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The Integrated Development Index (I-Dex): A new comprehensive approach to measuring human development

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Abstract - Standard economics and policy prescriptions adopt the modernization thesis as its base, which says that developing countries can modernize by undergoing secularization and westernization. However, Muslim countries, including Malaysia, have shown that more economic development and progress can take place together with a renewed manifestation of Islamic values and norms. This important departure from the modernization thesis reflects a potential alternative transformational development model. However, conceptual and theoretical frameworks of this alternative development model are still lacking. There is an urgent need for Muslim countries to develop this alternative model, which represents a more holistic and inclusive concept of development that integrates the physical/material, intellectual and spiritual dimensions of human beings. This study proposes to develop an integrated Islamic development framework and index based on, and representing, the *Maqasid al-Shariah* or noble objectives of the *Shariah* for OIC and non-OIC countries. The final expected outcome of this study is a *Maqasid*-based Integrated Development Index (I-Dex) that will better represent holistic development and well-being according to Islamic benchmarks, hence providing academics, students and policymakers in Muslim countries with an alternative measurement of progress.

Keywords: Islam, Maqasid al-Shariah, development index, integrated development, human development

1. Introduction

Over the decades, development has taken a much wider connotation than was first discussed. From the simple growth models of the 1950s and 1960s, there has been a growing acceptance that development has to be holistic. In 1999, the World Bank introduced the Comprehensive Development Framework (CDF), which very clearly stated that development should be viewed as a multi-dimensional process that covered social, structural, human, governance, environmental, economic and financial spheres if it was to

be seen as a meaningful and sustainable process. This more holistic approach is congruent with the Islamic viewpoint on development. Islam encourages economic development that also establishes social justice and the well-being of human beings.

Muslim countries, Malaysia in particular, have shown seriousness in adopting an integrated and holistic approach to development. From Malaysia's experience, it has been shown that economic development and progress

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can take place hand-in-hand with a renewed manifestation of Islamic values and norms. Despite the recognition of the importance of religion in the multi-dimensional approach to development, the conceptual and theoretical frameworks of this alternative development model is still lacking. There is an urgent need for Muslim countries to develop this alternative model that represents a more holistic and inclusive concept of development that integrates the physical/material, intellectual and spiritual dimensions of human beings.

Islam encourages economic development that also establishes social justice that concerns itself with the wellbeing of humans. Central to the Islamic view on development is the higher purposes of the *Shariah* or *Maqasid al-Shari'ah* that has stated three fundamental goals, i.e., educating the individual, establishing justice and ensuring the well-being or *Maslahah* of all. The *Shariah* is much more than just law, it is a total guidance and constitutes values, norms and general guidelines for ensuring total well-being of man. In trying to discuss Islamic economics, the *Maqasid al-Shariah* provides a potentially comprehensive framework that can be used to measure development as represented by the concept of *Maslahah*.

The major focus of past literature on al-Magasid was on developing the theory, and most of the discussions centered on its legal dimensions. The pioneering works emanated from scholars such as, Al-Juwayni (1979), Al-Ghazali (1901), Al-Shatibi (n.d), Ibn 'Ashur (1998) and Ibn Taymiyyah (al-Raysuni, 1992). Recently, the application of al-Maqasid in various disciplines including economics and finance has been gaining prominence. Among the leading economists who have written on the subject, to mention a few are Chapra (1985 and 2000), Siddigi (2000), Ahmad (2000), Atiyah (2008), Hasan (2004) and Al-Najjar (2008). Their works however, relate al-Magasid to the discipline of economics in a broad theoretical framework. Chapra (2008) came up with a model of human development from a Magasid perspective. However, the study is still at a philosophical and theoretical level that needs to be cascaded at the operational level. Therefore, there is a need for extending the application of al-Maqasid to comprehensive development at macro level both in theory and application.

Several indices have been developed as variations or possible alternatives to the more commonly used HDI to measure human well-being in the process of development, such as the Quality of Life Index, the Happiness Index and the less known Meaning of Life Index, very few have attempted to integrate the religious aspect of development that reflects spiritual well-being which has been recognized as an important component in the construction of the indices. The Ethics-Augmented Human Development Index (E-HDI) by Dar (2004), the Islamic Human Development Index (I-HDI) by Anto (2009) and the Islamicity Index (I²) by Rehman and Askari (2010) are three of such attempts.

The E-HDI is based on *Maqasid al-Shariah* and it conceptualizes social change and development for all countries. It encompasses more explicitly the ethical concerns in measuring development by incorporating freedom, faith, environmental concerns and family values

in the HDI. However, the ranking of countries in the study is based on the ordinal measure using the Borda Rule instead of on the actual values of E-HDI computed for all countries. Hence, there is a need to develop a comprehensive development index based on *Maqasid al-Shariah* that can actually be computed for the ranking of countries' level of development. Anto (2009) attempts to develop such an index with the I-HDI. The index is comprised of what is termed as Material Welfare Index (MWI) and Non-material Welfare Index (NWI) representing the five basic needs in *Maqasid al-Shariah*. In addition, it also includes the Freedom Index and the Environment Index.

The Islamicity Index (I^2) was developed to measure the degree of "Islamicity" of Islamic and non-Islamic countries based on the principles of Islam. It aims at finding out whether or not Islam is an agent that enhances human development and its economic performance. It uses four sub-indices namely the Economic Islamicity Index (EI²), the Legal and Governance Islamicity Index (LGI2), the Human and Political Rights Islamicity Index (HPI2), and the International Relations Islamicity Index (IRI²). These indices, in a nutshell, measures government's adherence to Islamic principles in their economics; legal integrity and governance environment; degree of civil and political rights; and relationship with the global community in regard to several keys areas of environmental contribution, globalization, military engagement, and overall country risk (Rehman and Askari, 2010). In this index, Islamic economic, financial, political, legal, and social principles were represented by 67 proxies that are the standard practice of good governance and good economics applicable to all countries regardless of their religious orientation. However, the Islamicity Index basically uses existing indicators that represent universal values, and therefore it is not really based on Magasid al-Shariah.

In view of the limitations of existing development indices proposed, this study is aimed at the construction of an integrated Islamic development framework that culminates in the creation of the Integrated Development Index (I-Dex) as a new and more comprehensive alternative to the existing measures of living standards and human well-being. The I-Dex encompasses both the physical and spiritual dimensions of human development based on, and representing *Maqasid al-Shariah*, and is proposed to be an integrated and a more holistic alternative to the existing measures of living standards and human well-being.

Contemporary works on development indices

Real GDP per capita has often been used as a proxy for living standards, either to compare well-being in one country at various points in time or to compare well-being across many countries at a particular point in time. A higher GDP means a higher value of production of goods and services thus implying higher consumption and greater material well-being. However, GDP as a measure of well-being has often been criticized since it excludes consideration of non-material dimensions and non-market activities, and considers some consumption items as beneficial when they are actually harmful, such as negative environmental externalities associated with increased production. In addition, using the average measure of income ignores the distribution of income within a country (Kula et al., 2008).

There have been several efforts to provide alternatives to GDP as a measure of well-being. Nordhaus and Tobin (1973) formulated a measure of economic welfare (MEW) that attempts to measure well-being through a quantification of consumption. Apart from GDP, they included costs of commuting and exclude costs for education, health, police, sanitation, road maintenance, defense, and health services. The major criticism to this measure is the somewhat arbitrary calculations of how non-market activities are measured. Others such as Opschoor (1991) and Mayo et al. (1997) provide indexes of sustainable economic welfare that consider the distribution of income within a population.

The United Nations Development Programme constructed the Human Development Index (HDI) to incorporate aspects other than income to measure human well-being. Human development is seen as creating an enabling environment for people to enjoy long, healthy and creative lives. ¹ It uses a slightly modified measure of GDP, along with measures of life expectancy at birth, the adult literacy rate, and the extent of school enrollment, to construct the index. The HDI is reported in the annual *Human Development Report*; the first was published in 1990.

Although the HDI attempts to measure human development as a multidimensional concept, it was only confined to three dimensions of Quality of Life (QoL), namely, longevity, educational attainment and standard of living. In addition, the HDI ignores the extent of inequality in QoL over the members of the population (Anand and Sen, 2000, and Chatterjee, 2005). Early recognition of this point has resulted in corrections in HDRs 1991-1993 for the adjusted per-capita income, usually in terms of the Gini coefficient of the income distribution. However, such distributional correction on the income component of HDI was no longer performed since 1995 onwards. In order to take into account the extent of inequality in the distribution of longevity, educational attainment and standard of living/income, Chatterjee (2005) proposed an alternative index of human development, which is defined as the simple average of the "uptilt" indices of the three constituents. The uptilt for longevity can be computed on the basis of an abridged lifetable for the population considered. For the level of education, a classification of the population into categories representing different levels of education on the basis of periodical educational surveys or censuses is required. For income (consumer expenditure), the distribution of the latter as derived from income/expenditure surveys also needs to be done.

Over the more recent years, sustainable development has been the focus with regards to the most important policy goals at the global level. Environment and natural resources should constitute a means to achieving better standards of living (Anand and Sen, 1995). Debates on how to measure the quality of life have been influenced by two issues, which are (i) the constituents versus the determinants of wellbeing, and (ii) the temporal horizon of the development path, current or sustainability-oriented. Considering human development from a sustainable perspective, there was a need to build a more sustainable-oriented development index. Constantini and Monni (2004) constructed a numerical measure for this purpose to incorporate environmental protection and long-term sustainability. This requires the maintenance of capital stock to guarantee constant or growing welfare levels. They consider four components of development, which are: access to resources, education, social stability, and quality of natural environment and computed the index as the simple average of the four. Due to data availability, their study is limited to the European countries. Their findings indicate that an enlarged measure of development allowed differences among countries that seemed important to be emphasized.

Constructing the Integrated Development Index (I-Dex)

The conceptual framework Al-Ghazali's theoretical framework of maqasid al-shari'ah

Al-Ghazali (d.1111 A.D) refined al-Juwayni's theory of *Maqasid al-Shariah*, and categorized *Maslahah* into three: necessities (*Daruriyat*), complements (*Hajiyaat*) and embellishments (*Tahsiniyaat*). According to al-Ghazali, necessities are those elements without which the system of a nation will run into chaos. Complements are elements that facilitate human lives. Meanwhile embellishments are articles that are related to moral and ethical conduct. He further refined necessities into the preservation of five essential elements (*al-Dharuriyat al-Khams*), namely religion (*al-Din*), life (*al-Nafs*), intellect (*al-Aql*), progeny (*al-Nasl*) and wealth (*al-Mal*). These five essential elements are given priority according to this order. The theoretical framework of al-Ghazali's *Maqasid* is illustrated in the Figure below:

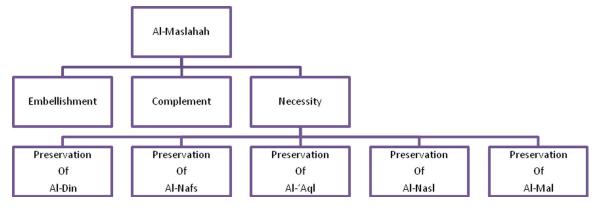


Figure 1. Al-Ghazali's theoretical framework of magasid al-shari'ah.

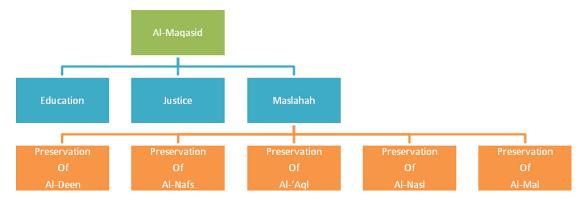


Figure 2. Abu Zaharah's theoretical framework of magasid al-shari'ah.

Prominent scholars in the recent past who have greatly benefited from al-Ghazali's theory include Ibn 'Ashur, al-Shatibi and Abu Zaharah. For example, al-Shatibi (n.d.) expanded the application of al-Ghazali's three levels of *Maslahah*, referred to them as universal concepts and their classifications as final or *Qaati'i* (Nyazee, 1994). Abu Zaharah (1967) extended al-Ghazali's theory to include justice and education. Modern scholars in the areas of economics and finance have also used al-Ghazali's *Maqasid* theory as bases for their studies. For example Chapra (2008) has used al-Ghazali's classification of the five essentials to develop a model of human development and well-being.

Abu Zaharah's extended al-maqasid theory

Abu Zaharah (1997) sees the objectives of al-Shariah as mercy (rahmah) to mankind, as confirmed by the Qur'anic verse: "We have not sent thee but as mercy to the whole world (a'lamin)" (al-Qur'an, 21:107). The word a'lamin refers to all creations of Allah in the Universe, including mankind. Furthermore, Abu Zaharah has widened the scope of his specific objectives of al-Shariah beyond al-Ghazali's three levels of *Maslahah* and beyond the scanty specific objectives suggested by other Muslim scholars of al-Maqasid. Abu Zaharah's theory of al-Magasid has three constructs, namely Tahdhib al-Fard (Education), al-'Adl (Justice) and al-Maslahah (public interest). Regarding Education, Abu Zaharah was of the view that Islam primarily focuses on the individual as an important building block of the society. Proper education for the individual (knowledge, skills and values) will bring about a good society. He sees justice as a noble objective in Islam. He says justice should be defined in relation or according to the context of its application. Hence, there is judicial justice, social justice and economic justice. Similar to al-Ghazali, Abu Zaharah sees the aim of Maslahah primarily as the preservation of five essential elements (Al-Dharuriyat al-Khams), namely religion (al-Din), life (al-Nafs), wealth (al-Mal), intellect (al-'Aql) and progeny (al-Nasl). These five elements constitute the basis for all the affairs of mankind

Hence, based on the discussions above, *Maqasid al-Shariah* provides a comprehensive framework that can be used to measure development. This framework is represented by the three levels of *Maslahah* and the five universal values or essential elements (*al-Daruriyat al-Khams*). As explained by earlier scholars, the three levels of *Maslahah*, in an ascending order, are Necessities (*Daruriyat*), Complements (*Hajiyat*) and Embellishments (*tahsiniyat*). While the five essential

elements are *al-Din* (religion), *al-Nafs* (human life), *al-Aql* (Intellect), *al-Nasl* (family institution) and *al-Mal* (wealth).

The three levels of *Maslahah* represent a growth path and stages of development from a *Maqasid* perspective. The first level, *Daruriyat* or Necessities, represent the minimum level that every individual, institution and nation must achieve. This level embodies the preservation of the five universal values or essential elements aforementioned. The second level provides avenues for the growth of the five elements and the third level represents the stage for their sustainability. Therefore, the three levels of *Maslahah* and the five essential elements represent the Integrated Development Components (IDC), which are part of the comprehensive and multi-dimensional framework for producing the Integrated Development Index (I-Dex).

Operationalizing maqasid al-shari'ah – the behavioral science method

One of the behavioral science methods that can be adopted in operationalizing *Maqasid al-Shariah* is Sekaran's (2000) operationalization method. It breaks down abstract notions or concepts (C) into observable characteristic behaviors, which she termed as dimensions (D). The dimensions are then further broken down into measurable behaviors that are called elements (E). She cited the example of thirst as a concept. The behavior of thirsty people is to drink a lot of fluid (Dimension). The degree of thirst can be measured by the number of glasses drunk by each thirsty individual (Element). Sekaran's model can be illustrated in Figure 3 above.

Sekaran's concept can be adopted to formulate the I-Dex conceptual framework, which is represented by the 6 elements of I-Dex, and operationalized into the respective dimensions and, further broken down into elements. The

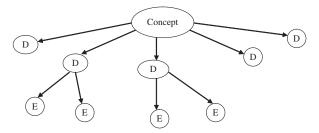


Figure 3. Sekaran's operationalization method. **Note:** D denotes Dimensions and E, Elements

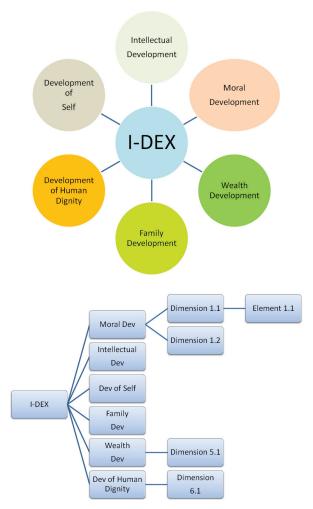


Figure 4. The I-Dex conceptual framework based on *Magasid al-Shariah*.

process of operationalizing I-Dex into measurable elements is based on content analysis of relevant works on the area.

Definition of the components of maqasid al-shari'ah Only five components of Maqasid al-Shariah will be the focus of this study based on the definitions provided by earlier scholars. The sixth component, i.e., development of human dignity is excluded as there is no clear definition that can be obtained from earlier works.

Hifdh al-din (preservation of religion)

Al-Din is derived from the Arabic word "d-a-n-a," which has several literal meanings, including judgment, governance, accountability, subjugation, authority, submission, surrender, obedience and peace. Technically, it carries a general meaning as "way of life." Early scholars of al-Maqasid such as al-Juwayni (n.d.), al-Ghazali (1901) and 'Izz Abd Salaam were more concerned on developing the theory, which was largely used to serve Usul al-Fiqh. Therefore, they discussed the preservation of the five Maqasid components, including al-Din, as a matter of example rather than a serious deliberation on their dimensions. The succeeding Fuqaha, Ibn Ashur (1998) defines Hifdh al-Din as salvaging the faith of every individual Muslim

from being affected by anything that might undermine and confuse his or her beliefs and distort his or her behavior. As for the community as a whole, preserving *al-Din* means to prevent anything that might violate and destroy its fundamentals, which includes defending Muslim land and sovereignty and preserving the means of Islamic learning and education among the present and future generations of the Muslim Community (Ibn Ashur, 1998, p.116).

Contemporary Muslim scholars have expanded the dimensions of preserving al-Magasid. For example, Attia uses the components of al-Magasid differently in four realms and identifies the corresponding means of preserving them at the three levels, namely Daruriyyah, Hajiyyah and Tahsiniyyah. Hence, he discusses the preservation of al-Din at the three realms: Individual, family and the Ummah. At the individual realm, he uses the term "al-tadayyun" (personal piety), which can be preserved through individual's effort in promoting religious piety within one's self. He suggests that the following four means (dimensions) at the Daruriyyah level be used to preserve al-Din at the individual realm: strengthening the 'Aqidah, performing obligatory 'Ibadat, embracing good Akhlaq and performing obligatory acts of obedience. Al-Tadayyun at the family realm means preservation of personal piety within the family, which is achieved at Hajiyyah level by good choices of candidates for marriage. At the Ummah realm, Attia defines al-Din as "Preservation of Religion and Morals," which can be preserved through two means at the level of Daruriyyah (performing communal prayers and performing other socio-religious activities) and two means at the Hajiyyah level, namely upholding moral values and curbing the spread of corruption.

Another contemporary scholar, Auda (2010) opines that the focus of the preservation of *al-Din* in al-Ghazali's and al-Shatibi's terminology has its roots in al-Amiri's punishment for giving up true faith. Auda argues that the same theory has been re-interpreted by modern scholars to mean "freedom of faiths" or "freedom of belief," using Ibn Ashur's term (Auda, p.24). Meanwhile Chapra (2008) sees *al-Din* in the context of *al-Maqasid* as providing religious worldview which potentially helps man to reform the human self to ensure the fulfillment of all his spiritual and material needs.

Based on the discussion above, the preservation/development of *al-Din* can be operationalized from the following four broad dimensions, namely (i) philosophical dimension - providing worldview, (ii) spiritual dimension - strengthening the 'Aqidah, (iii) moral dimension - embracing good *Akhlaq*, and (iv) practical dimension - performing obligatory 'Ibadat and performing virtual acts.

Hifdh al-'aql (preservation of the intellect)

Preservation of intellect has been defined by Muslim scholars beginning from al-Juwaini up until contemporary time in various ways. However, all of them agree on certain elements of the definition and the meaning of preservation of intellect. Chapra (2008) quotes Imam Al-Ghazali as saying that intellect is the fountainhead, starting point, and foundation of knowledge. Imam Al-Ghazali (n.d.) also believed that prohibition of wine by *Shariah* is the evidence for the necessity to protect the intellectual. Al-Shatibi (2004), for example, defines preservation of intellect, preventing it from anything that will spoil it. According

to Ibn Ashur (2006), preservation of intellect means the protection of people's minds from anything that would put them in disorder. He further elaborates on this definition by saying that it is because otherwise any type of disorder of the intellect will lead to serious corruption consisting of improper and perverted human conduct. Consequently, any defect affecting a mind of an individual leads to a partial corruption of the society while defects affecting the minds of the whole community will lead to total devastating corruption and evil. Chapra (2008) agrees with this view but he adds another point by saying that it is faith that provides that right direction to the intellect, otherwise intellect may lead to more and more deceptions and exploitations. At the same time, faith requires the service of intellect to maintain its dynamism to respond to changing socio-economic and intellectual environment.

Al-Zarkashi (1994) was in the opinion that the *Shariah* preserves the intellect by making legal punishment obligatory for drinking intoxicants, because the mind is the ground for any act related to *Maslahah*. Therefore, any disruption of the intellect leads to extreme *Mafsadah*.

Islam emphasizes the importance of reason and dignifies a human being by favoring him over the rest of the creatures and calling him upon the development of reason, physically and intellectually:

- a. **Physical development**: one of the principles in Islamic Jurisprudence is that a judge should not judge when he is hungry, because otherwise he might come up with improper decree. Another fact that proves that the *Shariah* does pay attention to preservation of intellect is that the preference is given to the food if it is served at the time of the prayer. It is because the mind of the praying person must be free from any external effects that would prevent him from focusing on his prayer with peaceful mind.
- b. **Intellectual development:** seeking knowledge and considering reason as the foundation of *Iman*; freeing reason from superstition and harmful knowledge such as black magic. This has a direct relationship with the proper education for human beings that would always keep them alert, sober and constantly on the right track in developing and preserving the intellect from any harm.
- c. **Punishing with legal punishment:** Ibn Ashur (2006) explains the legal punishment for intoxication, it is because the *Shariah* needs to distinguish between the rationally sound people from those who are not. This, of course, will lead to a better social security and consequently to law and order in the society.

Hifdh al-nafs (Preservation of Life)

There are a number of definitions of *hifdh al-nafs* as provided by scholars. Al-Juwayni and Al-Ghazali in Al-Raysuni (2006), for instance, defines *hifdh al-nafs* as generally the preservation of human life through the law of retribution (in the event of murder). In order to describe *hifdh al-nafs* further, Al-Shatibi in Al-Raysuni (2006) explains that preservation of life can be achieved in three ways:

 Establishing its foundation through the legitimacy of procreation—ensuring they enter into valid matrimony and have at their disposal whatever related measures needed, including divorce

- 2. Ensuring its survival through food and drink—ensuring they do not receive nourishment which is harmful or lethal (survival from within)
- Providing clothing and shelter—guaranteeing the provision of everything without which the things mentioned above would not be possible, including animals for slaughter, as sacrifices, hunting, the right to impose penalties for crimes (survival from without)

Along similar views, Al-Allaf (n.d.) says that preservation of life is secured by obtaining lawful means of sustenance such as food, marriage, medicine, shelter, etc. Ibn Ashur (1998) added another dimension to the definition of *hifdh al-nafs* by stating that preservation of human souls means to protect human lives from being ruined either individually or collectively by preventing harm and ruin before they happen, such as combating and eradicating epidemics. This can be considered to be falling under Al-Shatibi's "survival from without," but from non-human threats.

Applying the views of earlier scholars to the more contemporary context, Chapra (2008) states that *hifdh al-nafs* involves the achievement of the following:

- 1. Dignity, self-respect, brotherhood and social equality
- 2. Justice
- 3. Spiritual and moral uplift
- 4. Security of life, property and honor
- 5. Freedom
- 6. Education
- 7. Good governance
- 8. Removal of poverty and need fulfillment
- 9. Employment and self-employment opportunities
- 10. Equitable distribution of income and wealth
- 11. Marriage and stable family life
- 12. Family and social solidarity
- 13. Minimization of crime and anomie
- 14. Mental peace and happiness

Hence, based on the views of the various scholars, hifdh al-nafs can be defined as the preservation of human life through three means. The first is survival from within, which includes (a) human sustenance through the fulfillment of human physical and biological needs in terms of food and drinks, (b) fulfillment of spiritual/psychological needs, which include moral and spiritual uplift, and (c) fulfillment of intellectual needs through education. The second way to achieve hifdh al-nafs is survival from without, i.e., (a) the general protection of human life from harm and danger in his natural environment through the provision of clothing and shelter, (b) the protection of human life from nonhuman threats such as diseases through medical treatments, preventive medicine and disease control mechanisms such as vaccinations, and (c) protection of life from human threats, either individually or collectively through the provision of public security to minimize the incidence of crime and a legal structure that serves as deterrence to life threatening crimes, such as capital punishment for murder. The third way to achieve hifdh alnafs is the fulfillment of social needs (based on Chapra's definition) through the achievement of brotherhood, social equality, good governance, equitable distribution of income and wealth, and family and social solidarity. The definition can be summarized in Figure 5.

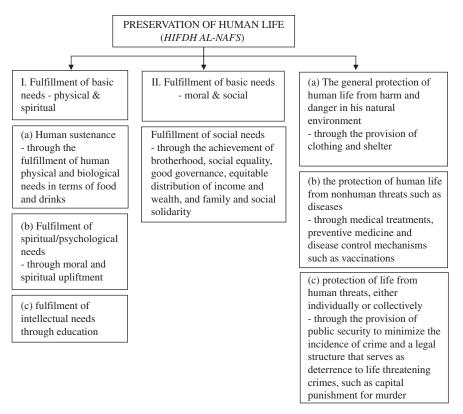


Figure 5. Preservation of human life (*hifdh al-nafs*).

Hifdh al-mal (preservation of property/wealth) For hifdh al-mal, according to Ibn Ashur (2006), preservation of property means protecting the wealth of the community from being ruined and from shifting to the hands of others without compensation. Al-Juwayni and Al-Ghazali in Al-Raysuni (2006) describe this preservation as the protection of people's possessions from thieves by cutting off their hands, while Al-Shatibi in Al-Raysuni (2006) states that it is the prohibition against injustice, depriving orphans of their property, wastefulness, envy, giving short measure and weight, corruption in the land.

Contemporary literature on *hifdh al-mal* views it in a more "holistic" manner, i.e., (i) protection of ownership and property; (ii) acquisition and development of property or wealth and (iii) preservation of wealth. This can be found in the writings by Hassan and Mahlknecht (2011); Ng (2008); Dusuki and Bouheraoua (2011); and Chapra (2008). Ng elaborates that preservation of wealth with regards to its availability as essentials or *daruriyyah*; circulation of wealth as complementariness or *hajiyyah*; while investment and growth of wealth as embellishment or *tahsiniyyah*. Hassan and Mahlknecht (2011) emphasize that there must be transparency in wealth and finance, and justice in the circulation of wealth.

Chapra (2008) stresses the importance of promoting equitable distribution of income and wealth in the development of and expansion of wealth. He provides the following suggestions to achieve this purpose:

- i. Redistributive methods of zakah, sadaqat and awqaf
- ii. Economic development to increase national income:

- a. Strengthening of human resources education, technological advance, work ethics, etc.
- b. Proper monetary and fiscal policies to accelerate development
- c. Access to capital for the poor microfinance
- d. Employment and self-employment opportunities vocational training, etc.

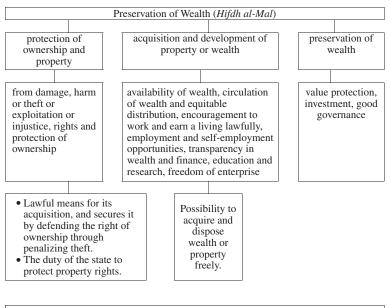
He also states that the development and expansion of wealth can be realized through:

- Education, research, and improvement in technology and management
- ii. Security of life, property and honor
- iii. Good governance
- iv. Freedom of enterprise
- v. Employment and self-employment opportunities

The discussions on *hifdh al-mal* can be consolidated and summarized in Figure 6.

Hifdh al-nasl or al-nasb (preservation of progeny or lineage)

The concept of *hifdh al-nasl* involves the protection, preservation and promotion of progeny (Kasule, 2004), it is essential in Islam for a healthy, productive and effective Islamic society. This is against the background that no civilization can endure if its future generations are spiritually, physically, and mentally inferior to the preceding ones and thus, unable to respond fruitfully to the challenges they face (Chapra, 2008). Moreover, the desire to have offspring is a very strong natural human instinct. This fact is recognized in the Holy *Qur'an*, where Allah



- Transparency, prevention of harm and hardship, and justice in circulation.
- Must also take into account intergenerational dimension: optimality is reached when it is no longer possible to improve of any one of the components without harming any one of the remaining in the current or some other generations.²

Figure 6. Preservation of wealth (*hifdh al-mal*).

(S.W.T) stated that wealth and progeny are the allurements of this world (Fadel, 2002). In a *hadith*, the Prophet (pbuh) called on the *ummah* to marry and have children so that he will be proud of it in the hereafter.

In Islam, *Nasl* is preserved by legitimizing marriage, prohibiting adultery and forbidding emasculation among others (Al Sari, n.d.). On the other hand Çizakça (2007) viewed *hifdh al-nasl* as the protection of future generations; in this regard he argued that the "Al-Ghazali Optimum" is reached only when it is no longer possible to improve one of the five components of *maqasid al-Shariah* without impairing any one of the remaining in the current or future generation.

Hifdh al-nasl takes many dimensions depending on the particular aspect of human life being considered. In everyday life this has taken the form of prohibiting zina, adultery, and the harsh hudud punishments mete out upon the violators (Çizakça, 2007; Kasule, 2005). Generally, the strict moral laws and the prohibition of fornication and adultery are part of the stress on the preservation of progeny or lineage (Fadel, 2002). Islam does not only prohibit adultery, but it also legalized and encouraged marriage, thus, hifdh al-nasl is ensured through marriage, child birth within the marital bond and proper child bond (Kasule, 2004). In Islam, the family is only based on marriage, which is controlled by rules and regulations. The marriage contract has legal consequence of joint rights and responsibilities of husband and wife in relation to one another and to their offspring; it is under this protective umbrella that children are to be born. In Islam, the right of legitimacy is a basic right, and every person has the right to be the legitimate child of his/her parents (Fadel, 2002).

In the same vein, Al Sari (n.d.) argued that the principle objective of marriage is to preserve posterity and continuity of mankind, other objectives that include all the benefits men and women gain as a result of marriage such as emotional, sexual or even materialistic benefits are subsidiary. Although nasl (posterity) may be achieved outside the framework of marriage, but such a benefit is considered rejected in Islam because it will result in to uncertainty as to the legitimacy of the offspring and thus jeopardizes their basic rights and thereby undermines the magasid. Therefore, the basic rights of children in Islam at various stages of their life, right before conception or even marriage up to a certain stage of their life are aimed at ensuring protection of the progeny of Muslims' ummah. These rights include, among others, choosing a good mother for them, feeding, shelter, education, proper upbringing and healthcare. In mu'amalat the law of inheritance ensure transfer of property rights from parents to children so that they can have a means of sustenance even after the demise of their parents (Kasule, 2005).

The elements of the dimensions of hifdh al-nasl are as follows:

Premarital level: Selection of right partner, by considering factors such as health, behavior, knowledge and even the *nasl* itself, in a *hadith* reported by Abu Dawud the Prophet (pbuh) said "Marry a loving, kind and reproducing female as I will take a special pride by you on the Day of Judgment"

Preconception level: Tampering with the reproductive process is an unlawful practice in Islam; these include; ceasing it in any form, tampering with it in any way or reducing it for no legitimate reason (Anonym, n.d.)

Prenatal level: As the soul (spirit) is be blown in the foetus at the fourth month of pregnancy, Islam prohibits abortion after the fourth month of pregnancy; however, if there is a grave situation, which endangers the life of mother, there is no harm in performing abortion to the foetus (Anonym, n.d.)

Postnatal level: Offering *adhan* to the babies ears soon after birth set stage moral upbringing, breastfeeding for up to two years of age and care and protection of children ensures healthy children.

Childhood and adulthood: In Islam children's rights are numerous; these include right to a decent and peaceful life, good and worthy names, protection against all possible vices and bad habits such as: lying, cheating, theft, jealousy, deception and unkind attitudes towards parents, certain necessities of life, including affordable house, lawful food, useful education and proper upbringing (Chapra, 2008).

Healthy environment and need fulfillment: Health care and good nutrition are the basis of this element, because if the children do not get proper nutrition along with a clean and healthy environment and suitable medical care, they may not grow up to be strong and fit adults and as result may not be able to contribute significantly to their societies even if they are of high moral standing and well educated (Kasule, 2005; Chapra, 2008). Moreover, good nutrition for children ensures that they grow as healthy boys and girls who are potential parents; also good nutrition for pregnant mothers ensures foetal growth and development as well as easy delivery (Kasule, 2004; 2005).

Moral and intellectual development: This is part of the right of children to good upbringing and education; it reinforces the *maqasid* of the preservation of religion; a morally bankrupt and illiterate child will not be the proud of his parents and the Muslim *ummah* at large, therefore, parents should inculcate into their children the necessary character ((khuluq hasan) and educate them. Chapra (2008) argued that in order to make children good Muslims, it is necessary to inculcate in them all the decent qualities of character (khuluq hasan) that Islam requires of its followers, these include honesty, truthfulness, conscientiousness, tolerant and able to get along with others peacefully, punctual, hardworking, thrifty, polite among others.

Freedom from fear, conflict and insecurity and debt burden: This underscore the need for a peaceful society devoid of chaos and all forms of crisis including economic and financial ones, these may jeopardize the welfare of future generation, thus the current generation should avoid living beyond their means and should create job opportunities for future generation (Chapra, 2008).

Operational definitions of maqasid components, dimensions and elements

Based on the content analysis of the various definitions of *Maqasid* components by different scholars, the operational definitions of the components can be derived as follows:

i. Hifdh al-Din is defined as the preservation and development of human faith through spiritual

- enrichment, embracing good moral standards and performing religious practices at the individual, family and ummatic level.
- ii. Hifdh al-Aql is defined as utilizing and developing the intellect and safeguarding the mind from negative influences, such as drugs and superstitions.
- iii. Hifdh al-Nafs is defined as ensuring the existence, sustenance and development of human life through the fulfillment of basic needs, both physical & spiritual, and moral & social needs, and its protection from threats, both human and non-human.
- iv. *Hifdh al-Mal* is defined as the protection of ownership and property from damage, harm, theft, exploitation or injustice. In addition, it also encompasses the acquisition and development of wealth by making it available through circulation and equitable distribution, as well as preserving the wealth through investment and good governance.
- v. *Hifdh al-Nasl* is defined as the protection of everything that would ensure the survival and progress of the family (in all dimensions physical, material, spiritual, emotional) and the preservation and development of future generations.

From the operational definitions given above, the dimensions of each component of the *Maqasid* are identified and summarized in Table 1.

For hifdh al-din, only two of the three dimensions are selected, namely, spiritual enrichment, and embracing good moral standards. Due to the difficulty in measuring religious practices as a composite measure, it has been excluded.3 For hifdh al-aql, the dimension of developing the intellect is included as measured by primary and secondary school enrollment. Three dimensions are selected for hifdh al-nafs, namely fulfillment of basic needs (physical), fulfillment of moral needs, and protection from threats (human). The dimension of fulfillment of basic needs (spiritual) is in effect also included since its elements of religious and non-religious education has already been captured in the measurements of spiritual enrichment in hifdh al-din and developing the intellect in hifdh alagl. The Magasid component hifdh al-mal is measured by two dimensions of protection of ownership and property and acquisition and development of property/wealth, measured by the readily available international property rights index and the inclusive wealth index, respectively. The Gross Domestic Product (GDP), that has been regularly used to reflect wealth/income in HDI and even E-HDI in Dar (2004) has been replaced by the inclusive wealth index. The last component, hifdh al-nasl, includes survival and progress of the family and protection of progeny, as measured by divorce rate and child mortality rates, respectively.

As illustrated above, the construction of the I-Dex is based on the dimensions identified from the conceptual definitions given by Muslim scholars on the components of *Maqasid al-Shariah*. This is the major difference from the E-HDI developed by Dar (2004) amd Anto (2009), where the applications of *Maqasid al-Shariah* do not explicitly take into account the various dimensions embedded in each *Maqasid* component. As such, the I-Dex is deemed to represent a more comprehensive approach in measuring development from the Islamic perspective.

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Maqasid Component	Dimensions	Possible Elements
Hifdh al-Din	Spiritual enrichment,	Sound faith; religious school enrollment
	Embracing good moral standards	Corruption level; charity; social service/volunteer work
	Religious practices	Performing prayers; payment of zakat
Hifdh al-Aql	Utilizing the intellect	Employment; research opportunities; freedom of speech and thought
	Developing the Intellect (physical development of the brain)	Healthcare; provision of healthy food and drinks; environmental pollution
	Developing the Intellect (non-physical/mental prowess)	State of mental health; education; access to internet
	Safeguarding the mind from negative influences (eg. wine, drugs, superstitions)	Media; measures against intoxicants; criminal/illegal activities
Hifdh al-Nafs	Fulfillment of Basic Needs (physical)	Provision of food, water, electricity, amenities, health, housing; material wellbeing; means to earn a living
	Fulfillment of Basic Needs (spiritual)	Education (religious & non-religious)
	Fulfillment of Moral Needs	Good governance; human rights; justice; political freedom
	Fulfillment of Social Needs	Social justice; marriage/family institution; community life
	Protection from threats (human)	Public security; political stability and security
	Protection from threats (non-human)	Preventive healthcare; medical services
Hifdh al-Mal	Protection of ownership and property	Property rights/ ownership; access to judiciary; legislation
	Protection of wealth and property from damage/Prevention of harm and hardship in wealth and finance	Insurance
	Preservation of wealth through protection of its value	Price stability
	Preservation of wealth through its circulation	Financial intermediaries;
	Acquisition and development of property/wealth	Employment laws; the availability of wealth
Hifdh al-Nasl	Survival and progress of the family	Marriage/family institution; public security; security of life
	Protection of future generation	Environmental sustainability; economic sustainability
	Protection of progeny	Reproductive health; child mortality
	Development of future generations	Education; literacy
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Note: Highlighted cells are dimensions selected for the construction of the I-Dex.

Table 2. Dimensions and elements of components of the magasid al-shari'ah for the construction of the I-Dex.

Dimensions	Elements in Dimensions	Items in Elements	Measurement of Items in Elements	Source of data for measurement
Hifdh al-Din: defined as the preservation ar at the individual, family and ummatic level	preservation and develo l ummatic level	pment of human faith throu	Hifdh al-Din: defined as the preservation and development of human faith through spiritual enrichment, embracing good moral standards and performing religious practices at the individual, family and ummatic level	standards and performing religious practices
Spiritual enrichment	Religious Education	Percentage of total expenditure in religious education	(Expenditure in religious education/ Total expenditure in education in a given year)*100	Ministry of Education/Ministry of Finance of respective country
Embracing good moral standards	Level of Corruption	Overall ranking in corruption index	TI Corruption Index	http://www.transparency.org/
Hifdh al-Aql: defined as util	zing and developing the	intellect and safeguarding	Hifdh al-Aql: defined as utilizing and developing the intellect and safeguarding the mind from negative influences, such as drugs and superstitions	and superstitions
Developing the Intellect (non-physical)	Education (regular)	Primary enrollment rate	Primary enrollment rate (Number of children enrolled/total number of eligible children)*100	http://stats.uis.unesco.org/ unesco/TableViewer/ document. aspx?ReportId = 143&IF_Language = eng
		Secondary enrollment rate	(Number of children enrolled/total number of eligible children)*100	http://stats.uis.unesco.org/ unesco/TableViewer/ document. aspx?ReportId = 143&IF_Language = eng
Dimensions	Elements in Dimensions	Items in Elements	Measurement of Items in Elements	Source of data for measurement
Hifdh al-Nafs: defined as ensuring the existence, sustenance and deveneeds, and its protection from threats, both human and non-human.	uring the existence, susl n threats, both human c	enance and development of ind non-human.	Hifdh al-Nafs: defined as ensuring the existence, sustenance and development of human life through the fulfillment of basic needs, both physical & spiritual, and moral & social needs, and its protection from threats, both human and non-human.	s, both physical & spiritual, and moral & social
Fulfilment of Basic Needs Poverty index (physical)	Poverty index	Poverty gap at national poverty line (%)	Mean shortfall from the poverty line (counting the nonpoor as having zero shortfall) as a percentage of the poverty line	http://data.worldbank.org/topic/poverty
Fulfilment of Moral Needs Fulfilment of Basic Needs (spiritual)	Fulfilment of Basic Needs (spiritual)	Universal Human Rights Index		http://www.ohchr.org/ EN/HRBodies/Pages/ UniversalHumanRightsIndexDatabase.aspx
Protection from threats (human)	Public security	Incidence of crime	Crime Index	http://www.numbeo.com/crime/rankings_by_country.jsp
				(Continued)

Table 2. (Continued)

Dimensions	Elements in Dimensions	Items in Elements	Measurement of Items in Elements	Source of data for measurement
Hifdh al-Mal: defined as th development of wealth by n	e protection of ownership naking it available throu	and property from damage gh circulation and equitable	Hifdh al-Mal: defined as the protection of ownership and property from damage, harm, theft, exploitation or injustice. In addition, it also encompasses the acquisition a development of wealth by making it available through circulation and equitable distribution, as well as preserving the wealth through investment and good governance.	Hifdh al-Mal: defined as the protection of ownership and property from damage, harm, theft, exploitation or injustice. In addition, it also encompasses the acquisition and development of wealth by making it available through circulation and equitable distribution, as well as preserving the wealth by making it available through circulation and equitable distribution, as well as preserving the wealth by making it available through circulation and equitable distribution, as well as preserving the wealth through investment and good governance.
Protection of ownership and property	Property rights/ ownership	International Property Rights Index	International Property Score earned under this index Rights Index	http://www.internationalpropertyrights index.org/about
Acquisition and Availability of development of property/wealth (essentials / wealth	Availability of wealth (essentials / daruriyyah)	Inclusive wealth index.	Inclusive wealth index. Wealth = Pmc*Manufactured capital (MC)+Phc*Human capital (HC)+Pnc*Natural capital (NC)	http://www.unep.org/pdf/IWR_2012.pdf
Dimensions	Elements in Dimensions	Items in Elements	Measurement of Items in Elements	Source of data for measurement
Hifdh al-Nasl: defined as the protection of everything that we and the preservation and development of future generations.	e protection of everythin, evelopment of future gen	g that would ensure the surverations.	vival and progress of the family (in all dimensi	Hifdh al-Nasl: defined as the protection of everything that would ensure the survival and progress of the family (in all dimensions – physical, material, spiritual, emotional) and the preservation and development of future generations.
Survival and progress of the family	Marriage/Family institution	Divorce rate	(number of divorces in a given time period/ $$ UN; Euromonitor total number of marriages at the end of the time period) *1000	/ UN; Euromonitor
protection of progeny	Child mortality	Child mortality rates	The total number of child (more than 1 and http://www.measuredhs.com/pubs/less than 5 years) deaths per 1000 live births	l http://www.measuredhs.com/pubs/ ns

Conclusion

This study proposes to develop an integrated Islamic development framework and index based on, and representing, the *Maqasid al-Shariah* or noble objectives of the *Shariah* for OIC and non-OIC countries. The Integrated Development Framework based on *Maqasid al-Shariah* has been developed based on the works by al-Ghazali and Abu Zaharah. Using content analysis, the operational definitions of each component of *Maqasid al-Shariah* have been derived, and the dimensions identified based on the scope of the definitions. The elements have been selected for each dimension based on the relevant existing indicators. However, data availability still poses a major constraint in selecting more relevant indicators.

The *Maqasid*-based Integrated Development Index (I-Dex) will be computed in a follow-up study that will involve data collection and empirical work. The I-Dex is hoped to better represent holistic development and well-being according to Islamic benchmarks, hence providing academics, students and policymakers in Muslim countries with an alternative measurement of progress.

Notes

- 1. http://hdr.undp.org/hd/
- 2. Cizakca (2007).
- This is an area for future studies where a composite measure of religiosity may be developed and included in the I-Dex.

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