in religious services	Religious education			
	V146	frequency in prayer				
FAITH	V147	religious, non-religious or atheist person				
	V148	belief in God				
	V55	freedom of choice in life	Interior and foreign			
	V177	preferred not to go out at nightpolices; pro-poorvictim of crime last yearpolicy; education				
	V179					
	V180	immediate family victim of crime last year				
LIFE	V183	worries: a war involving my country				
	V184	worries: a terrorist attack				
	V185	worries: a civil war				
	V188	gone without enough food to eat	1			
	V189	felt unsafe from crime in your home	_			
	V182	not being able to give my children a good education	Education policy;			
	V248	highest level of education	Employment policy;			
INTELLECT	V172	alcohol consumption in streets	Interior security policy			
	V175	drug sale in streets	_			
	V203	Homosexuality: justifiable	Religious and moral			
	V203A	Prostitution	education policy			
POSTERITY	V204	Abortion	-			
	V206	sex before marriage	-			
	V209	parents beating children	_			
	V59	satisfaction with financial situation	Employment policy;			
PROPERTY	V171	occurrence of robberies	Security policy			
ΓΚΟΡΕΚΙΥ	V181	worry about losing job or not finding a job	-			
	V239	which income group you belong to	-			

Table (1) Maqāşid al-Sharīʿah (MS) dimensions with survey variables and indicators

4.2 The Rationale for Selected Indicators

The rationale for selecting the indicators for each dimension is given below in detail. The general rationale for most of the indicators is covered by the following verse: Verily, Allah orders justice and good conduct and giving to relatives and He forbids immorality and bad conduct and transgression. He admonishes you that perhaps you will be reminded. (Qur'ān, 16:90)

Some of the indicators fall into the category of positive protection while others in the category of preventive protection. We can divide the dos and don'ts of Sharī'ah into four levels: At level 1 the acts are divinely punishable like shirk, ribā, suicide. Level 2 includes those acts which are legally punishable under *hudūd* laws (punishments ordained by Allah) like theft, murder, adultery. Level 3 consists of dos of religious goodness like prayer, fasting, zakāh, hajj. The last level comprises of dos of moral goodness like goodness to parents, kindness, generosity, discipline, cleanliness, good governance. Roughly speaking, the first two levels fall into the category of preventive protection whereas the last two levels fall into the category of positive protection. Ideally, there should be at least one indicator for each dimension from the four levels.

It should be stated at the outset that some of the indicators are not directly relevant to Muslim countries but they are included in order to evaluate moral and ethical decline in our society as well as to compare the level of morality of our society with that of a non-Muslim society from a Sharī'ah perspective for the purpose of, for example, immigration or for sending our children for higher education to that society. In most of the cases in Muslim countries, such indicators do not take a significant proportion.

a) Indicators of faith protection:

Belief in God (Allah) is the first article of faith as mentioned in the famous hadith of *Jibrael* (peace be upon him). Similarly, prayer (*salāh*) is one of the pillars of Islam and offering prayers five times in congregation in a mosque is compulsory for males. The importance of belief in Allah and *salāh* is evident from the following verse of the Qur'ān and the narration of the Holy Prophet (may the blessings and peace of Allah be upon him):

Verily I am Allah, there is no other god besides Me, so worship Me alone and establish the salah in order to remember Me. (Qur'an, 20:14)

Between a man and disbelief is his abandoning of *salāh*. (al-Naisabouri, 1991, 1:88, *ḥadīth* no. 82)

There is overwhelming evidence in support of the selected indicators. However, for the sake of brevity, the above evidence provides sufficient rationale for selecting the four indicators for faith protection.

b) Indicators for life protection:

The sanctity of life is very high in Islam. If someone kills a person, Islam considers it as a killing of mankind.

... If anyone slew a person – unless it be for murder or for spreading mischief in the land – it would be as if he slew the whole people: and if anyone saved a life it would be as if he saved the life of the whole people (Qur' $\bar{a}n$, 5:32)

Wars and crimes are considered as mischief in the land, and hence, life-threatening. Seven out of nine indicators for this dimension are related to war and crime or fear of crime. The remaining two are related to freedom and hunger. Islam categorically renounces oppression and injustice and values freedom and feeding the poor.

On the authority of Ali (may Allah be pleased with him), who said: The Messenger of Allah (may the blessings and peace of Allah be upon him) said: Beware of the supplication of the oppressed, for he only asks Allah for his right. Truly, Allah does not prevent someone's right from reaching him. (al-Bayhaqi, 2003, 9:533, *hadīth* no. 7061)

c) Indicators for intellect protection:

Islam emphasizes learning and acquisition of knowledge, and forbids activities that are harmful to intellect. The indicators of education fulfill the learning and knowledge dimension (positive protection) whereas indicators of intoxication cover the intellect-damaging activities (preventive protection) and therefore they are strictly forbidden in the Qur'ān and the Sunnah. The Qur'ān categorically forbids the drinking of alcohol in the following verses:

O ye who believe! Intoxicants and gambling, sacrificing to stones, and (divination by) arrows, are an abomination, of Satan's handiwork: eschew such (abomination), that ye may prosper. (Qur'ān, 5:90)

Similarly, the next verse states the social and spiritual harms of drinking and gambling:

Satan's plan is (but) to excite enmity and hatred between you, with intoxicants and gambling, and hinder you from the remembrance of Allah, and from prayer: will ye not then abstain? (Qur'ān, 5:91)

d) Indicators for posterity protection:

 $Hay\bar{a}'$ (decency and modesty) is the cornerstone of Islamic morality and a building block of an Islamic society and family. The Prophet (may the blessings and peace of Allah be upon him) says:

If you have lost *hayā*' then do whatever you feel like. (al-Bukhari, 1422H, 4:177, *hadīth* no. 3484)

 $Hay\bar{a}'$ is a branch of $\bar{i}m\bar{a}n$ and it protects an individual from doing wrong. In another narration the Holy Prophet (may the blessings and peace of Allah be upon him) said:

Every religion has a distinct moral call and the moral call of Islam is $hay\bar{a}$ '. (Ibn Majah, 2009, 5:276-277, *hadīth* no. 4181)

Abdullah Yusuf Ali, the renowned translator of the Holy Qur'ān, comments on the seriousness of the effects of sex offenses (opposite of *hayā*') on spiritual life (Ali, 1990):

It must not be thought that the checking of sex offences or of minor improprieties that relate to sex or privacy, are matters that do not affect spiritual life in the highest degree. These matters are intimately connected with spiritual teaching such as Allah has sent down in this *sūrah* [*sūrah* al-nūr]. The emphasis is on "We": these things are not mere matters of convenience, but Allah has ordained them for our observance in life. (p. 1002)

Unfortunately, the twin-evil of drinking and sex is a norm and not an exception in a modern western society and since Muslim countries are being westernized gradually, it is important to constantly monitor our society in order to eradicate any factors that lead to the twin-evil. More importantly, drinking, illegal sex, and murder are explicitly covered in *hudūd* laws (punishments ordained by Allah) to achieve the Sharī'ah objectives of protection of intellect, posterity, and life respectively.

On the authority of Ali b. Abi Talib (may Allah be pleased with him) who said: The one who utters an obscenity and the one who spreads it [in society] are equal in sin. (al-Bukhari, 1998, p. 169, *hadīth* no. 324)

Therefore, protection of $hay\bar{a}$ ' boils down to the protection of posterity. The indicators asking about whether homosexuality, sex outside marriage, and prostitution are justifiable show the extent of $hay\bar{a}$ ' in

the society. Divorce also affects a family and it is disliked by Allah:

The most hated of the permissible things before Allah is divorce. (al-Bayhaqi, 2003, 7:527, *hadīth* no. 14894)

Similarly, it is prohibited to beat children in a way that harms or injures them. Ignoring these indicators in calculating minimum protection for posterity would lead to a gross simplification of this objective and hence result in a serious defect in the MS index.

e) Indicators for property protection:

Islam enjoins lawful earning and discourages begging, and forbids earning through illegal means and usurping property. The *fiqh* principle of *akl al-māl bi al-bāțil* clearly bans all such activities that involve devouring wealth through exploitation and fraud. This principle is based on the following verse (Nyazee, 2000):

O ye who believe! Eat not up your property among yourselves in vanities: But let there be amongst you traffic and trade by mutual good-will: Nor kill (or destroy) yourselves: for verily Allah hath been to you Most Merciful! (Qur'ān, 4:29)

Moreover, theft and robbery are covered in *hudūd* laws and their punishment is ordained by Allah in the following verse:

As to the thief, male or female, cut off his or her hands: a retribution for their deed and exemplary punishment from Allah, and Allah is Exalted in Power, Full of Wisdom. (Qur'ān, 5:38)

The following narrations strongly condemn robberies and thefts (illegal acquisition of wealth).

On the authority of Sa'id bin Zayd (may Allah be pleased with him), who said: The Messenger of Allah (may the blessings and peace of Allah be upon him) said: Whoever usurps a hand's span of land will be made to wear a collar as wide as seven Earths on the Day of Resurrection. (al-Bukhari, 1422H, 4:107, *hadīth* no. 3198)

On the authority of Ubadah bin al-Samit (may Allah be pleased with him) that the Prophet (may the blessings and peace of Allah be upon him) used to say: Return a needle or thread. Beware of treachery, for it is a disgrace for its practitioners on the Day of Resurrection. (al-Nasai, 1986, 6:262, *hadīth* no. 3688) The indicator 'occurrence of robberies' falls in the category of preventive protection while the other indicators 'satisfaction with income', 'job', and 'income group' fall in the positive protection category. Allah commands us to earn ($hal\bar{a}l$) a livelihood as mentioned in the following verses:

And Allah has made trade lawful. (Qur'ān, 2:275)

And We have made the day a means of earning livelihood. (Qur'ān, 78:11)

And there are others traveling in the land, seeking Allah's bounty. (Qur'ān, 73:20)

And when the prayer is finished, disperse in the land and seek the bounty of Allah (by working etc.) and remember Allah much, so that you may be successful. (Qur'ān, 62:10)

These verses and narrations provide sufficient justification for these indicators to be included in the index for the objective of protection of property.

4.3 Methodology

The main goal of the present paper is to identify MS dimensions in member countries where more policy focus is required. To achieve the above goal, the task is performed in the following steps:

- 1- Constructing the MS Deprivation Perception Index (MSDPI) for each member country in the OIC using the counting approach where the weight for each dimension and indicators in each dimension are taken as equal since we do not find any strong evidence based on the Sharī ah to prefer one dimension or indicator over the other. Moreover, most of the popular indices like HDI and MPI also take equal weights.
- 2- Computing contribution/share of each MS dimension in MSDPI.
- 3- Computing the share of each indicator in a dimension⁽⁵⁾.
- 4- Ranking of member countries by MSDPI and by share of each MS dimension.
- Computing policy scores for each dimension of member countries.

- 6- Formulating a relative achievement criterion to achieve a relative target in terms of ranking.
- 7- Setting policy (absolute) targets at three levels.

Steps 1 to 5 and 7 are further discussed in the results section. Step 6 is explained below.

The relative achievement criterion of a dimension towards a target is given by:

If $a_{it} = r_t > r^*$ then $d_i = 1$ (target achieved)

$$d_i = 0$$
 otherwise

s.t.
$$\Delta r_t \ge 0$$

where r^* = a policy criterion (benchmark) of achievement $r^* = \left(\frac{r_{max}}{2}\right)$ (assumed)

$$d_i = ith dimension$$

 a_{it}

= *Relative achievement*(*least deprivation*)

of ith dimension at time t. $r_t = actual rank$ $r_{max} = maximum rank (least deprived)$

Now the percentage relative achievement is obtained by

% relative achievement =
$$A_t = \frac{\sum_{i=1}^{j} a_{it}}{D} X \, 100$$

where $j = \sum_{i=1}^{j} d_i$
 $D = \text{total number of dimensions} = 5$

(Where maximum rank = total number of countries in the sample provided that two or more countries do not have the same ranking).

For example, if a country has a rank (r_t) of 12 in one dimension (the rank in the other four dimensions are below 10 $(= r^*)$) and if the least deprived (maximum) rank (r_{max}) is 20, then this country has a higher rank than half of the countries in that dimension $(r_t > r^*)$. The country has achieved in one dimension (a_{1t}) but failed in the remaining four dimensions $(d_1 = 1 \text{ but } d_i = 0 \text{ where } i \neq 1)$. That is, the country has achieved in 20% of dimensions (A_t) . Since change in ranking of other countries can affect relative achievement, the change in rank overtime should remain same or positive. The

⁽⁵⁾ The results of this computation are not shown to save space. However, the results are discussed in the findings section.

dynamic constraint $(\Delta r_t \ge 0)$ for the performance (achievement) criterion provides an incentive for a country to make continuous progress in that dimension in spite of achieving the percentage (absolute) target. Thus, a country has an overall achievement if it achieves both relative and absolute targets. The absolute targets are set in three stages as discussed in the next section.

5. Results and Discussion

Table 2 categorizes the OIC countries on the basis of MSDPI scores into very highly multidimensionally poor, highly multidimensionally poor, moderately multidimensionally poor, and weakly multidimensionally poor countries. The demarcation percentages for these categories are arbitrary and are taken for the sake of comparison and policy purpose only.

Table 2 shows MSDPI scores for 20 OIC countries. On the basis of the scores, countries are divided into four categories. The last column shows the MSDPI category of each country where status 1 shows most deprived in MS dimensions and 4 shows the least deprived in MS dimensions. The demarcations between categories are arbitrary and are explained in the footnote of the table.

COUNTRY	MSDPI (%)	MSDPI STATUS*
Kazakhstan	45.19933	1
Lebanon	33.2725	1
Algeria	31.51833	1
Uzbekistan	31.416	1
Kyrgyzstan	31.092	1
Azerbaijan	30.55589	1
Pakistan	28.5575	2
Iraq	26.15167	2
Malaysia	26.02154	2
Nigeria	25.27118	2
Tunisia	24.36681	2
Yemen	23.713	2
Egypt	22.83913	2
Morocco	20.28417	2
Turkey	20.04548	2
Libya**	17.73252	3
Palestine	16.864	3
Jordan	13.71167	3
Kuwait	4.34612	4
Qatar	1.86792	4

Table (2) MSDPI scores and categorization of countries in four classes

*1 = MSDPI >= 30% very highly multidimensionally poor.

2 = MSDPI >= 20% but <30% highly multidimensionally poor.

3 = MSDPI >= 10% but <20% moderately multidimensionally poor.

4 = MSDPI < 10% weakly multidimensionally poor.

** Since the data available in VWS is from 2010-14, therefore some countries, e.g. Libya is ranked better compared to its current situation.

Table 3 ranks OIC countries by MSDPI from the most deprived to the least deprived. Kazakhstan stands first in this ranking as the most deprived nation in MS dimensions while Qatar stands last in this ranking as the least deprived nation. To further understand the ranking, we decompose the index into the contribution of each dimension in overall deprivation and rank these countries on the basis of individual contribution of all five dimensions (see Table 3). In what follows, we rationalize the ranking of best and worst cases with some paradoxical cases. All cases cannot be discussed due to space limitation.

The ranking of countries in each dimension is revealing; Kazakhstan, which is ranked first in overall deprivation, performs relatively better in individual dimensions except faith and posterity. The other three central Asian republics (Uzbekistan, Azerbaijan, and Kyrgyzstan) also have the same situation. This is understandable since these states share a common history of invasion by Russia and implementation of communism. Islamic civilization and values could not flourish and descend to the young generations which is reflected in the deprivation of faith (particularly, attendance in religious services) and posterity (particularly, justifiability of abortion and sex before marriage). At the same time, these states are rich in natural resources which is reflected in higher ranking in life (particularly, low crimes) and property (particularly, income group).

The top two countries in terms of least deprivation are Qatar and Kuwait. Both of these Arab countries have a high ranking (least deprivation) in all dimensions except intellect (particularly, highest level of education). Since most of the countries in the Gulf region have strict Islamic laws, they are close to fulfilling *maqāşid* al-Sharī'ah. These countries also have rich oil reserves which have led them to raise living standards. Mainly because of these two factors they have very low crime rates which have contributed to a high ranking in the protection of faith, life, posterity, and property. At the same time, these oilrich Gulf countries have very limited PhD programs that result in a low ranking in the intellect dimension.

On the other hand, Jordan, which is the third least deprived after Kuwait, is deprived in intellect (particularly, alcohol consumption which is not forbidden in Jordanian law) and property (particularly, rising unemployment and dissatisfaction with financial position). Lebanon, which is geographically and culturally close to Jordan, is far worse in deprivation especially in faith (particularly, low attendance in religious services), intellect (high alcohol consumption), and posterity (particularly, justifiability of homosexuality and abortion). This is understandable since there has been increasing secularization of the country after a long civil war. Algeria, the third most deprived country after Lebanon, shows a high deprivation in life (war-related threats), intellect (alcohol consumption), and property (dissatisfaction with financial position, occurrence of robberies, and worry about losing job or not finding job). Algeria has always been in political unrest due to military involvements and confrontations with Islamic parties. Moreover, its culture (particularly, in cities) is dominated by the French culture which is a result of more than 100 years of colonial rule by France. The faith and posterity protections receive higher ranks may be due to the effect of mysticism (*maraboutism*) particularly in rural regions and the strong effect of mosques and *'ulamā'* (religious scholars) in cities.

Lastly, we discuss the paradoxical case of Palestine, which has received a better ranking in all dimensions except property protection (largely affected by dissatisfaction with financial situation). Though the property dimension has a low ranking, life and intellect dimensions are also not far from the benchmark of 10 (used for policy score computation). Life protection is most affected by war and terrorist attacks related indicators while intellect is affected largely by drug sales. Since tourism is the largest source of revenue for Palestine, its disruption greatly affects the economy. This is understandable due to the security situation in the region and access to the main tourist territories is completely controlled by the government of Israel. Hence, the Palestinian people do not get enough earning opportunities which results in the low ranking in the property protection dimension.

The WVS data is unavailable for some important countries like KSA, UAE, Bahrain, Bangladesh, and Brunei. We can somehow extrapolate the ranking of these countries using the ranking of their neighboring countries which are also similar in terms of resources and culture. For example, KSA's and Bahrain's rankings are likely to be close to Qatar and Kuwait. Similarly, Brunei's and Bangladesh's rankings are likely to be close to the rankings of Malaysia and Pakistan respectively.

Table 3 shows the overall MSDPI ranking and ranking in each dimension of MS for 20 OIC countries where 1 = most deprived and 20 = least deprived.

COUNTRY	MSDPI RANK	DEPRIVATION RANKING IN EACH MS DIMENSION					
		Faith	Life	Intellect	Posterity	Property	
	(Most Deprived)						
Kazakhstan	1	3	19	18	4	19	
Lebanon	2	8	14	8	8	15	
Algeria	3	15	8	6	13	5	
Uzbekistan	4	2	19	11	6	19	
Kyrgyzstan	5	7	10	17	5	14	
Azerbaijan	6	2	13	19	9	18	
Pakistan	7	12	7	10	12	12	
Iraq	8	10	11	5	18	9	
Malaysia	9	9	12	19	3	13	
Nigeria	10	17	4	14	2	11	
Tunisia	11	5	9	15	19	3	
Yemen	12	6	6	16	17	6	
Egypt	13	16	2	9	19	2	
Morocco	14	19	5	2	9	3	
Turkey	15	4	16	7	11	17	
Libya	16	14	3	13	7	16	
Palestine	17	11	15	12	15	4	
Jordan	18	13	17	4	16	8	
Kuwait	19	18	15	9	14	16	
Qatar	20	19	18	8	15	18	
	(Least Deprived)						

Table (3) MSDPI ranking

In the next table (Table 4) we derive policy scores which reflect policy emphasis dimension(s). Note that (Table 4) countries are organized in ascending order, from the lowest score in MSDPI to the highest score in MSDPI. The lowest score MSDPI countries are generally least capable in all dimensions and vice versa. Most of those in the middle are relatively good in some dimensions and lacking in others which results in different policy scores. Table 4 also gives insight into policy focus areas as to where more attention is required. It shows that life and intellect, and in some cases, property dimensions are most weak and hence require very high policy emphasis for the given OIC countries.

Table 4 shows policy emphasis scores for each dimension of 20 OIC countries. The higher the score of a dimension, the greater the emphasis required on that dimension. The explanation of policy score calculation is given in the footnote of the table.

COUNTRY	MSDPI RANK	POLICY SCORES*				
		Faith	Life	Intellect	Posterity	Property
	(Most Deprived)					
Kazakhstan	1	17	1	2	16	1
Lebanon	2	12	6	12	12	5
Algeria	3	5	12	14	7	15
Uzbekistan	4	18	1	9	14	1
Kyrgyzstan	5	13	10	3	15	6
Azerbaijan	6	19	7	1	11	2
Pakistan	7	8	13	10	8	8
Iraq	8	10	9	15	2	11
Malaysia	9	11	8	1	17	7
Nigeria	10	3	16	6	18	9
Tunisia	11	15	11	5	1	17
Yemen	12	14	14	4	3	14
Egypt	13	4	19	11	1	18
Morocco	14	1	15	18	11	19
Turkey	15	16	4	13	9	3
Libya	16	6	17	7	13	4
Palestine	17	9	5	8	5	16
Jordan	18	7	3	16	4	12
Kuwait	19	2	5	11	6	4
Qatar	20	1	2	12	3	1
	(Least Deprived)					

Table (4) Policy scores for each dimension for OIC countries

* Policy score for a dimension = (Maximum Possible Rank – Actual Rank in a dimension). For example, Kuwait ranks 18 in faith dimension and the highest possible rank is 20. Therefore, policy scores for faith dimension = 20 - 18 = 2. That means faith needs low policy emphasis.

However, in order to know which dimension requires more emphasis in each of the four categories of these countries, average policy scores are obtained (Table 5). According to average policy scores for four categories of countries, most policy emphasis dimensions are faith (attendance in religious services and frequency in prayers are most prominent indicators of faith which require more emphasis) for very highly multidimensionally poor countries, life (war, terrorist attack, and going out at night have very high scores among all indicators of life) and property (satisfaction with financial situation and worry about losing/not finding job have high scores) for highly multidimensionally poor countries, property (satisfaction with financial situation) for moderately multidimensionally poor countries, and intellect (highest level of education) for weakly multidimensionally poor countries.

Table 5 shows highest policy emphasis dimensions for each category of the countries in a bold font. The description of categories is given in the footnote of Table 2.

Table (5)) policy	emphasis	dimensions
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Average Policy	Scores for each dim	ension across 4 categories				
Very highly mu	ltidimensionally poor	countries				
FAITH	LIFE	INTELLECT	POSTERITY	PROPERTY		
Highly multidin	nensionally poor coun	tries				
FAITH	LIFE	INTELLECT	POSTERITY	PROPERTY		
Moderately mul	Moderately multidimensionally poor country					
FAITH	LIFE	INTELLECT	POSTERITY	PROPERTY		
Weakly multidimensionally poor countries						
FAITH	LIFE	INTELLECT	POSTERITY	PROPERTY		

Table 6 shows the percentage (relative) achievement towards a target of, say, attaining ranking above 10 (half of the highest least deprived ranking) in each dimension (a relative target).

According to this arbitrary criterion, Palestine performs better than other OIC countries in terms of achieving 80% of dimensions (rankings of 4 out of 5 dimensions are above 10) in spite of being in a continuous war-like situation for a long time. This paradox could be explained in terms of adaptation to the harsh conditions by the people of Palestine as evident from their less worrisome responses to question like 'worries about a war involving my country'. In contrast to these responses, the countries where war or other crisis broke out relatively recently like Yemen, the responses are more worrisome. On the other hand, Morocco performs worse than other OIC countries, achieving 20% of dimensions (ranking only 1 out of 5 dimensions higher than 10). The achievement of each dimension towards the target provides information hidden in MSDPI ranking.

Table 6 shows the achievement towards the target of least deprivation in all 5 dimensions. The relative deprivation is calculated using a cut-off rank equal to 10. A rank of a dimension equal to or higher than the cut-off means a less deprived dimension. Otherwise, the dimension is more deprived.

The overall achievement target might be set to increase by 20 percentage points in the next 5 years (i.e., achievement in one more dimension). This absolute target can be achieved by decreasing the percentage contribution (deprivation) of each dimension in MSDPI. At present, the highest (least deprived) contributions in MSDPI among all countries are: faith (2%), life (6%), intellect (15%), posterity (4%), and property (15%) whereas among OIC countries, the highest (least deprived) contributions are: faith (2%), life (14%), intellect (15%), posterity (4%), and property (20%). However, these target percentages should ideally be zero or close to zero indicating no share in deprivation.

Although the paper is concerned with OIC countries it can also provide a comparison with non-OIC countries. The MSDPI developed in this paper can be equally suitable for other countries and can be applied by any country that has concerns about morality, values, and faith. However, the minimum thre-shold (cut-off point) may be changed for some indicators to suit a prevailing religion and belief in that country. For example, attendance in religious services and frequency in prayers can be adjusted according to the religious teachings of that country. From this point of view, our thresholds for the indicators of faith dimension might be restrictive for some non-Muslim countries, and hence show them as more deprived in that dimension than they actually are.

Graphs A1 to A5 in the appendix show the pattern of contribution of each dimension when countries are ranked according to contribution in faith. The majority of non-OIC countries are deprived in faith and posterity dimensions, whereas the majority of OIC countries are deprived in life and property. The listing of deprivations in MS dimensions of non-OIC countries might be problematic for some researchers, but it provides a useful guide to those Muslims who want to migrate to these countries yet are very conscious about the Islamic environment. Moreover, the questions in WVS on faith are relative to the religion an individual is practicing or believing in. The indicators used for each dimension (Table 1) are consistent with the teachings of the world's major religions (Islam, Christianity, Judaism, Buddhism, and Hinduism).

	Most deprived	Least deprived	Relative Achievement*	
Country	No. of dimensions		(%)	
Kazakhstan	2	3	60	
Lebanon	3	2	40	
Algeria	3	2	40	
Uzbekistan	2	3	60	
Kyrgyzstan	3	2	60	
Azerbaijan	2	3	60	
Pakistan	2	3	80	
Iraq	3	2	60	
Malaysia	2	3	60	
Nigeria	2	3	60	
Tunisia	3	2	40	
Yemen	3	2	40	
Egypt	3	2	40	
Morocco	4	1	60	
Turkey	2	3	60	
Libya	2	3	60	
Palestine	1	4	80	
Jordan	2	3	60	
Kuwait	1	4	80	
Qatar	1	4	80	

 Table (6) Deprivation and achievement (based on Table 3)

* The detail of calculation of relative achievement is given in the text. We use a rank of 10 as a benchmark. Any ranking equal to or higher than 10 in a dimension is considered an achievement (non-deprivation = 1) in that dimension. The sum of achievements divided by total dimensions gives relative achievement.

The absolute targets can be set according to the following 3-stage policy. Initially, policy focus should be on decreasing the actual contribution (share) of deprivation in most deprived dimensions in the OIC countries to the OIC countries' lowest (deprivation) levels. That is, life and property dimensions of OIC countries should be reduced to their lowest (deprivation) levels of 14% and 20%, respectively, and then to the lowest world (deprivation) levels of 6% and 15%, respectively. On the third stage, these contributions should be reduced to 5% and ultimately to 0% (no deprivation). This 3-stage reduction in contributions of most deprived dimensions in MSDPI will ultimately improve the situation (ranking) of OIC countries in all five dimensions. The policy (absolute) targets suggested in this paper are similar to the targets set for achieving Millennium Development Goals (MDGs) or Sustainable Development Goals (SDGs)⁽⁶⁾ of the UN. However, these targets are absolute in the sense that they have no relation with the overall ranking of countries in achieving these goals. The achievement criterion suggested here along with targets makes it relative.

The countries' ranking in MSDPI is compared to their HDI ranking of the same year. Since HDI is an improvement ranking in descending order whereas MSDPI ranking is a deprivation ranking in ascending order, for the sake of comparison, we take the

⁽⁶⁾ Most of the deprivation indicators in MDGs or SDGs have achievement criteria of reducing by half, by two-thirds, or by three-quarters by 2015 (in MDGs) and by 2030 (in SDGs).

reciprocal of MSDPI ranking and name it as MSPI ($Maq\bar{a}sid$ al-Sharī'ah Progress Index), with descending order. The two rankings somehow show a negative correlation (Graph A6 in the appendix). This is understandable since faith and posterity dimensions are missing in HDI and these dimensions clearly have affected the MSDPI. This negative correlation is further investigated through graphs of each dimension of all countries (Graphs A1 to A5). The graphs of faith and posterity of all countries show a reverse trend as compared to life and property graphs. This explains the inverse relation between HDI and MSPI rankings.

6. Conclusion and Policy Implications

The paper explores the policy focus for *maqāşid* al-Sharī ah dimensions by ranking OIC countries using recent World Values Survey (WVS wave 6) data. A *Maqāşid* al-Sharī ah Deprivation Index (MSDPI) is constructed using the Alkire-Foster dual-cut-off counting methodology. The countries are categorized on the basis of MSDPI scores in four categories: very highly multidimensionally poor (VMP), highly multidimensionally poor (HMP), moderately multidimensionally poor (WMP) countries. Results show that Kazakhstan is the most deprived nation in MS dimensions while Qatar stands last in this ranking as the least deprived nation.

The countries are also ranked according to the contribution of each MS dimension in MSDPI. The results show that the most important policy emphasis dimensions are life and intellect, whereas the least significant policy emphasis dimensions are faith and property for twenty OIC countries for which WVS data are available on the required variables. The policy emphasis dimensions highlight the significance of improving the law and order situation and education standards throughout OIC countries. According to average policy scores for four categories of countries, the most important policy emphasis dimensions are faith (attendance in religious services, frequency in pravers are most prominent indicators of faith) for very highly multi-dimensionally poor countries, life (war, terrorist attack, and going out at night have very high scores among all indicators of life) and property (satisfaction with financial situation and worry about losing/not finding job have high scores) for highly multi-dimensionally poor countries, property (satisfaction with financial situation) for moderately multi-dimensionally poor countries, and intellect (highest level of education) for weakly multidimensionally poor countries.

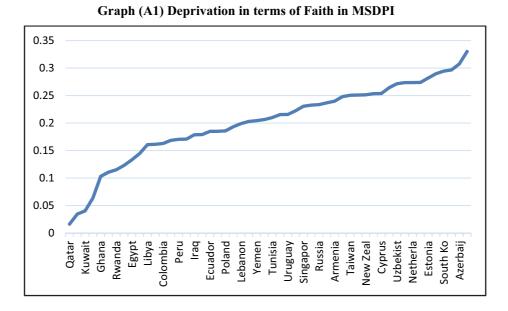
A comparison of the MSDPI ranking with the Human Development Index ranking of these countries shows a negative correlation which also indicates the importance of raising the level of education and living conditions in faith rich countries.

References

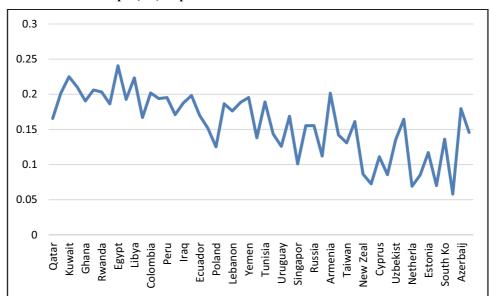
- Ali, Abdullah Yusuf. (1990). The Holy Qur'an English Translation of the Meanings and Commentary (Revised and Edited by The Presidency of Islamic Researches, IFTA, Call and Guidance). Madinah, KSA: King Fahd Holy Qur'an Printing Complex.
- Ali, Salman S., Tohirin, A., & Ismail, A. G. (Eds.). (2017). Maqasid al-Shariah based Index of Socio-Economic Development (Seminar papers, Volume II). Gombak, Malaysia: IIUM.
- Ali, Salman Syed, & Hasan, Hamid. (2014). Towards a Maqasid al-Shariah based Development Index (IRTI Working Paper No. WP# 1435-18). Retrieved from: www.irti.org/English/Research/Documents/WP/WP-1435-18.pdf
- Ali, Salman, Syed (Ed.). (2014). Towards Maqasid al-Shariah based Index of Socio-Economic Development (Seminar papers, Volume I). Jeddah: IRTI-IDB.
- Alkire, S., & Foster, J. E. (2011). Counting and Multidimensional Poverty Measurement. *Journal of Public Economics*, 95(7-8), 476-487.
- Anto, M. H. (2009). Introducing an Islamic human development index (I-HDI) to measure development in OIC countries. *Islamic Economic Studies*, 19(2), 69-95.
- Barro, J., & McCleary, R. M. (2003). Religion and economic growth (NBER Working Paper No. 9682). Retrieved from: www.nber.org/papers/w9682.pdf
- al-Bayhaqi, Ahmad bin al-Hussain. (2003). *al-Sunan al-Kubra*. Beirut: Dar al-Kutub al-'Ilmiyyah.
- al-Bayhaqi, Ahmad bin al-Hussain. (2003). *Shu'ab al-Iman*. Riyadh: Maktabah al-Rushd.
- al-Bukhari, Muhammad bin Ismail. (1998). al-Adab al-Mufrad. Riyadh: Maktabat al-Ma'arif.
- **al-Bukhari, Muhammad bin Ismail.** (1422H [2001]). *Sahih al-Bukhari*. Beirut: Dar Tawq al-Najah.
- **Chapra, M. Umar.** (1992). *Islam and the Economic Challenge*. Herndon, VA: International Institute of Islamic Thought and The Islamic Foundation.
- Chapra, M. Umar. (2008). The Islamic Vision of Development in the Light of the Maqasid al-Shari'ah. Jeddah, Kingdom of Saudi Arabia: Islamic Research and Training Institute, Islamic Development Bank.

- Dar, Humayon A. (2004). On making human development more humane. *International Journal of Social Economics*, 31 (11/12), 1071-1088.
- Ibn Majah, Muhammad bin Yazid. (2009). Sunan Ibn Majah. Beirut: Dar al-Risaalah al-'Alamiyyah.
- Ismail, A.G., Ali, Salman S., & Hameed, L. M. (Eds.). (2017). Policy Discussion on Maqasid Shariah for Social Economic Development. Bangi, Malaysia: KUIS.
- Jacob, J., & Osang, T. (2010). Religious values, beliefs, and economic development (Discussion Paper). Retrieved from Southern Methodist University, Department of Economics website: faculty.smu.edu/ tosang/pdf/jo_vbad_32.pdf
- Kamali, M. Hashim. (1999). *Maqasid al-Shari'ah: The Objectives of Islamic Law*. Islamabad: Islamic Research Institute, International Islamic University Islamabad.
- Masud, M. Khalid. (1977). Islamic Legal Philosophy: A Study of Abu Ishaq al-Shatibi's Life and Thought. Islamabad: Islamic Research Institute, International Islamic University Islamabad.
- **al-Naisabouri, Muslim bin al-Hajjaj.** (1991). *Sahih Muslim.* Beirut: Dar Ihya' al-Turath al-Arabi.
- **al-Nasai, Ahmad bin Shoaib.** (1986). *Sunan al-Nasai.* Aleppo, Syria: Maktab al-Matbo'at al-Islamiyyah.
- Nyazee, Imran Ahsan Khan. (2000). Islamic Jurisprudence. Islamabad: Islamic Research Institute, International Islamic University Islamabad and International Institute of Islamic Thought
- Rehman, S. S., & Askari, H. (2010). How Islamic are Islamic countries? *Global Economy Journal*, 10(2), 1-37.
- Siddiqi, M. Nejatullah. (2014). *Maqasid-i-Shari'at* (Urdu). Islamabad: Islamic Research Institute, International Islamic University Islamabad.
- Weber, M. (2010). *The protestant ethic and the spirit of capitalism.* New York: Penguin classics, Simon Shuster.
- World Bank. (2017). Monitoring Global Poverty: Report of the Commission on Global Poverty. Washington, DC: World Bank. doi: 10.1596/978-1-4648-0961-3.

Appendix

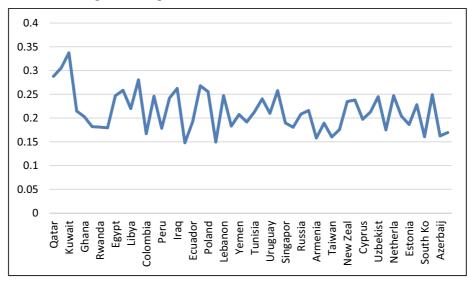


The graph arranges all countries in ascending order of deprivation in MS on the horizontal axis. The least deprived in MS (the lowest MSDPI) is Qatar. The vertical axis shows the contribution of faith in MSDPI for each country. Qatar is least deprived in the faith dimension of MS. As overall deprivation (MSDPI) increases, the deprivation in faith dimension also increases as shown by the rising graph of deprivation in faith dimension. Note that because of the long list of countries not all countries are displayed on the horizontal axis.



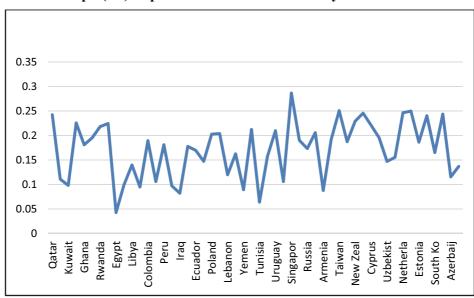
Graph (A2) Deprivation in terms of Life in MSDPI

The graph arranges all countries in ascending order of deprivation in MS on the horizontal axis. The least deprived in MS (the lowest MSDPI) is Qatar. The vertical axis shows the contribution of life in MSDPI for each country. As the overall deprivation (MSDPI) increases the deprivation in life dimension decreases for the majority of countries as shown by the falling indicators for the deprivation in life dimension. Note that because of the long list of countries not all countries are displayed on the horizontal axis.



Graph (A3) Deprivation in terms of Intellect in MSDPI

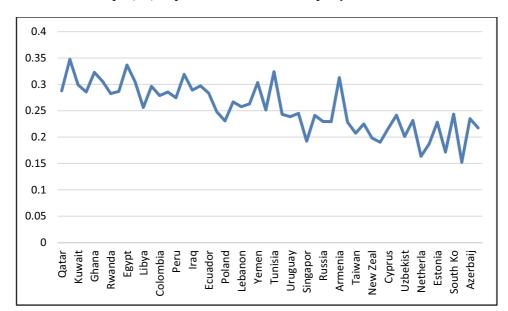
The graph arranges all countries in ascending order of deprivation in MS on the horizontal axis. The least deprived in MS (the lowest MSDPI) is Qatar. The vertical axis shows the contribution of intellect dimension in MSDPI for each country. As overall deprivation (MSDPI) increases, the deprivation in the intellect dimension for the majority of the countries does not change by much as shown by the uniform fluctuations in the graph of deprivation in the intellect dimension. However, for countries with low MSDPI like Qatar and Kuwait, the contribution of the intellect dimension in overall deprivation is high. Note that because of a long list of countries not all countries are displayed on the horizontal axis.



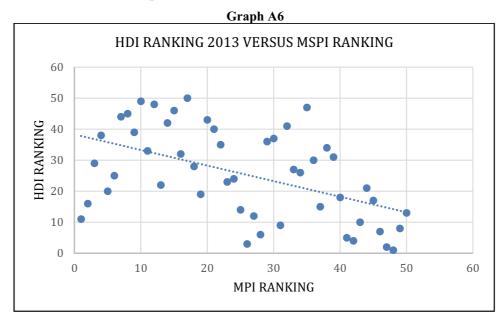
Graph (A4) Deprivation in terms of Posterity in MSDPI

The graph arranges all countries in ascending order of deprivation in MS on the horizontal axis. The least deprived in MS (the lowest MSDPI) is Qatar. The vertical axis shows the contribution of posterity in the MSDPI for each country. As overall deprivation (MSDPI) increases, the deprivation in posterity dimension increases for the majority of the countries as shown by the rising graph of deprivation in the posterity dimension. Note that because of a long list of countries not all countries are displayed on the horizontal axis.

Graph (A5) Deprivation in terms of Property in MSDPI



The graph arranges all countries in ascending order of deprivation in MS on the horizontal axis. The least deprived in MS (the lowest MSDPI) is Qatar. The vertical axis shows the contribution of property dimension in MSDPI for each country. As overall deprivation (MSDPI) increases, the deprivation in the property dimension decreases for the majority of the countries as shown by the falling graph of deprivation in property dimension. Note that because of a long list of countries not all countries are displayed on the horizontal axis.



The graph intends to compare the MSDPI ranking with HDI ranking for all countries. Since a higher number in the MSDPI ranking shows lower deprivation (higher prosperity) whereas a higher ranking in the HDI shows lower human development (higher deprivation), the ranking is done by using the reciprocal of MSDPI called the MSPI (*Maqāşid al*- Sharī'ah Progress Index) for valid comparison. The higher number for both the MSPI and HDI rankings both show higher deprivation-one in MS and the other in human development.

The graph compares the ranking of all countries by HDI and MSPI (=1/MSDPI). The trend line shows more-or-less a negative correlation between the two. Hamid Hasan is currently Assistant Professor and the Head of School of Economics at the International Islamic University, Islamabad. His teaching and research interests are: applied econometrics, microeconomics, macroeconomics, welfare economics, Islamic economics, energy economics, happiness economics, experimental economics, labor economics, discreet choice economic modelling, behavioral economics, and impact evaluation. He completed his PhD on Welfare Economics, from School of Business and Law, La Trobe University, Melbourne, Australia. He has also worked as Research Consultant, at the Islamic Research and Training Institute (IRTI), Islamic Development Bank (IBD), Jeddah, Saudi Arabia. Earlier, he taught on deputation, at the School of Economics and Finance, La Trobe University, Melbourne, Australia. He has a number of publications to his credit and has attended several international conferences.

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قياس الحرمان من خلال أبعاد مقاصد الشريعة في دول منظمة التعاون الإسلامي: الترتيب ونقاط التركيز السياسية

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المستخلص. في الوقت الذي أقر الاقتصاديون بوجود صلة بين القيم والاقتصاد، فقد تم تجاهل هذا الأمر في المقاييس السائدة للتنمية الاقتصادية والاجتماعية. تقترح هذه الورقة مؤشرًا مكملاً يستند إلى القيم كبديل لمؤشرات التنمية الاقتصادية والاجتماعية الموجودة (الخالية من القيم)، فضلاً عن صياغة سياسة اقتصادية ذات ثلاث مراحل لدول منظمة المؤتمر الإسلامي (OIC) للحد من القصور المترتب عن استبعاد مقاصد الشريعة الإسلامية من خلال أهداف مطلقة ونسبية للسياسات الاقتصادية. وفي هذا السياق، تستكشف الورقة محل اهتمام السياسات الاقتصادية بمقاصد الشريعة الإسلامية، حيث جرى ترتيب دول منظمة التعاون الإسلامي (OIC) وفق مسح القيم العلية الشريعة الإسلامية، حيث جرى ترتيب دول منظمة التعاون الإسلامي (OIC) وفق مسح القيم العالمية الشريعة الإسلامية، حيث جرى ترتيب دول منظمة التعاون الإسلامي (OIC) وفق مسح القيم العالمية الشريعة الإسلامية، حيث جرى ترتيب دول منظمة التعاون الإسلامي (OIC) وفق مسح القيم العالمية الشريعة الإسلامية، حيث جرى ترتيب دول منظمة التعاون الإسلامي (OIC) وفق مسح القيم العالمية بطرق متعددة: في تقترح ابتداءً استخدام مؤشر لمقاصد الشريعة الإسلامية من منظور السياسات الإسلامية الحددة عاير اختيار هذا المؤشر، وانتهاءً ببناء مؤشر لقياس أثر استبعاد مقاصد الشريعة الإسلامية اعتمادًا على منهجية Wissor وانتهاءً ببناء مؤشر لقياس أثر استبعاد مقاصد الشريعة الإسلامية اعتمادًا على منهجية ما للوشر، وانتهاءً ببناء مؤشر لقياس أثر استبعاد مقاصد الشريعة الإسلامية اعتمادًا على منهجية Adio حيث ما مناد لا معالمية. ونم ينات من منظور السياسات الإسلامية اعتمادًا على منهجية المؤشر بقاصد الشريعة الإسلامية من منظور السياسات الإسلامية اعتمادًا على منهجية Adio حيث ما موشر لقياس أثر استبعاد مقاصد الشريعة الإسلامية اعتمادًا على منهجية ما للوشر، وانتهاءً بناء مؤشر لقياس أثر المراحدة. في توسيع حدود المؤشر أن يمكن تكراره وتطبيقه على الدول المختلفة بسهولة باستخدام بيانات من مصدر واحد موثق متاح الجميع. ولم تظهر النتائج التي تم التوصل إليا ترتيب البلاد فحسب، وإنما أشارت كذلك إلى المجالات التي ينبغي إدخال تحسينات علها بوضع أهداف مطلقة ونسبية عبر تدخلات السياسات الاقتصادية وصولاً لتحقيق التنمية الشاملة.

الكلمات الرئيسية: مقاصد الشريعة، الفقر متعدد الأبعاد، الرفاه، السياسة.