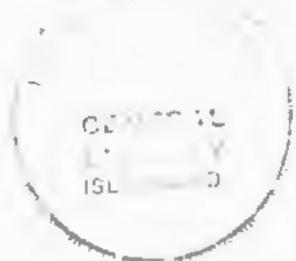


Socioeconomic Development Index based on *Maqasid al-Shariáh*:
The Case of OIC Countries



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A Dissertation Submitted to the School of Economics, International Institute of
Islamic Economics in Partial Fulfillment for the Award of Doctor of Philosophy
Degree in Economics of the International Islamic University, Islamabad.

1
Accession No. TH-27047

C2

PLD
330.956
ABS
K

Economic development - Religious aspects - Islam
Islamic countries - Economic conditions
Islamic law - Interpretation and construction
Maqasid al-Shariah.

Indexes (Economics)

Social indicators - Islamic countries

APPROVAL SHEET

**Socioeconomic Development Index Based on Maqasid Al-Shariah:
The Case of OIC Countries**

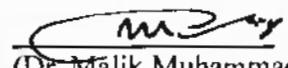
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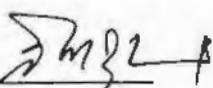
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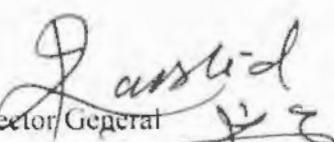
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Dedication

To my deceased parents and only brother Hafiz Ata Ur Rehman, whom I just lost in a road accident, who taught me the true meaning of brotherhood.



Declaration

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ABSTRACT

The maximization of utility is at the heart of the materialistic approach to development. Poverty, inequality, wastage and serious environmental difficulties have come from this approach to development, endangering the planet's survival. For Muslims, development has a different meaning than it does for the rest of the world. For Muslims, development is the polar opposite of the current development paradigm. Material and nonmaterial successes, as well as accountability and social responsibilities, are central to the Islamic vision of development. Following this conceptual clarification of the term development, a composite index of *Maqasid al-Shariah* (MS) deprivation is produced using data from WVS 7 for 15 OIC member countries, followed by individual indices of five dimensions by employing the most widely used Alkire and Foster (2011) technique. Apart from the overall MS deprivation score, distinct indices for each of the five MS dimensions are generated to determine the position of OIC nations in each of the five MS dimensions independently. The countries are graded according to their level of deprivation in the five *Maqasid al-Shariah* dimensions. Nigeria is the most deprived country in the *Maqasid al-Shariah* dimensions, while Tajikistan is the least deprived, according to our data. The determinants of the *Maqasid al-Shariah* based deprivation index are also explored using the OLS regression technique for cross-section data from 49 WVS 7 nations, including both Muslim and non-Muslim countries. According to the findings of our study, judicial effectiveness, Social capital, Social values and Ethical values have significant inverse relationship with the value of these countries' *Maqasid al-Shariah* based deprivation score. Similarly, the human inequality variable, which is an average of the values of income, education, and health inequalities, has a direct impact on the MS deprivation index score.

ACKNOWLEDGMENT

I am grateful to ALLAH SWT for providing me with the abilities to accomplish my PhD course work and thesis. May ALLAH SWT expand my knowledge and abilities so that I can better serve the Ummah and Islam.

Dr. Hamid Hasan and Dr. Malik Muhammad, my esteemed supervisors, will always be in my debt for their unwavering support and advice during the course of my thesis. May ALLAH SWT bless them in this life as well as the next.

The IIIE team, particularly Syed Niaz Ali Shah and Br. Dr. Tauqir Ahmed, are constantly encouraging and supportive, ALLAH SWT bless them all. My family, including my wife and children, remained upbeat and patient throughout the course work and thesis writing process. May ALLAH SWT make me to return them as much as I can.

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List of Abbreviations

AH	After Hijra
ARDL	Autoregressive Distributive Lags
ASEAN	Association of Southeast Asian Nations
CE	Common Era
EHDI	Extended Human Development Index
E-HID	Ethics Augmented Human Development Index
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GNI	Gross National Income
GTD	Global Terrorism Database
HDI	Human Development Index
HDR	Human Development Report
ICT	Information and Communication Technology
I-Dex	Integrated Development Index
IHDI	Inequality Adjusted Human Development Index
I-HDI	Islamic Human Development Index
IMF	International Monetary Fund
LPI	Legatum Prosperity Index
MDGs	Millennium Development Goals
MS	<i>Maqasid al-Shariah</i>
MSA	<i>Maqasid al-Shariah</i> based Average Poverty
MSH	<i>Maqasid al-Shariah</i> based Headcount of Poverty
MSI	<i>Maqasid al-Shariah</i> Index
MSPI	<i>Maqasid al-Shariah</i> based Multidimensional Poverty Index
ODA	Official Development Assistance

OIC	Organization of Islamic Cooperation
OPHI	Oxford Poverty and Human Development Initiatives
PEW	Pew Research Centre USA
PHDI	Planetary Pressure-Adjusted Human Development Index
RA	<i>Rahmat Ullah Alaih</i>
RTA	<i>Raziullah hu Tala Anhu</i>
SAW	<i>Sallahhu Alaihi Wasalam</i>
SCECDI	Socio-economic Development Index
SDGs	Sustainable Development Goals
SWT	<i>Subhanhu Wa Taala</i>
TIAR	Transparency International Annual Report
UN	United Nations
UNDP	United National Development Program
US	United States
VECM	Vector Error Correction Model
WB	World Bank
WCED	World Commission on Environment and Development
WDI	World Development Indicators
WDR	World Development Reports
WVS	World Value Survey

Chapter 1

Introduction

1.1 Background of the Study

The role and impact of religious values on the performance of economies have been established in the literature since decades. Several studies by leading economists have found a direct relationship of religiosity and outcomes of economic events, for example, religion and economy (McCleary, 2006), religious values and the economy (Weber, 2013), economic growth and religious belief (Barro & McCleary, 2003), local religious norms, corporate social responsibility and firm value (Zolotoy et. al., 2019), religious values and behavior in economic development (Jacob & Osang, 2010) and impact of Christian values on the poverty alleviation in Philippines (Karian et al., (2017). However, the analysis of socioeconomic welfare is still lacking certain important considerations, such as ethics, morality and freedom, which are parts of declared human rights in almost all societies of the world. For instance, the globally used measures of human wellbeing, namely the HDI (Human Development Index – developed by UNDP) and MPI (Multidimensional Poverty Index – developed jointly by OPHI and UNDP), are value neutral and based only on material contemplations of human beings.

The prevalent concept of development is based into believing that development and progress require acquisition of wealth and material welfare, and most of the text books endorse this conception (Zaman, 2013; Kim et al., 2016; Guru et al., 2019; Tordaro & Smith, 2021). The idea that wealth is an input to improve human welfare and the economists should work on methods and means to bring ease and comfort to human lives,

seems revolutionary. However, Mahboob-ul-Haq, a worldly renowned Pakistani development economist of 20th century, after implementing development strategies based on conventional growth theories' provided a completely different insight. He writes that, "*We were told to take care of our GNP as that would take care of people—let us reverse this and take care of people as this will take care of our GNP*".¹ Based on his experience over decades of development work, he reinstates the phenomenon of development from conventional wealth-oriented views of development to human-centered approach to development. He further goes on by saying that humans are both means and ends of economic development.

Similarly, under Sen's (1985, 1999) capability approach, the humans' capabilities to function are considered as real development rather than accumulation of wealth. In his views, without ability to get benefit of a given resources is just like having a book by an illiterate person or a good nutritious food by a sick man (Sen, 1999). Another study by the World Bank (2006) reemphasizes the role and potential of human beings when it quotes that most of the wealth on the globe is produced by the skills and capabilities of people rather than natural or accumulated capital.² Thus, the role and scope of humans are so important in the process of development.

The Islamic view of development is not only positive and normative but also transformative.³ Different definitions of development are presented by Islamic economists with consensus on two points; first, happiness or success is the goal of economic

¹ See Bari (2011)

² Where is the Wealth of Nations?" study by World Bank (2006) <http://siteresources.worldbank.org/INTEEI/214578-1110886258964/20748034/All.pdf>

³ For reference please see; Zaman. A. (2009). Islamic Economics: A survey of the literature; II. *Islamic Studies*, 48(4), 525-566, pp. 531.

development and second, this happiness is achieved by having complete development in both dimensions, material and spiritual. Hasan (1995, 2006), also stated similar views about development by recognizing two broader aspects of human life; first, the material needs, related to consumption of material goods and services and second, the spiritual needs, related to moral, ethical and social aspects of life. The above two needs may seem conflicting but factually are interrelated and supportive to each other. A bunch of Islamic teachings are witnessed of their complementary relation.⁴

In line with the above definition, however with different expressions, according to Sadeq (2006), development is a balanced and sustained improvement of both the material and spiritual wellbeing of man. It involves not only an efficient provision of livelihood to everyone according to his needs and ability but also moral and character uplift according to Islamic teachings (Sidani, 2019).

Ahmad (2006) provided philosophical underpinnings of the concept of development in Islam, which is based on four points: (i) *Tawhid*, (ii) *Rububiyyah*, (iii) *Khilafah*, and (iv) *Tazkiyah*. The meaning of *Tawhid* is belief on oneness of Allah, *Rububiyyah* is accepting Allah (SWT) as sustainer and provider of Rizq (all type of needs) to everyone, *Khilafah* is positioning of human being as vicegerent of Allah (SWT), and *Tazkiyah* is purification of souls. Having belief on and implementation of above four points ensure the development of both the material and spiritual aspects of human life. It is important to understand that according to Islamic approach, the humans are at center of all

⁴ "O ye who believe! When the call is heard for the prayer of the day of congregation, haste unto remembrance of Allah and leave your trading. That is better for you if ye did but know". (Al-Al-Qurán, 62:09) "Give not unto the foolish (what is in) your (keeping of their) wealth, which Allah hath given you to maintain; but feed and clothe them from it, and speak kindly unto them". (Al-Qurán, 04:05)

development activities. The provision of useful production, improving quality of life, advancement in technology suited to requirement of Muslim societies, self-sufficiency and more integration of Muslim countries could be important miles stone to achieve the goals of development in Islam.

Unlike neo-classism, which is based on isolating economic activities from other dimensions of real life (Rist, 2014), Islamic approach to development is a multipart activity. In order to have complete and perfect development, efforts would have to be made in several directions simultaneously. However, as said earlier, rather focusing on isolated economic approach, Islamic approach is a blend of different factors and forces which work in an endogenous integrated model⁵ (Thinklink Institute, 2021). To elaborate this paradigm, Islamic epistemology provides further detailed insight. Allah (SWT) has made human beings as best of all creatures and made everything of this universe subservient to him (Ahmed, 2011).⁶ In fact, development is about developing the hidden potential for excellence that all human beings are born with (Sadeq, 1987; Zaman, 2013; Sidani, 2019). To be able to practice and presenter of this righteous role model for which humans are sent to this earth, two main conditions have been proposed by the Holy Quran; first, *shahadah* in the form of *Kalma Tayabah*, (like a necessary condition in any economic analysis) as prerequisite for acceptance of all good deeds (action – *Amaal*). However, only belief on Allah is no guarantee of success or development and second, one's action (*Amaal*) are demonstration of his belief (seems sufficient condition). According to Holy Quran, “*whoever will perform good deeds whether man or woman, and he or she is believer, is*

⁵ A phenomenon or process where different factors have complementary relationship

⁶ “*Verily we have honored the Children of Adam. We carry them on the land and the sea, and have made provision of good things for them, and have preferred them above many of those whom We created with a marked preferment*”. (Al-Qurán; 3:114).

promised for the reward of a noblest life (highly developed) and an extra ordinary reward in the life hereafter by Allah (SWT) " (Al-Qurán, 16:97).⁷

1.2 Maqasid al-Shariah and Socioeconomic Development

One of the sayings of Prophet Muhammad SAW is regarding the five questions to be asked by Allah (SWT) to every person on the Day of Judgment. The prophet Muhammad (SAW) said:

"The son of Adam will not be able to pass away from Allah (S.W.) until he is asked about five things: how he lived his life, and how he utilized his youth, with what means did he earn his wealth, how he spent his wealth, and what did he do with his knowledge"

(Hadith No.2416, Chapter. Sufful Qiyamah, Sunan al-Tirmidhi)

First and second questions are about spending of lives and specially youth-time, third and fourth are regarding money – means of earning and ways of spending, and the fifth is about the use of beneficial knowledge. These questions are directly related to 4 of the five *Maqasid al-Shariáh*: as preservation of life, preservation of property, preservation of posterity, and preservation of intellect respectively, whereas the fifth – preservation of faith – includes all five needs.

As Islam is a divine religion and complete code of life for all people of all times, it stands for the welfare of whole mankind.⁸ The set of rules derived from the teachings of

⁷The translation of all verses of Al-Qurán is taken from the website; <http://corpus.Al-Qurán.com/translation.jsp>; translation by Pickthall.

⁸ "O mankind! Worship your Lord, Who hath created you and those before you, so that ye may ward off (evil). Who hath appointed the earth a resting-place for you, and the sky a canopy; and causeth water to pour down from the sky, thereby producing fruits as food for you. And do not set up rivals to Allah when ye know (better)". (Al-Qurán; 2:21-25)

Quran and *Sunnah* is called *Shariáh*. The objectives of *Shariáh* are deduced from principles, laws and moral codes. In the context of above hadith of the Prophet SAW, the objectives of *Shariáh* principles are meant to achieve satisfied progress in four broader socioeconomic aspects of life. The first and foremost of these principles is having belief on Oneness of Allah (SWT) , which then help in achieving higher level of each objective. The scholars who have studied and analyzed *Shariáh* laws have found that the implementation of these laws will ensure the progress and prosperity of humanity, (Chapra, 2008; Anto, 2011; Bintang & Indra, 2015; Ali & Hasan, 2018; Abu-Bakr & Ringim, 2018). So, development according to Islam is centered on human development which can be achieved through *Maqasid al-Shariáh*.

The objectives of *Shariáh* are considered as the summary of *Shariáh* guidance, which covers all aspects of human life including social, economic and political at individual and collective level (Oladapo et al., 2017). The first formal discussion on these objectives is made by Imam al-Juwaini in his book *al-Burhan fi Usul ul Fiqh*. A five-dimensional classification of the given objectives was proposed first time by Imam Abu-Hamid Al-Ghazali just in an indicative way, and later in expended form by Imam Abu Ishaq Al-Shatibi (Kamali, 1999), (Johnston, 2007), (Auda, 2008), (Kamali, 2008). These include protection of faith, life, intellect, posterity and property. Protection and improvement in these objectives will guarantee the material and spiritual needs and will ultimately lead to a developed society. Any deficiency on the part of any of the above will cause moral and material deprivation.

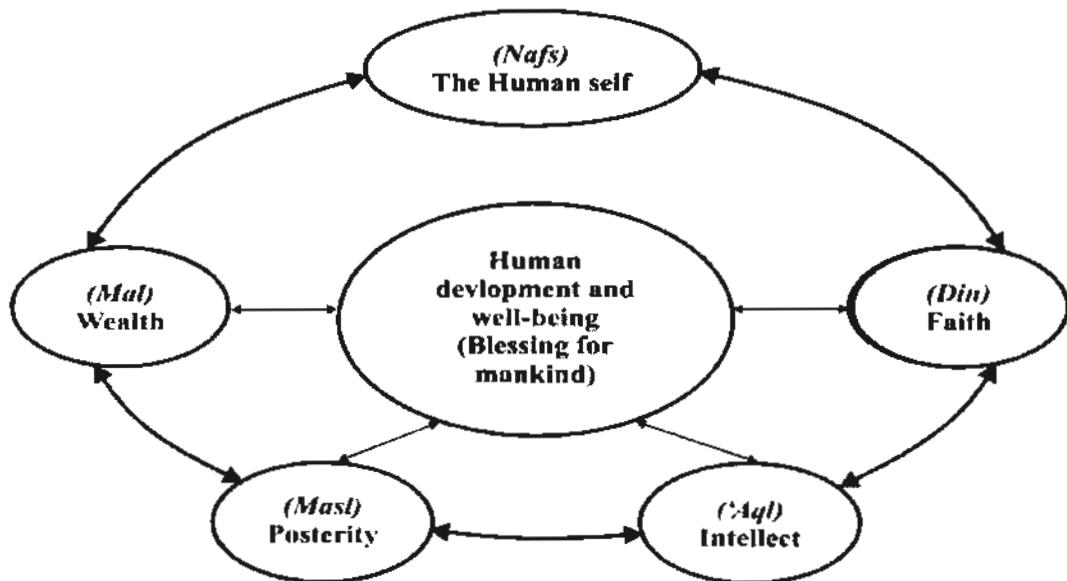
According to al-Ghazali, as quoted in Masud (1977), *Maqasid al-Shariáh* means the goals and ends of *Shariáh* to achieve *Maslalahah* - the public interest, which is defined as follows:

"In its essential meaning it is an expression for seeking something useful (mansáah) or removing something harmful (madarráh) What we mean by maslahah is the preservation of the maqsúd (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 is maslahah and what fails to preserve them is mafsatadah and its removal is Maslahah".

(pp. 152-153, Ch. 8)

The above said five aspects of human life are considered so important and comprehensive to take care of both the material and spiritual life, or worldly life and life hereafter, or temporary and permanent life (Rafie et al., 2017). A diagrammatical illustration of these objectives of *Shariáh* and their mutual dependence made by Chapra and Ali (2008) is sketched below:

Figure. 1 Theoretical Framework of *Maqasid al-Shariah*



Source: Chapra and Ali (2008, p-6)

From Shariáh perspectives, every measure and procedure of development should be in line with the objectives of *Shariáh*⁹. Having undoubted belief (faith – *al-Din*), security of life (*Al-Nafs*), intellect (*Al-Aql*), posterity (*Al-nasl*) and wealth (*Al-mal*) should be focus of all development activities. The high-level achievement in all these aspects is necessary for being happy and developed in this life and life hereafter. The stay and success of this life is temporary viz a viz the happiness and eternal stay of the life hereafter and their combined achievement is called as success (*Falah*) in *Shariáh* terminology (Al-Qurán, 87:16-17, 9:38), so *Falah* is a comprehensive and holistic concept of human welfare (Al-Qurán, 2: 201, 28:77).

⁹ “O ye who believe! Come, all of you, into submission (unto Him); and follow not the footsteps of the devil. Lo! he is an open enemy for you”. (Al-Qurán, 2:208)

Also, the protection of five fundamentals, mentioned above is not a one-time protection. Rather it involves continuous effort to improve to reach the best achievable level. Every action that can improve the existing level and every effort that can help in avoiding the bad or unlike outcomes is desirable from *Shari'ah* perspectives. In Fiqh Terminology, it will involve *Dafal-mafasid* (elimination of degrading factors and reasons) and *Jalbal-masaleh* (realization and improvement of benefits). For example, for protection of life, the following given and similar measures can be applied,

- Violent crimes
- Health and safety
- Epidemic life taking diseases
- Extreme hunger, poverty and inequality
- Loss of dignity and honor
- Ignorance, superstitions and orthodox beliefs
- Attack on life (by others or self-inflicted)
- Fear and Insecurity of life, etc.

From the enhancement aspect it can include:

- Education and awareness
- GNI per capita or living level
- Health and Medical care
- Moderation in consumption

Similarly, the second part of the study is based on exploring the relevant determinants of MSH (*Maqasid al-Shariah* based Headcount of Poverty). Certainly, the value of MSH

depends on the value of different variables. In the literature, various studies have found certain macroeconomic variables as determinants of HDI. It includes real income, value of the coefficient of inequality, inflation, government spending, fertility rate and life expectancy etc. However, in the context of HDI based on dimensions of *Maqasid al-Shariáh*, along with given variables, certain other qualitative and quantitative variables are expected to affect the value of index. Therefore, it is thought to study the impact of certain additional variables such as religiosity, Islamic education and awareness, rule of law and social/moral values and norms prevailing in the society.

The situations of individual countries related to their earned value of MSH will help in setting policy targets at Micro and Macro level. In the light of achieved score on the dimensions of *Maqasid al-Shariáh*. It will help in better utilizing the financial and other human resources towards the desired directions.

1.3 Research Gap

There have been continues efforts for measuring development in societies. These are all about developing new measures or improving the existing measures. In some recent efforts, the globally recognized HDI has been adjusted to incorporate the impact of certain new factors, for example, environment and sustainability (Neumeyer, 2001); ethics and morality (Dar & Otiti, 2002); HDI and its family of indices (Bagolin, 2008; Berenger & Chouchane, (2007); healthy human development indices (Engineer, et.al, 2009); and inequality adjusted HDI (Alkire and Foster, 2010). In all above studies, they have measured new multidimensional socioeconomic indices but still relying on Sen's capability approach and HDI. Among the given available indices, least progress has been made to develop an index for measurement of progress and welfare in Muslim countries.

As noted above, the multidimensionality of human welfare has long been recognized by social scientists in general and Muslim scholars much earlier than its present-day focus. However, Sen (1985, 2000) and Haq (1999) made it popular and usable by developing Human Development Index (HDI), first time introduced by UNDP in 1990, later on every years with improvement in method and scope.

The perfection and wider applicability of HDI have made it a popular index for measuring human development across the globe. Many renowned scholars have also used HDI to develop an index based on Islamic values and thoughts (for example, Dar, 2004; Anto, 2009; Rehman and Askari, 2010; Amin et. al., 2011). Although all these indices are good for cross country comparison and help in setting policy goals at state level but provide no details for regional decomposition or household or individual level within each country. The micro level information we are using helps not only in policy making at unit level but also to check the performance of institutions or applied projects. This micro data can also be aggregated to get overall picture.

Similarly, it is still required to address the impact of various determinant of human welfare on the value of HDI (developed on Islamic lines and views) by using suitable econometric modelling. This measurement is important in the context of newly introduced *Maqasid al-Shari'ah* based human welfare index and its relationship with literature-based determinants of HDI, for example, these determinants can include health, income, education, government expenditures, inequalities, inflation, etc.

1.4 Objectives of Study

1. To construct and measure an index for each dimension of the *Maqasid al-Shariáh* for socioeconomic development in selected OIC countries.
2. To rank and compute policy score of each dimension of *Maqasid al-Shariáh* for policy purposes.
3. To construct and measure a composite index of *Maqasid al-Shariáh* dimensions for selected OIC countries.
4. To study the impact of different literature-based determinants of human wellbeing on MSH and MSPI for OIC countries.

1.5 Significance of the Study

A significant empirical work is evident that the unnecessary emphasis on material components of development at the cost of moral/spiritual values, proved an incomplete/wrong approach. After the Second World War, in many countries of the world, real income increases many times but wellbeing and happiness failed to increase rather worsened in many cases.¹⁰ This is because real income is positively associated with happiness only to certain level where standard biological needs are fulfilled. After that level, some other needs are supposed to be fulfilled for ever increasing level of happiness and satisfaction.

What are those needs? These are mostly spiritual and non-material and do not necessarily require income or wealth to get these satisfied. The dedicated wealth-oriented

¹⁰ The increase in income happened because of structural development projects by World Bank and other donor countries and organizations in War-torn and former colonies of world powers. SAP (Structural Adjustment Program) by WB and IMF in one of the example of such programs.

approach may in fact hurt satisfaction of these needs. Why economists have excluded these needs in the analysis of socioeconomic welfare? Because, these are value loaded and involve moral/ethical considerations which are diametrically opposed to prevailing capitalist philosophy.¹¹ Secondly, these are qualitative in nature and difficult to measure. However, these are inevitable for a perfect analysis and cannot be ignored. One of important reason for these needs to be fulfilled is achievement of mental peace and inner satisfaction which are not related to increase in income and piling up of wealth through self interest (Frank, (2012; Easterlin & O'Connor, 2020).¹²

On the top of these needs are justice, cooperation and social responsibility which demand fair, respected and dignified treatment of every individual irrespective of his color, race, gender and nationality. Equally important are spiritual and moral values which serve as pre-requisite for resource efficiency and justice in distribution to fulfill all other social and material needs of the society (Sen, 1999; Zaman, 2013; Haq 2018; Zaman, 2019, Zaman, 2021). Further in the list are security of honor, life and property, education (both religious and contemporary), marriage, family and social solidarity. Although few of these needs have now been added in the new approach to human wellbeing (like environment and inequality), but still moral and ethical foundations are required to be added in the given approach to development. Without having these needs incorporated in new approach to socioeconomic development, any model of development will be incomplete, wrong and baseless (Ahmed, 2011; Mirakhori & Askari, 2010). The Muslim countries, which are no less affected in terms of social and moral upheaval, political and economic downfall,

¹¹ For details, see, "Islamic Development Accumulation of Wealth" by Zaman (2013); See also Zaman (2013) and Zaman (2019).

¹² For details, see Easterlin Paradox (1974).

required serious policy challenges to achieve human welfare. In the given situation, the best policy option could be to follow and implement the objectives of Shariáh as proposed by Imam Ghazali, which provide safety and enhancement of faith, life, intellect, posterity and property, collectively called *Maqasid al-Shariáh* (objectives of Shariáh), a complete package covers both the moral and material aspects of life. Among the contemporary Muslim scholars, Chapra et al. (2008) has provided a detailed theoretical framework for using *Maqasid al-Shariáh* to achieve socioeconomic development in Muslim countries. It is highly desirable to formulate and suggest policies based on *Maqasid al-Shariáh* on how to achieve these goals (*Maqasid*), which consider both material and non-material dimensions of humankind and provide a comprehensive model for development in Muslim countries. This work aims to contribute to this effort by developing a framework derived from *Qurán* and Sunnah related to each objective of Shariáh and then construct a *Maqasid-i-al-Shariáh* (MS) based Index by following multidimensional dual cut-off approach (Alkire & Foster, 2011).

Chapter 2

Compatibility of SDGs with Maqasid al-Shariah

2.1 Introduction

When we are discussing the development from Islamic and contemporary perspectives, it is important to write about the sustainable development goals called as SDGs. The SDGs for 2030 are initiated by the UNDP after the partial success of Millennium Development Goals (MDGs -2015), for next fifteen years. The seventeen goals of SDGs are adopted at much broader level by almost all members of UN. These goals cover mainly three dimensions of social, economic and environment in the context of sustainability of resources and life on earth. The Muslims constitute more than 25% of world population with fifty seven sovereign states.¹³ An attempt is made to evaluate sustainable development goals in the light of Islamic approach to human survival and resource sustainability. The Islamic vision of peace, progress and its continuity has been given by early Muslim thinkers in the form of *Maqasid al-Shari'ah*. It is tried to determine the relevance of SDGs with *Maqasid al-Shari'ah* as well as to identify the gaps wherever exist in the light of universality of Islamic teachings. The SDGs are discussed to reestablish the subject of the goals from primary *Shari'ah* sources. Subsequently, the issue of important missing goals and dimensions are discussed when compared with the objects of *Maqasid al-Shari'ah* (MS). These are related to justice, ethics, and humanity, which will make SDGs unique and universal. We augment the globally recognized socioeconomic objectives of SDGs with

¹³ <https://assets.pewresearch.org/wp-content/uploads/sites/11/2014/01/global-religion-full.pdf>

most significant dimensions and aspects of MS. Consequently, it will help for better understanding and applicability of sustainable development goals of UNDP in Muslim societies.

2.2 The Compatibility of SDGs with *Maqasid al-Shari'ah* and Missing Goals

Islam is a divine religion for the guidance of all human beings till the last day of this universe. The injunctions and teachings of Islam are all perfect in the sense that these are complete and valid for all times and all people of this planet¹⁴. These features make Islam and guidance of Islam so universal that it covers each and every problem the world is facing or can face any time in future. Consider the example of most recent development in growth models, where social capital has been added after the inclusion of technological component¹⁵. But Islamic teachings from the very first day named the followers as one single group like a single body. Any harm to any part must be felt by the whole body (Al-Qurán; 49:10; 3:103). The holy Prophet reported to have said, “*the example of believers in regard to mutual love, affection, cooperation and sympathies is that of one body; when any limb of it aches, the whole body aches, because of sleeplessness and fever*” (Sahih Muslim, No. 6586).

Islam requires from Islamic Government to establish institutions for public welfare as Almighty Allah says, “*Those (Muslim rulers) who, if We give them power in the land, (they) order for Iqamat-as-Salat. [i.e. to perform the five compulsory congregational Salat (prayers) (the males in mosques)], to pay the Zakat and they enjoin Al-Ma'ruf (i.e. Islamic*

¹⁴ “This day have I perfected your religion for you and completed My favour unto you, and have chosen for you as religion al-Islam. Whoso is forced by hunger, not by will, to sin: (for him) lo! Allah is Forgiving, Merciful”. (Al-Qurán; 5:3)

¹⁵ Sequeira (2011)

*Monotheism and all that Islam orders one to do), and forbid Al-Munkar (i.e. disbelief, polytheism and all that Islam has forbidden) [i.e. they make the Quran as the law of their country in all the spheres of life]. And with Allah rests the end of (all) matters (of creatures)" (Al-Qurán; 22:41). For promoting virtues and suppressing evils, rules of *Muhtasib* are obtained from the verses of Holy Quran, where Almighty Allah says that nice people always cooperate for good things and stop people from all types of wrongdoings¹⁶. The Prophet Muhammad (SAW) in one of his statements, provide guidance on how to lead a peaceful and respectful life, he said, "*By the one in whose hand is my soul! You will not enter Paradise until you believe, and you will not believe until you love one another. Shall I inform you a matter which if you do It, will love one another? Spread Salam among each other*" (Al-Tirmidhi, No. 2904).*

On the basis of above *ayaat* and *ahadith*, it can be clearly inferred that Islam sets very clear agenda for peace, progress and prosperity for humans. Here we have tried to examine to what extent the Sustainable Development Goals – 2030 are in conformity with Islamic vision of development. The Islamic doctrine of socioeconomic development has been compiled by early Muslim scholars in the form of *Maqasid al-Shariáh*. These are based on five dimensions, namely, protection and development of *faith* (*Hifz ul deen*), self (*Hifz ul nafs*), intellect (*Hifz ul aql*), progeny (*Hifz ul nasl*) and property (*Hifz ul maal*).

Attempts have been made by different researchers to map the SDGs against *Maqasid al-Shariáh*. However, such attempts have often resulted in establishing a form of

¹⁶ "And there may spring from you a nation who invite to goodness, and enjoin right conduct and forbid indecency. Such are they who are successful". (Al-Qurán; 3:104).

"They believe in Allah and the Last Day, and enjoin right conduct and forbid indecency, and vie one with another in good works. These are of the righteous". (Al-Qurán; 3:114).

correlations among the two. We explore the relationship by going through the basics of *Shariáh* sources and norms from the primary sources of *Qur'an* and the *Ahadith* for each one of the SDGs. In addition, we provide a critique of the SDGs by identifying some missing dimensions of socioeconomic development from Islamic perspective. These are based on humanity and values for which humans are called as the best of creature¹⁷. Before this discussion, here is a summary of few studies which discuss the subject of sustainable development in the context of Islamic law.

Haq et al. (2019) relate the three aspects of development, which are sustainability of resources, attainment of *Maqasid al-Shariáh* and Poverty alleviation. According to the authors, what it means by sustainability is that future generation benefits from the development of present which is exactly the *Hifz ul Nasl*, the fourth dimension of *Maqasid al-Shariáh*. The authors ascertain the very concept of *Shariáh* regarding the worldly resources in the hands of users. The current generations are trustees of the resources and not the absolute owners and are accountable for justified use of the given resources.

Abdullah (2018) highlighted the potential of Waqf for field of development by exploring a channel of three consecutive factors, which are Waqf, fundamental goals of SDGs and *Maqasid al-Shariáh*. According to the author, the institution of Islamic Waqf plays a significant role in realizing many vital goals of SDGs which are consistent with the *Maqasid al-Shariáh*. The given study provides a framework for possible collaboration of institution of Waqf and SDGs.

¹⁷ "Verily we have honored the Children of Adam. We carry them on the land and the sea, and have made provision of good things for them, and have preferred them above many of those whom We created with a marked preferment". (Al-Qurán; 3:114).

Hasan (2006) writes on the meaning of sustainable development and its implications from conventional approach and Islamic perspective. His definition of sustainable development is focused on environment friendly growth. According to the author, in the given contemporary approach of growth and development there is tradeoff between output maximization and environmental degradation. He particularly mention the definition of sustainable development by the World Commission on Environment and Development (WCED) in 1987 as, “*meets the needs of the present without compromising the ability of future generations to meet their own needs*”¹⁸. The author incorporate the Islamic approach to material growth and environmental concerns by frequently quoting the references from the *Holy Quran* and *Ahadith* of the Prophet (SAW)¹⁹. In his opinion, the variation in approaches adopted by Islamic and non-Islamic ones is due to difference in worldview. He concluded that Islamic approach is more environment protective as it incorporates the moral, ethical and social responsibilities of inhabitants of planet.

Dariah et al. (2015) discuss how SDGs can be effectively implemented in Muslim countries with different ideological perspective. They explore the three relationships of human and *Allah* (SWT), human and human, and human and environment based on Shariáh sources. They develop connection of above three relationships with SDGs. As discussed in conclusion made by the authors, Islamic sources provide not only enough details on above

¹⁸ (World Commission on Environment and Development, 1987)

¹⁹ “*But seek the abode of the Hereafter in that which Allah hath given thee and neglect not thy portion of the world, and be thou kind even as Allah hath been kind to thee, and seek not corruption in the earth; lo! Allah loveth not corrupters*”. (Al-Qurán 28:77)

“*A client of Saad said, Saad found some slaves from the slaves of the Madina cutting the trees of Madina. So he took away their property and said their patrons, I heard the messenger of Allah prohibiting to cut any trees of Madina, if anyone cuts any one of them, what is taken from him will belong to the one who seizes him.*” Abu Dawood, Vol. 2, No. 2038)

three relationships but also the way forward on how to implement these for successful outcomes.

Ismail and Sheikh (2017) declare SDGs as in consonance with Islamic spirit and philosophy. According to the authors, the Islamic approach to welfare is a combination of spiritual, intellectual and economic perspectives. The *Maqasid of Shari'ah* strengthen moral consciousness; develop pro-social behavior and environmental concerns that ultimately leads to achieve sustainable development goals. According to authors, the Islamic socioeconomic institutions of Zakah and Waqf works very informally and effectively to achieve many non-viable but commercially vital projects.

The question is as how to implement the agenda of SDGs (2030) by UNDP in Muslim countries with different social, cultural, and spiritual modalities. Here one needs to understand the fundamental difference in the concept of development in Islamic perspective. According to Islamic approach to development, the spiritual or moral wellbeing is the key to all forms of progress, "*As for man, when his Lord tries him by giving him honor and gifts, then he says (puffed up): My Lord has honored me. But when He tries him, by straitening his means of life, he says: My Lord has humiliated me!*" (Al-Qurán; 89:15-16). While talking about development from two perspectives, there is need to differentiate between material and moral development. We can explain this point with an example of heart-transplant which is an achievement in medical sciences, but not a solution for negative feelings created in the hearts of human and takes the form of actions to cause destruction in the society. With this backdrop, we will review SDGs by UNDP in more

details to see how the sustainable development goals are related to the *Maqasid al-Shariáh* proposed by Imam Shatibi and others.²⁰

2.2.1 Compatibility of SDGs with *Maqasid al-Shariáh*

The Sustainable Development Goals are opted at much wider level because of their focus on human capabilities and development. All these goals are directly meant for immediate actions on humans' conditions and circumstances. The human centered approach which has rightly been addressed in SDGs seems very compatible to five *Maqasid al-Shariáh*,

In what follows, we will first determine the alignment of SDGs with *Maqasid al-Shariáh*. In this section, a brief description of each individual goal and its corresponding dimension of *Maqasid al-Shariáh* is provided. Further in proceeding section, some more important dimensions (related to morality and ethics) of socioeconomic development are made part of the discussion.

SDG 2.1: "End Poverty in all its forms everywhere". According to the Global Multidimensional Report 2020, Across 107 countries of the world which are home to 76% of the world's population, 1.3 billion people - 22 percent—are multidimensionally poor. Two-thirds of multidimensionally poor people live in middle-income countries²¹.

This objective has been categorically addressed under *Hifz ul Maal*, the fifth dimension of *Maqasid of Shariáh*. Islam views poverty as a curse to be eradicated through productive efforts. It has been taken as collective responsibility (*farad kifayah*) of the society to take care of needs of all disadvantaged people. The common term used in *Shariáh* sources for charity is *Sadaqah*. When *Sadaqah* takes the form of compulsory levy required by the

²⁰ The history of *Maqasid al-Shariah* is given in chapter no.2 (Literature Review), section 2.2

²¹ Global MSPI Report 2020

eligible rich Muslims, it is called Zakah. Also, when Sadaqat results in flow of benefits of permanent nature, it is named as Waqf or *sadaqah jariah*" (Hassan & Ashraf, 2010, Ali et al., 2015, Shirazi, 2014, Shirazi & Amin, 2009).

SDG 2.2: "End hunger, through food security and sustainable agriculture". Hunger is also measured through undernourishment, which means incapability to afford necessary calorie requirements. According to the Food and Agriculture Organization (FAO – UN) statistical pocket report of 2019, the situation of people facing undernourishment further deteriorated, where more than 820 million comes under the definition of hunger (10.08% of world population)²².

The issue of food and hunger is related to the second (*Hifz ul Nafs*) and (*Hifz ul Nasl*) dimensions of *Maqasid al-Shari'ah*. There are a number of references from primary Shari'ah sources which deal with the issue of agriculture and food security. On the importance of charity in fighting hunger, the Allah (SWT) said, "*And they give food, in spite of their love for it (or for the love of Him), to Miskin (poor), the orphan, and the captive, (Saying): "We feed you seeking Allah's Countenance only. We wish for no reward, nor thanks from you*" (Quran; 76:8-9). The Prophet Muhammad (SAW) said: "*Give food to the hungry, visit the sick and set free the captives.*" (Sahih Al-Bukhari, No. 552). Also, the Prophet Muhammad (SAW) related the existence of *eeman* with somebody on looking after the food needs of his neighbor, "*He does not have faith in me who spends the night satiated while he knows that the neighbor to his side is hungry*" (Al-Silsila-tus-Sahiha, No.387).

²² <http://www.fao.org/3/ca6463en/ca6463en.pdf>

SDG 2.3: “Ensure healthy lives and promote wellbeing for all at all ages”. This goal deals with the treatment of some life taking diseases and overall happiness which comes under ambit of protection of life, intellect and family (*Hifz ul Nafs, Hifz ul Aql and Hifz ul Nasl*). Islamic teachings place a great emphasis on healthcare and have provided principles for safe, secured and healthy life. On seeking medical care, The Prophet (SAW) exhorted Muslims to seek medical treatment and do not consume any unlawful (*haram*) object: “*Narrated Abu al-Darda: The Prophet Muhammad (SAW) said, Allah has sent both the diseases and the cure and he has appointed a cure for every disease, so treat yourself medically but use nothing unlawful*” (Sunan Abu Dawood, No.3874).

Indeed, a believer with good health could be more effective for fulfilling his duties towards Allah (SWT) and his fellow human beings. The Prophet ((SAW)) said: “*The strong believer is better and more beloved to Allah (SWT) than the weak believer although both are good*” (Sunan Ibn-e-Majah, No.79). There are guidelines available by the Prophet SAW as dinning etiquettes, which include evading of over-eating, sharing food with the destitute and deprived (*Fuqra-o-Masakeen*). Similarly, the case of smoking which is according to the majority *Ulema* comes under the category of highly disliking if not haram. If we look at the situation around, over eating and smoking both are source of wastage and causes serious medical issues.

SDG 2.4: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. This goal is all about provision of up to the level education as basic right for all without any discrimination, which is the third objective of *Maqasid al-Shariáh* called as protection of intellect (*Hifz ul Aql*). Islamic emphasis on learning and education is evident from very first revelation (*Wahi*) which started with the word “read”, “*Read! In*

the Name of your Lord, Who has created (all that exists)," (Al-Qurán; 96:1). Almighty Allah admire knowledgeable person, He says, "*It is only men of understanding who will remember (i.e. get a lesson from Allah's Signs and Verses)?*" (Al-Qurán; 39:9).

On the importance of education and learning, the Prophet Muhammad (SAW) used to make prayers that "*My Lord! Increase me in knowledge*" (Al-Qurán; 20:114). The Messenger of Allah said, "*Seeking knowledge is obligatory upon every Muslim*" (Sunan Ibn-e-Majah, No. 224). On the significance of dissemination of knowledge, The Prophet (SAW) reported to have said, "*A father gives his child nothing better than a good education*" (Sunan Al-Tirmidhi, No. 1952). Similarly, in another hadith, "*When a man dies, his acts come to an end, but three, recurring charity, or knowledge (by which people benefit), or a pious son, who prays for him (the deceased)*" (Sahih Muslim, No.4223).

The given two ahadith point to the interesting comparison between imparting education and a running charity (*Waqf*), which is a continuous source of benefit for the facilitator. While education remained at the top agenda of the institution of *Waqf* throughout Islamic history. A Number of world class Muslim Universities are established through Waqf funds, like Jamiat ul Azhar of Egypt is one of the example.

SDG 2.5: "Achieve gender equality and empower all women and girls". This subject of women empowerment has been covered under *Hifz ul Nasl*, the fourth dimension of *Maqasid al-Shariáh*. Although it is presented so that world has achieved a lot in terms of gender equality, however, the women inside and outside home are still facing discrimination and the media figures are just shocking.

Islam acknowledged the balance role of man and woman to form an ideal family unit which then helps in shaping the desirable future of mankind. The Quran declares that

human beings are created in pair. *“And among His Signs is this, that He created for you wives from among yourselves, that you may find repose in them, and He has put between you affection and mercy. Verily, in that are indeed signs for a people who reflect”* (Al-Qurán; 30:21)

The Qur'an has clearly described the rights for women, and the men are advised to treat them nicely and gently, for example, *“O you who believe! You are forbidden to inherit women against their will, and you should not treat them with harshness, that you may take away part of the Mahr you have given them, unless they commit open illegal sexual intercourse. And live with them honorably. If you dislike them, it may be that you dislike a thing and Allah brings through it a great deal of good”* (Al-Qurán; 4:19)

The prophet Muhammad (SAW) reported to have said in his farewell pilgrimage to men for their kind treatment to women. The men have accepted them (the women) as trust from Allah.²³ Moreover, he warned the men for usurping the rights of women being weak party in the contract. *“I forbid usurpation of the right of two weak persons – the orphan and the woman”* (Sunan Ibn-e-Maja, No78). In line with the Islamic vision of a balanced society, women are entitled to have equal access to health, education, professions of their competencies and fair participation in economic and other decision making levels.

SDG 2.6: “Ensure access to water and sanitation for all”. Water comes under the types of needs for which humans don't have substitute. This is the reason provision of water has been considered collective responsibility of society. Throughout Islamic history, the provision of water type basic needs have been ensured through the institution of Waqf.

²³ (Sahih Muslim, No. 2590)

Provision of water is based on protection of life and generations and therefore discussed under *Hifz ul Nafs* and *Hifz ul Nasl*. When the early Muslims migrated to Madina, they found difficulty in having drinking water. They approached the Prophet Muhammad (SAW) for this purpose. On the motivation of Prophet Muhammad (SAW), the only well of drinking water of Madina was bought by the companion Hazrat Othman bin Affan RTA from a Jew and made available free of cost to everybody in Madina being necessity of life. This is a noblest example set by the Companion of Prophet which tell us two lessons, the importance of the institution of Waqf in the provision of basic of life to everyone and secondly, the bad practice of profiteering from the basic of life such as water. Important to mention here that provision of water was not discriminatory then, available both for Muslims and non-Muslims. (Sunan Nisai; No. 3637).

In the Islamic literature, there are sufficient references in the Quran and ahadith that seek to ensure good sanitation and good health. Cleanliness and purification are not an option in Islam; cleanliness is declared as a component of faith. Every Muslim is required to pray five times a day, and get oneself cleaned fully which include visiting toilet and making ablution, is a prerequisite for offering prayer. Allah Almighty says in Quran; “*Truly, Allah loves those who turn unto Him in repentance and loves those who purify themselves (by taking a bath and cleaning and washing thoroughly their private parts, bodies, for their prayers, etc.)*” (Al-Qurán; 2:222).

SDG 2.7: “Affordable and clean energy”. Power and energy requirements are linked with ability and productivity of humans to grow and compete in upcoming challenges of life. This is also to increase the infrastructure and capability of developing countries for supplying up-to-date and sustainable energy services. The issue of healthy and high-tech

environment has been taken up in fourth and fifth dimension of *Maqasid al-Shariáh* by demanding protection of lives and wealth of nations (*Hifz ul Nasl and Hifz ul Maal*). The teachings of Shariáh encourage possible available ways of learning and earning to have a decent and convenient life for everybody.

One saying of the Prophet Muhammad SAW is, “*Facilitate things to people and do not make it hard for them, and give them good tidings and do not make them run away*” (Sahih Bukhari, No.69). For this purpose cooperation and coordination of people at all levels is very much appreciated.

SDG 2.8: “Promote inclusive and sustainable economic growth, employment and decent work for all”. The contemporary world suffers from a continued lack of decent work opportunities. In the Islamic context, this social contract translates into a collective obligation called *fard kifayah* and has been protected under *Hifz ul Maal*, the fifth dimension of *Maqasid al-Shariáh*. As per Islamic teachings, the provision of basics of life to everyone is everyone’s responsibility. Just imagined living in a society where everybody is considering other as his brother, would it be possible for anyone to sleep without food, living without house which is a perfect case of inclusive growth.

Similarly, there are guidance available to make followers to be productive and doing some valuable role. It is said in the holy Quran that after you finish your prayer spread on the earth to look for the bounties of Allah (SWT).²⁴ The Prophet ((SAW)) underlined the significance of earning livelihood in these words: “*The best of your*

²⁴ “And when the prayer is ended, then disperse in the land and seek of Allah’s bounty, and remember Allah much, that ye may be successful”.(Al-Qurán; 62:10)

provision is what you earn, and your children are part of what you earn” (Ibn-e-Majah, No.2290).

Islam encourage the well-off members of the society to look after fellow poors and has institutionalized the phenomenon of charity by establishing the permanent flow of resources from the very rich to very poor. It is important to mention here that while Islam promote charity by rich people from giver's point of view and same time discourage dependence of capable individuals on charity from recipients' point of view.

SDG 2.9: “Industry, Innovation and Infrastructure”. No doubt, Industry and infrastructure are of central importance as it creates the link between thought and action, between the brain and the body. It includes better facilities of roads, information and communication technologies, sanitation, electrical power and water. The low infrastructure environments of developing countries have decreased their productivity by roughly 40%. Industrialization which is attracted by better facilities of overheads and infrastructure has job multiplication effects on society. It is thought that every job in manufacturing creates 2.2 jobs in other sectors.

It is jointly covered in the dimensions of *Hifz ul Nasl* and *Hifz ul Maal* which involve the protection and progression of people's business and property. Islamic teachings related to commerce also strongly recommend fairness in trade dealings. Qur'an says: “*And give full measure when you measure, and weigh with a balance that is straight. That is good (advantageous) and better in the end*” (Al-Qurán; 17:35). Furthermore, Islam also emphasizes on fulfilling contractual obligations in mutual exchange. Qur'an says, “*O you who believe! Fulfill (your) obligations*”. (Al-Qurán; 5:1)

SDG 2.10: “Reduce inequality within and among countries”. Inequality is contrary to Social justice and equity and is close to *Hifz ul Maal* (the fifth dimension) if we restrict it to financial resources. Societies across the globe have experienced significant economic growth in recent years. However, still gross inequalities exist regarding incomes and other dimensions of access to health and education. In many countries, an increasing share of income goes to the top one -two percent of the population. There is an increasing concern of scholars to change the focus of policies from mere economic growth to an inclusive approach based on the dimensions such justice, equity and environment.

The just distribution of resources is a key focus of Islamic economic approach with several Quranic verses and Ahadith of the Prophet ((SAW)) addressing this issue. In essence, Islam recognizes the notion of private ownership of resources and inheritance by progeny. It identifies the disparity that is a usual outcome of varying abilities and resources among men and women. However, there are redistributive procedures in place in the form of Zakah, Sadqah and the institution of Waqf which provide a moderating effect to reduce inequalities (Al-Qurán; 59:7). For example in the holy Quran, it is said, “*And in their properties there was the right of the beggar, and the Mahrum (the poor who does not ask the others)*” (Al-Qurán; 51:19).

The goal of just distribution of resources require that return should be in line with efforts and not because of Monopoly of resources or any other illegal/illegitimate means like interest, gambling and hoarding. Islam advice more rational and practical measures for creation and distribution wealth in the form of trade (*bai*) and partnership (*Mudarabah, Musharakah*).

Islamic also deals with disparity at a spiritual level – by labeling such inequality as a test. In the holy Quran, it is said, “*And wish not for the things in which Allah has made some of you to excel others. For men there is reward for what they have earned, (and likewise) for women there is reward for what they have earned, and ask Allah of His Bounty. Surely, Allah is Ever All Knower of everything.*” (Al-Qurán; 4: 32)

SDG 2.11: “Sustainable Cities and Communities”. The Islamic approach to peaceful and progressive societies fortifies the significance of interdependence and mutual reliance of all living species on the planet. “*There is not a moving (living) creature on earth, nor a bird that flies with its two wings, but are communities like you*” (Al-Qurán; 6: 38)

The Quran advice human beings not to play with the Creator’s divine balance (here referred to as ‘measure’) when it is said: “*And the heaven He has raised high, and He has set up the Balance. In order that you may not transgress (due) balance, And observe the weight with equity and do not make the balance deficient*” (Al-Qurán; 55: 7-9). And this very purpose of protection and prosperity of cities and communities is inherent in fourth objective of *Maqasid of Shariáh* that is *Hifz ul Nasl*.

SDG 2.12: “Responsible Consumption and Production”. According to the Food and Agriculture Organization (FAO) of UN, almost half of the total food-produce goes wasted, while one out of every nine people in the world suffers from hunger. The implication of this goal calls for avoiding wastage in consumption and production with the intention of using given worldly resources in an efficient way and preserving them for generations to come. It fits well with *Hifz ul Maal* and *Hifz ul Nasl* – the fourth and fifth dimensions of *Maqasid of Shariáh*.

Islamic principles are very clear regarding usage of resources and discourage conspicuous consumption of unnecessary spending. The Qur'an says: "and waste not by extravagance. Verily, He likes not Al-Musrifun (those who waste by extravagance)", (Al-Qurán; 6: 141). Rather Quran promote an attitude of moderation while dealing with worldly resources, "And those, who, when they spend, are neither extravagant nor niggardly, but hold a medium (way) between those (extremes)" (Al-Qurán; 25: 67)

On production side, Islam allows ownership right and profit motive and use of profits for consumption and further investment. However, it discourages accumulation for the purpose of hoarding. Qur'an says: "And those who hoard up gold and silver (Al-Kanz: the money, the Zakat of which has not been paid), and spend it not in the Way of Allah, - announce unto them a painful torment". (Al-Quran; 9: 34)

SDG 2.13: "Climate Action". Climate/environment of the world is deteriorating continuously. It is affecting severely the lives, businesses, and environment and if trends continue can cause more destruction in future. Sea levels are rising, weather patterns are changing, and the emissions of greenhouse gases are at highest levels. It is forecasted if necessary measures are not adopted, the worlds' temperate can rise up to three degree centigrade this century²⁵.

Huge efforts are required towards the preserving and conserving of environment. Islamic philosophy of life and living provides the necessary motivation and deterministic rewards for favorable action towards promoting positive externalities in the environment. Prophet Muhammad (SAW) said: "Whoever plants trees, Allah will give him reward to the extent

²⁵ The UN Annual Emission Gap Report 2019.

of their fruit." (Musnad Ahmed, No. 415). This objective has rightly been addressed in *Hifz ul Nasl*, the fourth dimensions of *Maqasid al-Shari'ah*. The human beings, as vicegerent of Allah, have the mission of faithfully observing the injunctions given by their Creator.

The two-world view of life in Islam promote socially responsible behavior as one of the key determinants of success in the life hereafter. Prophet Muhammad (SAW) said: "*If the Resurrection were established upon one of you while he has in his hand a sapling, then let him plant it.*" (Musnad Ahmad, No. 12491).

Everything of this planet belongs to a common single source of creation which is inherent in the concept of *Tauheed*; it implies a fair treatment of even animals, forests and environment. It demands peaceful coexistence and mutual responsibility rather than tendency to live like 'fittest survivors'. In another occasion, in response to a question regarding charity to animals, the Prophet Muhammad (SAW) said: "*yes, there is a reward for acts of charity to every beast alive*" (Sahih Muslim, No. 5577).

During our temporary stay of life, we must utilize the given resources of the planet as trustees. While getting benefit of everything provided we should not forget to pass on the resources to next generation at least in the conditions we inherited. Ideally we should also be caring about animals, birds and even insects which are in one way or the other created for the benefit of human beings.

SDG 2.14: "Life below Water". The oceans of the world – their temperature, flows and chemistry, – drive global connections that make the planet livable for humankind. Our weather, rainwater, drinking water, coastlines, climate, much of our food, and so valuable

oxygen in the air we breathe, are all of course provided and regulated by the sea. It is clearly covered under *Hifz ul Nasl*, the protection of progeny.

The Quran provides very direct instructions regarding the responsible use of the resources of planet to keep earth a livable place for generations to come. “*Evil (sins and disobedience of Allah, etc.) has appeared on land and sea because of what the hands of men have earned (by oppression and evil deeds, etc.), that Allah may make them taste a part of that which they have done, in order that they may return (by repenting to Allah, and begging His Pardon)*” (Al-Qurán; 30:41).

SDG 2.15: “Life on Land, by sustainably managing of forests, combat desertification, halt and reverse land degradation, halt biodiversity loss.” Owing to unjustified human behaviors deforestation have caused disappearing of forest forever. The forests cover almost of 1/3rd of the earth and are not only providing food to humans and animal but also source of tackling climate change and biodiversity. If the trend of deforestation continue, it will be a serious threat to sustainable development. The significance of environment and forests are addressed under the following saying of Prophet SAW, “*If any Muslim plants any plant and a human being or any animal eats of it, he will be rewarded as if he had given that much as charity*” (Sahih Bukhari, No. 6012). In this way, there are many ayaat of the holy Quran and the traditions of the Prophet SAW provide line of action to conserve resources and protect environment. To keep the planet a livable place through maintaining the balance of life is supreme duty of human beings and therefore forms the part of divine objectives of Shariáh. Sustainability of life on earth is very much related to the objective of posterity (*nasl*) or better future of human beings.

SDG 2.16: “Peace Justice and Strong Institutions”. Peaceful, just and inclusive societies are prerequisites to achieve the Sustainable Development Goals (SDGs). The notions of peace, justice, fairness and strong institutions are inherent to the Islamic vision of success (i.e. *falah*). The Quran asserts: “*It is those who believe (in the Oneness of Allah and worship none but Him Alone) and confuse not their belief with Zulm (wrong i.e. by worshipping others besides Allah), for them (only) there is security and they are the guided*” (Al-Qurán; 6:82).

The People everywhere need to be free of fear from all forms of violence while go about their lives whatever their ethnicity, or faith is. It will then ensure *Hifz ul Nafs* and *Hifz ul Nasl*, the protection of life and society, the second and fourth dimensions of *Maqasid al-Shariáh*. In order to take forward the SDGs we need operative and inclusive public institutions that can deliver quality education and healthcare, fair economic policies and inclusive environmental protection.

A high level injustice include killing innocent human being, an act which has been taken so serious and it is said killing some for no reason is like killing of whole humanity and saving the life of one individual is like saving the whole humanity. Almighty Allah says, “*Because of that We ordained for the Children of Israel that if anyone killed a person not in retaliation of murder, or (and) to spread mischief in the land - it would be as if he killed all mankind, and if anyone saved a life, it would be as if he saved the life of all mankind. And indeed, there came to them Our Messengers with clear proofs, evidences, and signs, even then after that many of them continued to exceed the limits (e.g. by doing oppression unjustly and exceeding beyond the limits set by Allah by committing the major sins) in the land*” (Al-Qurán; 5:32). Islam rules out any form of discrimination based on

race, color, sex, nationality. In another hadith the prophet ((SAW)) is reported to have said: “*O People, surely, your Lord is one and your father is one, no Arab has any superiority over Ajmi and no Ajmi has any superiority over Arab, no Red has any superiority over Black and no Black any superiority over Read but on the basis of piety.*” (Musnad-e-Ahmad, No. 9732)

SDG 2.17: “Partnership for the Goals. Revitalize the global partnership for sustainable development”. No doubt, the partnership and cooperation are highly important for successful execution of sustainable development agenda. A global, national and regional level inclusive approach based on shared values and vision that keep people and this planet at the center is extremely desirable.

The idea of cooperation and partnerships is fundamental to Islamic societies. This 17th goal of cooperation and partnership has same role for successful achievement of *Maqasid al-Shariáh*. Mutual cooperation and solidarity is a norm central to Islamic ethics. The second verse of Surah Al Maida in the holy Quran says: “*Help you one another in AlBirr and AtTaqwa (virtue, righteousness and piety); but do not help one another in sin and transgression. And fear Allah. Verily, Allah is Severe in punishment*” (Al-Qurán; 5:2).

A hadith by the Prophet Muhammad (SAW) reinforces this principle of cooperation and mutual assistance as; narrated by Abu Musa, “*A believer to another believer is like a building whose different parts reinforce each other. The Prophet then clasped his hands with the fingers interlaced (while saying that)*” (Sahih Bukhari, No. 2446).

2.2.1 Tabulated summary of association of SDGs and *Maqasid al-Shariáh*

SDGs (1-17)	<i>Maqasid al-Shariáh</i> Dimensions
SDG 1: End Poverty in all Forms	<i>Hifz ul Maal</i> Protection of Wealth
SDG 2: End hunger, through food security and sustainable agriculture	<i>Hifz ul Nafs, Hifz ul Nasl</i> Protection of life (individuals and society) from all perceived threats including hunger
SDG 3: Good health and Wellbeing	<i>Hifz ul Nafs, Hifz ul Aql, Hifz ul Nasl</i> Protection and provision of healthy life and livings
SDG 4: Inclusive Equitable quality Education	<i>Hifz ul Aql</i> Protection and provision of useful knowledge for all
SDG 5: Gender Equality Women's Empowerment	<i>Hifz ul Nasl</i> Protection and fair treatment of women and family
SDG 6: Water and Sanitation	<i>Hifz ul Nafs, Hifz ul Nasl</i> Protection/Provision of needs of life including water
SDG 7: Affordable, Sustainable Clean Energy	<i>Hifz ul Nafs, Hifz ul Nasl, Hifz ul Maal</i> Protection of life, family and business
SDG 8: Decent Work and Economic Growth	<i>Hifz ul Maal</i> Protection and progression in wealth and business
SDG 9: Industries, Innovation and Infrastructure	<i>Hifz ul Maal, Hifz ul Nasl</i> Protection and development of lives and business
SDG 10: Inequality within and Among Nations	<i>Hifz ul Maal</i> (when restricted to financial resources) Establishment of social justice and equity within individuals and nations
SDG 11: Sustainable Cities and Communities	<i>Hifz ul Nasl</i> Protection and advancement of societies

SDG 12: Responsible Consumption and Production	<i>Hifz ul Maal, Hifz ul Nasl</i> Protection and Preservation of resources for current and future generations
SDG 13: Climate Change	<i>Hifz ul Nasl</i> Protection and Preservation of environment for current and future generations
SDG 14: Life below Water	<i>Hifz ul Nasl</i> Protection and Preservation of progeny based on water resources and environment
SDG 15: Life on Land	<i>Hifz ul Nasl</i> Protection and Preservation of progeny based on land resources and environment
SDG 16: Peace, Justice and strong Institutions	<i>Hifz ul Nafs, Hifz ul Nasl</i> Peace, protection and advancement of individuals and societies
SDG 17: Partnership for the Goals	<i>Hifz ul Din + Other four dimensions</i> The first dimension of <i>Hifz ul Din</i> is a key to have cooperation and commitment for all other dimensions of <i>Maqasid al-Shariáh</i>

Source: Made by the author

2.2.2 Missing Goals of SDGs

Throughout the seventeen goals of SDGs, there is no mention of spiritual and moral human development. This is a serious flaw in the contexts of Muslims in particular and everybody in general. What we see in so called now a days civilized societies of Europe and America that they are in situation of social and family crisis. Highest income countries have lowest birth rate, highest divorce rate, no respect for women and old age people and everything is evaluated on the basis monetary values (Polanyi, 1974; Mattingly, 2018). Indeed, the highest blessing for a man is being follower of right path (*Sirat-e-Mustaqeem*) which can make every other achievement useful and valuable for the recipient. For example, before having material resources one should have ability of how to use these resources to make

them real blessing. Similarly, before having power and position one should be capable and honest enough to use these powers in the best interest of society.

Apart from the above given deficiency, there are certain goals/dimensions in the list of seventeen that needs further actions in terms of their better exposure and implementation. For example, the goal number 16 is about 'Peace, Justice and Strong Institutions'. Perhaps this should be the SDG1 due its role and importance for all other goals. On an occasion, while strongly rejecting the request of favor for a woman of an influential tribe who had committed theft, the Prophet Muhammad (SAW) said, "*What destroyed the past nations preceding you, was that if a Noble amongst them stole, they would forgive him, and if a poor person amongst them stole, they would inflict Allah's legal punishment on him. By Allah, if Fatima, the daughter of Muhammad stole, I would cut off her hand*" (Sahih Bukhari, 3475). The world we are living presents a complete image of duality (dual society) which is a consequence of prevailing capitalist system. The success of capitalism lies in two class system, capitalists and working class. The working class is treated unjustly at social, political and economic fronts. In capitalism, there is rule of law but based on 'might is right'. There is no recessions and deprivations but for the poors. We cannot expect any change until the structural snags of the capitalist system are fixed which are related with growth and its distribution. Social justice needs to be implemented first before the economic justice within and among the nations.²⁶

Similarly, the goal number 4 is about 'Inclusive and Equitable Education. Education, perhaps the key of all achievements but no difference has been made in

²⁶ <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/01/World-Social-Report-2020-FullReport.pdf>

contemporary academia between Useful and Useless knowledge. The Prophet Muhammad (SAW) prayed for beneficial knowledge, and sought protection from useless knowledge (Sunan Ibn-e-Majah, No.3843). There is utmost need to adopt education to promote characters and humanity that can lead people toward reality of this life and universe. We need education that helps people to become human beings rather than human resource. Life has become more luxurious and easy but without peace and tranquility. More money is spent on wars and weapons than on hunger and poverty (Sachs, 2002; Mendez, 2002; Hashimi, 1985). The 3% of US Defense spending can stop hunger on the planet.²⁷

A so-called issue of the day is addressed under goal number 5 which is 'Gender Equality'. In line with the Islamic vision of balanced society, the provision of necessary help and support to women in gender-segregated societies has always been considered commendable. However, there have also been complaints of meddling with moral/social codes and a genuine call to activists to shift their focus from 'women empowerment' to 'family empowerment'. Indeed, the present-day "women only" approach to wellbeing is against the Islamic values and culture. Islam promotes family empowerment where complementary roles of men and women are clearly identified and inevitable for socioeconomic wellbeing of family (Muljano, 2020; Tandon, 2016).

Also, the issue of poverty in all forms has been taken up under goal number 1. A number of targets have been agreed on how to overcome the problem of poverty, but nothing on how to motivate people and nations to avoid dependence on others. Whereas Islamic teachings in this regard not only encourage spending for others from the giver's point of view, but it also tries to minimize dependence on charity from the beneficiary's

²⁷ <https://www.sharing.org/information-centre/blogs/3-us-military-spending-could-end-starvation-earth>

side. It restricts the benefits to flow to the poorest of poor and the destitute, who are not in a position to generate any income from any source (Sadeq, 2002), (Saifuddin et al., 2014). In one of his Hadith, the Prophet Muhammad (SAW) explained; "*The upper hand is better than the lower hand, and the upper hand is the one that spends, and the lower hand is the one that asks*" (Sunan Abu Daud, No. 1648).

The modern day economies are evaluated on the basis of their growth rates and this issue has been discussed under goal number 8. However, the intellect of the world need to understand that there is no any economic problem as growth. The only challenge to contemporary world is social and economic justice for equitable allocation and distribution of resources. When things will be decided in this way, we will overcome the problem of poverty, inequality and deprivation (White & Anderson., 2001; Dutt, & Krishna., 1990). Today, to overcome the problem of poverty and hunger, we do not need growth; rather we need to stop the huge sums of money that is spent on completely unnecessary things. For example, 29 trillion dollars were spent to bailout the rich and powerful affectees of Global Financial Crisis (GFC) of 2007-08. This money was more than enough to fulfill all the food, housing and other needs of poors of the world. Similarly, the resources spent on weapons and wars can be used to provide needful to everyone living on this planet. Also, if women start wearing hijab, we can save billions of dollars which are spent on beautification for merely show off. This money then can be used for poverty reduction and feeding the hunger.²⁸ So, solution does not lies in growth rather socioeconomic justice and moral/human development that is exactly Islam stands for.

²⁸ <https://www.oecd.org/economy/growth-and-inequality-close-relationship.htm>

Finally, here is issue of responsible consumption and production, discussed in goal number 12. This is the goal which once achieved will improve life on planet in terms of poverty, hunger, growth and environment. However, the human beings if not guided rightly, have inclination for indulging in conspicuous and positional type consumption. In one of his sayings, the Prophet Muhammad (SAW) said: *"If Adam's son had a valley full of gold, he would like to have two valleys, for nothing fills his mouth except dust of the grave"* (Sahih Bukhari, No. 6436). This also hints at the intuitive desire of humans for non-satiated preferences. In another occasion, the Prophet Muhammad (SAW) said: *"The heart of an old man remains young with regards to two things: Love of life and wealth"* (Sahih Muslim, No. 2410). Islam disapproves both the extremes of being miser and extravagant in spending rather an attitude of moderation is advised. Allah (SWT) in Qur'an says: *"And those, who, when they spend, are neither extravagant nor niggardly, but hold a medium (way) between those (extremes)"* (Al-Qurán; 25:67). So, Islamic instructions to the followers regarding resource utilization are very clear and quite responsible in-term of human and environment concerns.

In conclusion, we have suggestion to add a full-fledged goal on Moral/Spiritual human development and extended exposure of some other already included goals, which are Peace, justice and strong institutions (Goal 16), Inclusive and equitable education (Goal 4), Gender equality (Goal 5), End poverty in its form everywhere (Goal 1), Inclusive and sustainable economic growth (Goal 8) and Responsible consumption and production (Goal 12). The sole purpose of appraising sustainable development goals is to make them compatible for Muslim societies in-particular and to everyone in general (Rehman, 2015). Islam, being the last divine religion with all its teachings (in the form of Quran and Sunnah

of the Prophet Muhammad (SAW)) are protected from any alteration by the Almighty Allah, because it is meant for the welfare of every individual in this universe.²⁹ So it is inevitable for everyone in search of truth to get him or her guided by the Allah's guidance. This is exactly the campaign in mind to proceed with this debate.

The measures of sustainable development suggested by UNDP in the form of seventeen goals to address the coming challenges to humanity on earth have been cross examined by Shariáh guidance. Almost all the goals are endorsed by *Maqasid al-Shariáh* through primary sources of Al-Quran and Sunnah of the Prophet Muhammad (SAW) with few exceptions. The goals which were considered incomplete or unclear are further explained under the title of 'missing goals'. It includes supremacy of ethics and morality on all other goals. Similarly, the justice as the basis of all accomplishments and its true implementation at all levels. We realized and provided a better exposition of the concept of 'what it means by inclusive and equitable education'. Also 'under gender equality', we stand for family empowerment rather woman only approach. The correlated problems of poverty and inequality are consequence of prevailing Capitalism and solution lies in social justice and equity.

Under the debate of the day, 'growth versus distribution', which one is major economic problem – of course distribution as we take it up? The last but not least, 'the goal of responsible consumption and production,' and the Islamic solution of moderation approach. Next on five dimensions of Maqasid and their relevance towards socioeconomic development. The five dimensions of Maqasid are made on the basis of ultimate objectives

²⁹ "And in truth We have made the Qur'an easy to remember; but is there any that remembereth?" (Al-Qurán, 54:17)

of Shariah. These starts from the very basis of faith, peace and security, family and generations, education and intellect and finally the wealth. Now some details on five dimensions and approach to socioeconomic welfare.

Chapter 3

Literature Review

3.1 Introduction

Before we describe the literature on measures of welfare (or human development) both from conventional and Islamic perspectives, it is important to provide first some insight on the concept and evolution of the theory of *Maqasid al-Shariáh*. The *Maqasid al-Shariah* are used to represent the philosophy and objectivity of Islamic laws. Nobody can assume about any single divine law to be given by Allah without any purpose. There are always reasons behind everything asked and everything prohibited, sometimes obvious and understandable and sometimes required knowledge and wisdom which is not possessed by everyone. In the Holy Quran, Allah (SWT) said: “*For [thus it is:] We have not created the heavens and the earth and all that is between them in mere idle play. None of this have We created without [an inner] truth: but most of them do not understand it*” (Al-Qurán, 44:38–39), and in another verse, there is a direct statement about the creation of human kind, “*Did you, then, think that We created you in mere idle play, and that you would not have to return to Us?*” (Al-Qurán, 23:115)

Moreover, the institution of *Ijtihad*³⁰ has always been remained an important instrument for better use of existing laws in the context of newly emerging situations and issues. The use of *Maqasid* has been very helpful in better understanding the laws of

³⁰ Ijtihad is defined by Niazi (2000) as, “it is the effort made by the *Mujtahid* (noun) in seeking knowledge of the *ahkam* (rules) of the *Shariah* through interpretation.”

Shariah while focusing on over all objectives and intention of the Law giver. This chapter has been used to describe the literature on *Maqasid al-Shariah* and measures of welfare. After the first section of introduction, second section is used to provide the history of *Maqasid al-Shariah*. Third and fourth sections provide conventional and Islamic measures of welfare. Few relevant studies on determinants of human development are discussed in fifth section. The ending part of this chapter provide a brief summary of the litterateur review.

3.2 History of *Maqasid al-Shariah*

The theme behind the development of the theory of *Maqasid* is to make followers of *Shariah* more focused and assertive towards the laws of *Shariah*. It helps them to prepare and deal well with the challenges of their times and situations. It has been possible by having knowledge of logic and wisdom behind the injunctions of *Shariah*. It enhance the capability of believers to apply the knowledge and rationale of given teachings of *Shariah* to much different and complex scenarios of socioeconomic lives, which is called *Ijtihad*. The similar thinking for injunctions of *Shariah* has been discussed by Shah Wali Ullah (RA) in his famous book, *Hujjat Ullah ul Balighah*.

The major work on *Maqasid* is accomplished by *fuqaha* (Islamic scholars) from fifth to eighth Islamic century. The important names who contributed towards the development of present day *Maqasid al-Shariah* are al-Tirmidhi al-Hakim (d.296 AH/908 CE), Abu Zayad al-Balkhi (d. 322 AH/ 933 CE), Al- Qaffal al-Kabir (d. 365 AH/ 975 CE), Ibn Babawayh al-Qummi (d.381 AH/991 CH), Abu al-MAALI AL-Juwayni (d. 478AH/ 1085 CE), Abu Hamid al-Ghazali (d. 505AH/ 1111 CE), Al- Izz Abd al-Salam (d.660

AH/1209) and Abu Ishaq al-Shatibi (d.790/ 1388 CE).³¹ Although the list of names is very long but we restrict to the work of those who are prominent in the development of the theory of *Maqasid*. A short description of these names and some highlights of their work is provided here.

Al-Tirmidhi al-Hakim (d.296 AH/908 CE), composed a book titled, ‘*al-Salah wa Maqasiduha* (prayers and purposes), in which the word *Maqasid* has been used to explain the logical and ultimate impacts of different action of *ibadats* (prayers). For example, glorifying Allah by the believers during every move of prayer is to demonstrate humbleness, praising Allah is to achieve consciousness, and focusing on prayer by someone is to achieve concentration for one’s direct relation with Allah. The author also wrote another book with similar meanings and details, ‘*al-Hajj wa Asraruh* (Pilgrimage and its Secrets).

Abu Zayad al-Balkhi (d. 322 AH/ 933 CE), wrote his book on the *Maqasid* of dealing (muamalat) with the title, ‘*Revealing Purposes in Religious Practices*’. The given book explained the purposes behind Islamic judicial laws and rulings. Another book by the same author under the title of ‘*Benefits for Bodies and Souls*’. The main theme of this book is to explained, how Islamic rulings and practices help in improving the physical and mental health of believers.

Al- Qaffal al-Kabir (d. 365 AH/ 975 CE), is another name who contributed through his writings towards the development of the theory of *Maqasid*. His book titled, *al-Qaffal's Mahasin al-Sharai* (The Beauties of the Laws) is structured like any other *fiqh* book. In

³¹ Auda, J. (2008).

this 400 pages book, he mentioned each Islamic ruling along with its purpose and wisdom behind. The book seems as initial steps towards the development of the theory of *Maqasid*.

Ibn Babawayh al-Qummi (d.381 AH/991 CH), is a name whose writing become the basis of the contemporary theory of *Maqasid*. His book entitled, *Ilal al-Sharai* (The Reasons behind the Rulings) provide irresistible reasons for believing in Allah , Prophets, heaven and other prevalent beliefs. He provided moral and rational reasons for rituals such as prayers, fastening, spending for the sake of Allah and caring for parents.

Al-Amiri al-Faylasuf (d.381 AH/ 991 CE), provided most primitive classification of the purposes of Islamic laws in his book entitled, *al-Ilam bi-Manaqib al-Islam* (Awareness of the Traits of Islam). In his book, he wrote on the classification of Islamic laws related to punishment of criminal offences (*hudud*).

Abu al-Maali al-Juwayni (d.478 AH/ 1085 CE), in his book, *al-Burhan fi Usul al-Fiqh*, provided a basic framework to now a days theory of *Maqasid*. In his book he described the objectives of Islamic laws which is to boost the lives of believers in terms of faith, lives, minds, families and wealth. His second book, *al-Ghayyath al-Umam* (The Salvage of the Nations) discussed and emphasized the fundamental principles of Islamic laws. According to al-Juwayni, the fundamentals of Islamic law which he named as *Maqasid*, cannot be undervalued even in the presence of difference of opinion over interpretations. No doubt, his work through his book *Ghiyath al-Umam* is an effort for the reimplementation of Islamic laws based on *Maqasid al-Shariah*. The context of his work on *Maqasid* is based on a situation in his time for which there were no ready solutions available. When the county was in financial crisis, and question asked, whether state can ask for more taxes other than *Zakah* and *Ushr* to perform its role for the security and

socioeconomic wellbeing of the people. He not only allow it rather he call it inevitable for the state to be better able to work for the basic function of public welfare.

Abu Hamid al-Ghazali (d.505 AH/ 1111 CE), extended work of his teacher, al-Juwaini, on the theory of *Maqasid* through his famous book, *al-Mustasfa* (The Purified Source). He is the man who first time use the word preservation (protection) for five *Maqasid al-Shariah*. He explained that there is no direct reference of Shariah to each of the five *Maqasid*, rather the validity and endorsement of five *Maqasid* is based on core of overall *Shariah* teachings. According to Ghazali, every action which causes betterment of above five objectives is desirable and anything which damages any of above five is undesirable and their prevention are *Maqasid al-Shariah*. Al-Ghazali prescribed an order of *Maqasid* which is based on importance of these objectives, which he mean that higher order objective should be placed first than lower order objective rather than ordering them based on formalities. According to which faith comes first being important than any other objective of *Shariah*.

Abu Ishaq al-Shatibi (d.790 AH/ 1388 CE), while working on the same lines of *Maqasid* developed by al-Juwaini and al-Ghazali, wrote on the theory of *Maqasid* through his book, *al-Muwafqat fi Usul al-Shariah* (Analogies in the Fundamentals of the Revealed Law). His contribution can be described in three substantial ways.

- I. Through his writing on the chapter of *Maqasid* in his book, *al-Muwafqat*, he changes the status of *al-Maqasid* from non-restricted interests to fundamentals of law. He emphasized that Allah has purposes for what he has created, through his messengers and by ordaining laws of *Shariah*.

- II. He talked about wisdom behind rulings to the bases of *Shariah* rulings. According to Shatibi, the universality of rulings in the form of *Maqasid* cannot be overruled by partial rulings of *Shariah*. He called knowledge of *al-Maqasid* as a tool to justify the juridical decision at all levels.
- III. From the situation of uncertainty to an inference of certainty. This is the mechanism used by Shatibi to endorse his inductive methodology for *al-Maqasid* based on higher number of evidences.

Al-Shatibi's book is still considered the most referenced book on the subject of *Maqasid al-Shariah*, however, his work on *Maqasid* perhaps not been widely accepted as under the title of, fundamentals of *Shariah*.

Ibn Ashur (1879-1973) wrote his famous book on the subject of *Maqasid* under the title, 'Ibn Ashur Treatise of *Maqasid al-Shariah*'. His book is divided into three parts; First part is reserved on establishing the foundations of *Maqasid*. He discussed numerous example of every day matters to discuss the use and importance of *Maqasid* of *Shariah* injunctions. He quoted example of the kind such as prohibition of hoarding and purpose is to avoid shortage of needs of life. Similar type of *Shariah* rules and their intended objective can be understood by the following verses of Quran: "*And Allah does not love corruption*" (Al-Qurán, 2:205); "*O you who believe! Do not devour one another's possessions wrongfully*" (Al-Qurán, 4:29); "*And no bearer of burdens shall be made to bear another's burden*" (Al-Qurán, 6:164); "*By means of intoxicants and gambling, Satan seeks only to sow enmity and hatred among you*" (Al-Qurán, 5:91), "*Allah wills that you should have ease, and does not will you to suffer ship*" (Al-Qurán, 2:185); "*And has laid no hardship on*

you in [anything that pertains to] religion” (Al-Qurán, 22:78); One can see a clear objective in each of Quranic verse above.

The second part discussed the general objectives of *Shariah* legislation. These are not related to particular type of laws and their corresponding objectives, rather are based on common sense thinking and remained essential practice of all societies. For example, kindness is common behavior which must prevail all times all places, similarly, punishment to criminals will stop crime and promote peace and security. The Third part is all about the laws and their objectives which are related with dealings and everyday matter of humans, called as *fiqh ul muamalat* in applied jurisprudence.

When the given form of *Maqasid* are comprehend in the context of foundations of *Shariah* injunctions, these are important in two ways, first, the *Maqasid of Shariah* are to present Islam as a complete code of life which ensure protection and prosperity in almost all fields of life. Second, it helps in guiding humans in their newly emerging issues and problem for which clear injunctions of *Shariah* are not available. There is debate on academic forums to extend the list of *Maqasid* by adding some new dimensions of socio economic issues of human concerns.

Here are few cotemporary additions in the list of *Maqasid* as discussed by Siddiqui (2018),³²

³² Siddiqui (2018), *Maqasid al-Shariah* (3rd edition). *Islamic Research Institute*, IIU, Islamabad.

- i. Justice – inevitable and utmost important, opposite to justice is Zulm (aggression/cruelty). According to *al-Quran*, a key responsibility of all Prophets of Allah (SWT) was to uphold justice.³³
- ii. Human-dignity – supported on the ground that dignity and self-respect has been ranked high in Islamic teachings and aspersion or false accusation is taken a highly punishable offense.³⁴
- iii. Freedom – it includes all types of human freedom to live and lead freely and independently.³⁵
- iv. Poverty Alleviation and General Welfare – provision of basics to everyone is Social/state responsibility and evident by many ayah and ahadith of the prophet SAW.³⁶
- v. Foreign cooperation/coordination – the responsibility of spreading Islam and peace is beyond any physical boundary/region or nation which is evident in many ayaat of Quran.³⁷

³³ “We verily sent Our messengers with clear proofs, and revealed with them the Scripture and the Balance, that mankind may observe right measure; and He revealed iron, wherein is mighty power and (many) uses for mankind, and that Allah may know him who helped Him and His messengers, though unseen. Lo! Allah is Strong, Almighty”. (Al-Qurán, 57:25)

³⁴ “Verily we have honored the Children of Adam. We carry them on the land and the sea, and have made provision of good things for them, and have preferred them above many of those whom We created with a marked preferment”. (Al-Qurán, 17:70 ; 49:11-13)

³⁵ “Say: (It is) the truth from the Lord of you (all). Then whosoever will, let him believe, and whosoever will, let him disbelieve. Lo! We have prepared for disbelievers Fire. Its tent enclosed them. If they ask for showers, they will be showered with water like to molten lead which burned the faces. Calamitous the drink, and ill the resting-place!” (Al-Qurán, 18:29)

³⁶ Tirmidhi, Chapter al-faraaidh; Sunan Maja, chapter Meeras ul Mal.

³⁷ “Thus We have appointed you a middle nation, that ye may be witnesses against mankind, and that the messenger may be a witness against you. And We appointed the qiblah which ye formerly observed only that We might know him who followeth the messenger, from him who turneth on his heels. In truth it was a hard (test) save for those whom Allah guided. But it was not Allah's purpose that your faith should be in vain, for Allah is Full of Pity, Merciful toward mankind”. (Al-Qurán, 2:143; 3:110)

However, the focus of given study is on all agreed classical five *Maqasid al-Shariah* compiled and presented originally by Imam Juwaini, then endorsed/arranged by Abu al-Hamid al-Ghazali, and finally extended in now a days given form by imam Abu Ishaque al-Shatibi.

3.3 Measures of Socioeconomic Welfare

The literature on measurement of socioeconomic welfare is presented into two parts; first, human wellbeing by conventional measures, and second, values embedded socio-economic welfare. The former type of measures is based on material aspects of socioeconomic lives of individuals, for example, HDI (Human Development Index by UNDP) and MPI (Multidimensional Poverty Index - joint venture of OPHI and UNDP). In most recent work, some extensions to the above measures are made, as Inequality adjusted HDI by Alkire and Foster (2010), Alkire and Robles (2016), and a book by Severine Deneulin and Lila Shahani (2009) and Foster et al. (2013). The office of UNDP in its March 2019 newsletter stressed an important aspect of socioeconomic welfare under the title, 'Human Development Report (2019) will focus on Inequality'³⁸, it further added that,

"It also provides an opportunity to rethink human development, which requires us to look at new issues, and to look, through fresh eyes, at long-standing development concerns. We will start with inequality. There is no doubt that despite some progress, today's world remains deeply unfair.

The life and prospects faced by a newborn in a poor country or a poor household are radically different from those of wealthier children. In all

³⁸ <http://hdr.undp.org/en/content/human-development-reimagined>

societies, long-standing forms of inequality persist while gaps are opening in new aspects of life. The next Human Development Report – to be released towards the end of 2019 – will focus on understanding those dimensions of inequality most important to people's well-being, and what is driving them".

Human Development Report (2019)

Similarly, the Human Development Report 2020 has addressed an important issue of climate change and environment considerations under the title, 'Human Development and the Anthropocene', where the value of HDI has been adjusted for planetary pressure for Anthropocene. An experimental exercise has been made by naming it Planetary Pressure-Adjusted Human Development Index (PHDI).³⁹

The second type of measures covers both material and non-material aspects of human life. These include measures like, 'On making human development more humane' by Dar (2004), 'The Islamic vision of development in the light of *Maqasid al-Shariáh*', by Chapra et al. (2008), 'Introducing an Islamic human development Index (I-HDI) to measure development in OIC countries', by Anto (2011), 'Is development accumulation of wealth? Islamic views', by Zaman (2013), 'The integrated development Index (I-Dex): A new comprehensive approach to measuring human development', by Amin et al. (2015), '*Maqasid-al-Shariáh*-based socio-economic development Index (SCECDI): The case of some selected Islamic economies' by Sanaullah and Kiani (2017), and a latest work by Ali

³⁹ <http://hdr.undp.org/en/content/2020-human-development-report-next-frontier-human-development-and-anthropocene>

and Hasan (2018) under the title, 'Measuring Deprivation from *Maqasid al-Shariáh* Dimensions in OIC Countries: Ranking and Policy Focus'.

3.3.1 Conventional Measures of Socioeconomic Development

In order to have a deep insight of different measures of two kinds, a year-wise details of some important studies is given here. Some prominent studies on conventional socioeconomic development measures are;

Alkire and Foster (2010) suggested a method for adjusting the HDI to reflect the effect of distribution across dimensions using an inequality measure from the Atkinson family. The new measure of IHDI (inequality adjusted HDI) demonstrates inequalities across all achievements in society including those within every dimension (income, education and health) across people, and across dimension for a given person. The challenge of implementing the suggested methodology of measuring IHDI for large balance and unbalance data set of countries is considered as areas of further investigation.

Salahuddin and Zaman (2012) measure multidimensional poverty in Pakistan using Alkire and Foster (2007) methodology and data from 1998-2006. This was perhaps the first attempt in Pakistan to calculate poverty where income was treated as means to ends rather end in itself. Unlike earlier unidirectional measure, it is decomposable across different dimensions and across provinces. Therefore, much helpful for anti-poverty policies.

Alkire and Robles (2016) measured multidimensional poverty using 3 approaches, namely: Dashboard; Union Identification; and Multidimensional Poverty Index by Alkire and Foster (2011) methodology. The authors used a consistent data set of 10 indicators for 101 countries. This is an attempt to discuss the procedural and consequential merits and demerits of each approach. First of the 3 approaches is named as Dashboard – it is based

on a vector of indicators covering different aspects of poverty. The dashboard approach is considered as easy to construct and simple to understand. It has also been extended to modified version in the form of joint distribution of deprivations, the simultaneous and overlapping deprivations, which has increased its importance as a measure of wellbeing. However, according to many critiques of this approach, it is only a large dashboards of risk diluting poverty related indicators with no ranking of priority.

Few others, who are not satisfied with the use of weights in measurement of multidimensional poverty, considered the assignment of weights as a controversial and difficult to assign and justify. They suggest a measure of multidimensional poverty without weights. This measure has defined a poor as, "anyone who is deprived in at least one indicator from the list". This approach is named as union identification method.

The third approach is exactly the global Multidimensional Poverty Index (MPI). The multidimensional poverty cannot be calculated using simple straightforward measure. The MPI includes the first two approaches in case of similar data and some additional features such as permitting the inclusion of indicators not equally important and adjusted through assigning of weights, use of multiple poverty cut offs and depicting the intensity of poverty.

The given three methods each with its merits and demerits has been discussed and employed in the above study. As during multidimensional poverty measurement, multiple deprivations are considered, a union identification method when compared with other two, will always exaggerate figure of poverty. Given the fiscal limitations of governments, the priority may be given to the methods which uses multiple deprivations unlike union identification.

Idrees and Ahmad (2017) made a comparative analysis of inequality measure used in the literature. They divided overall inequality measure in two main categories: Statistical measures and Regular measures. The former are basically measures of dispersion and used for inequality, for example range, mean deviation and relative mean deviation, variance and related measures. The latter are specifically meant for inequality and examples include ordinary measures, entropy measures and pure welfare-based measures. They also discuss the properties of inequality measures. Also, decomposition of inequality measures into additive and non-additive types. Additive decomposition is based on population subgroups between and within groups. Non-additive decomposition is based on source of inequality, as income, consumption etc. The paper is very helpful in understanding the existing measures of literature on inequality with some basic details on each.

Amanullah (2017) is an article on the construction and measurement of MPI in Pakistan published by planning commission of Pakistan. One major difference of this measurement of MPI and the global MPI for Pakistan is the choice of indicators used for measurement of dimensions. Out of total 15 indicators used in the measurement of National MPI, the seven are same as those of global MPI. The eight additional indicators are used in the context of local political priorities and the data availability in PSLM surveys. This measure of National MPI can help in resources allocation on provincial and district levels. Similarly by measuring it annually with updated data it can also help evaluating the progress of on-going anti-poverty policies.

The detailed analysis of conventional measure of socioeconomic welfare is not the objective of this study. Our focus is only to evaluate the standardized global measure of HDI and MPI and their application for Pakistan. It has already been highlighted under the

gap/significance of study that how Islamic measure of socioeconomic welfare are different than the conventional HDI. It is important to applaud the development that recently has been made in the measurement of HDI in the form of IHDI (inequality adjusted human development) proposed by Alkire and Foster (2010). Similarly, the most recent addition of the component of environment in the measurement of HDI as mentioned in human development report of 2020 is very much encouraging. The two studies for the measurement of MPI in Pakistan are Salahuddin and Zaman (2012), and Amanullah (2017). Both have their own importance and different from each other. Salahuddin and Zaman (2013) calculated the multidimensional poverty first time for Pakistan using data from 1998-06 by applying the same method of global MPI. However, MPI calculated by Amanullah (2017) has broader coverage of indicators than the usual seven suggested by UNDP. The ten additional indicators are added in the context of national political scenarios and local priorities. The decomposition of measured values of MPI for districts helps a lot for better allocation of scarce resources of the country.

3.3.2 Islamic Measures of Socioeconomic Development

The pioneering work in Islamic literature on the socioeconomic development is presented by Al-Ghazali (1901), Ibn-Ashur (1945), and Al-Juwayni (1979). Among the contemporary leading economists who have written on the subject are Ahmad (2006), Chapra et al. (2008), Ahmed (2011), Amin et al. (2015).

The first formal study on measurement of human development Index embodied with ethical, environmental and freedom aspects is by Dar (2004). The important indicators included in the measurement of human development Index are seven which are as follows: life expectancy, GDP, carbon dioxide emission, freedom Index, family value, and faith

Index. The Index of each dimension of ethics-augmented human development index (E-HDI) is calculated by adopting methodology used in HDR 2002 (UNDP, 2002) based on the formula of dividing the difference of actual and minimum values with the difference of maximum and minimum values. The values of E-HDI for 127 countries of the world including 52 Muslim countries then compared with the values of HDI for same countries for their comparative achievements.

Chapra et al. (2008) and Ahmed (2011) are two main studies which provided leading theoretical framework on Islamic values and socioeconomic development. Chapra et al. (2008) and others in their studies, discussed five dimensions of *Maqasid al-Shari'ah* along with necessary indicators (proxies) for measurement. They linked the *Shari'ah* guidelines as policy options to achieve the objectives of socioeconomic wellbeing. They described how Islamic values offer a complete package of prosperity covering all aspects of human life instead of just wealth. According to Chapra, all dimensions of *Maqasid al-Shari'ah* are interdependent and support each other. Ahmed (2011) raised question of failure of development theories during the last half century in Muslim countries and developing countries in general. According to Ahmed, this is because of wrong approach, lacking religious and cultural considerations. He rejected the idea of considering Islam as any other religion of the world. He emphasized on right development model which he presented in detail in the context of Islamic theory of economic development. He talked about the role of non-economic factors (cultural, sociological, political and religious) in the process of development. The crux of his development model is based on two points; first, *Falah* (success) of mankind is the target of all development efforts, and second, this *Falah* can

only be achieved through total development in all dimensions, that is with due balance between material and non-material (moral and spiritual) development.

Rehman and Askari (2010) measured Islamicity Index for 208 Muslim and non-Muslim countries to check the level of Islamicity (means adherence to Islamic values) based on *Maqasid al-Shariáh*. They constructed four sub-indices related to Legal, Human and Political Rights, Economic and Governance namely; Islamicity Economic Index, Islamicity International Relations Index, Islamicity Governance Index, and Islamicity Human and Political Rights Index. They ranked countries on the basis of Index values and found that mostly Muslim countries are non-Islamic in their affairs. They found that low Index countries are facing problems of corruption, law and order situations, moral deterioration, sever economic conditions and policies, and insufficient/inefficient institutions.

One very fundamental study on, 'how to construct a *Maqasid al-Shariáh* based human development Index' is by Ali and Hasan (2011). The study discussed the theoretical framework, developed axioms and discussed method on the formation of HDI in line with *Maqasid al-Shariáh* by using Alkire and Foster (2011) methodology of measuring multidimensional poverty. The major contribution of this study is the inclusion of axioms for *Maqasid al-Shariáh* dimensions in the light of guidance of *Quran* and *Sunnah* (*Shariáh*).

Another prominent study on the measurement of Islamic Human development Index (IHDI) is by Anto (2011) for OIC countries. The author adopted the same methodology used by UNDP to construct HDI for UN member countries in its annual report. However, in the construction of IHDI, he used dimensions of *Maqasid al-Shariáh*. The main

contribution of the author is exploring the best available proxies for the indicators used to measure dimension of MS. For example, to construct faith Index, he used corruption and criminal rate as indicator proxies. Similarly, for the measurement of family social Index, (which is *Hifz ul Nasl* from MS dimensions) he employed indicators like fertility rate, mortality rate and divorce rate. The data on the above variables obtained from multiple data sources like Human Development Reports (HDR), Legatum Prosperity Index (LPI for family and social Index), World Development Reports (WDR), IMF annual reports, Transparency International Annual Report (TIAR).

Amir-Ud-Din, R. (2014) also emphasize the need of incorporating the normative aspects of human societies within the measurement of development. Like many other studies, the author also use the theory of *Maqasid* to measure socioeconomic holistic development based on this life and the life hereafter. In order to construct the Maqasid al-Shariah Index (MSI), the author used the methodology of Chakravarty (2003) which is an extension of standardized HDI method. The author used a two-step strategy to make three sub-indices according to the three stage objectives of Shariah. These three stages are necessities (*dharuriat*), complementarities (*hajiyat*), and embellishment (*tehsiniat*). The author used different macro variables as proxies for measurement of five dimensions of MS for the OIC countries. For example, for preservation of Faith, the date is taken from Pew Research Centre USA (PEW), for preservation of life, the proxies used for measurement are life expectancy and freedom from male nutrition and similarly other relevant macro level proxies are used for the measurement of other dimensions at three given levels.

Amin et al. (2015) provided a very detailed and comprehensive conceptual and theoretical framework for understanding and measuring the five dimensions of Maqasid al-Shariah. This study is quite similar to those of Chapra et al. (2008) and Ahmed (2011). However the focus of this study is on measurement of five dimensions of *Maqasid*. They provided detailed list of indicators based on many aspects of human life to measure every dimension of *Maqasid*. For example, for the protection of life (*Hifz ul Nafs*) the authors have suggested the provision of basic needs which include both social and moral needs and protection from all expected threats to life. The authors further goes on exploring the details of the given needs in the form of material wellbeing, education, good governance, social justice and public security. The provided theoretical framework includes the dimensions, elements of dimensions, items in elements and finally their measurements.

Sanaullah and Kianni (2017) also developed a socioeconomic development index based on Maqasid al-Shariah for selected Muslim countries. Their final index is basically a combination of two indices namely social development index and economic development index. The social index is constructed by using seven social indicators and economic development index is made by using nine economic indicators. According to the authors, socioeconomic development happened because of social changes in the society which then helps in bringing economic prosperity. Different types of macro variables are used as proxies for the measurement of given indicators of two types of indices. The authors are unable to create a direct link between their indicators of two indices and dimensions of Maqasid al-Shariah. In terms of performance, Pakistan remained at lower lever for spending on education and health which results in a weak situation of *Hifz ul Nafs* and *Hifz*

ul Mal The value added agriculture Pakistan is relatively better than other Muslim countries.

Shaikh (2017) develop an index of socioeconomic development by adding new dimensions of environment, social infrastructure and income inequality. According to the author the newly developed index is also reflective of objectives of *Maqasid al-Shariah* named as Extended HDI (EHDI). The author calculated the value of index for overall 108 countries including 43 Muslim countries. The value of EHDI for majority of Muslim countries improved when compared with their HDI values. Surprisingly, the value EHDI of many non-Muslim low income countries also enhanced by adding broad based indicators which are consistent with *Maqasid al-Shariah*.

Ali and Hasan (2018) measured an index of deprivation from *Maqasid al-Shariah* dimensions in OIC Countries using Alkire and Foster dual count methodology. This paper is an extension and application of their earlier working paper of 2011. The authors have applied the proposed methodology to wider range of data and in broader context of setting policy goals. The authors uses the data of WVS 6 for measuring the five dimensions of MS for 20 OIC member countries. On the basis of their analysis, the authors were able to rank the given 20 Muslim countries in terms of their deprivation ranking from *Maqasid al-Shariah* perspective. According to the finding/ranking of the paper, Qatar ranked as the least deprived and Kazakhstan being the most deprived country in the list.

Almost all the studies have discussed objectives of MS partially or fully. Few studies provided only theoretical framework to provide channel between the five dimensions of MS and their possible proxies for measurements. These studies include Ahmad (2006), Chapra et al. (2008), Ahmed (2011), and Amin et al. (2015). Others

actually measured the dimensions by using proxies of macro variables for the given countries. The examples of such studies are Dar (2004), Rehman and Askari (2010), Anto (2011), Sanaullah and Kianni (2017) and Shaikh (2018). The studies which covered all the five dimensions of MS along with their micro level measurements are Amin et al. (2015) and Ali and Hasan (2018).

Although the composite measures of welfare are now common but still missing important dimensions related to basic rights and moral values. The absence of these values in so called contemporary developed societies have caused serious threat to their social structure, family relations and real happiness and satisfaction. Similarly the issue of measurement of certain qualitative type variables such as freedom and faith (or level of *Iman*) and their threshold levels for policy purposes. Then, in case of composite Index, the issue of weightage assigned to different dimensions seems a matter of subjective choice. However, for comparison purposes, some globally agreed standards are required for accurate and efficient analysis of welfare indices.

3.4 Determinants of Socioeconomic Development

The value of HDI is rooted into many of socioeconomic variables. A list of variables have been used in various studies as determinants of human development. It includes variables which are as diverse as telecommunication, foreign trade, health expenditure, urbanization, terrorism, tourism, electric power consumption, population size, seats in the parliament and many other socioeconomic variables. Few have direct impact in determining the values of HDI, for example, real GNI, inflation, measure of inequality, population and expenditure on health and education etc. There are other variables which indirectly effect the value of HDI and are urbanization, spending on R & D, terrorism etc. For more detailed study of

these variables and their impact on HDI, we have selected the following prominent studies from the literature on the subject.

Khan et al. (2019) is a study for Pakistan to determine the relationship of HDI with information and communication technology (ICT), GDP growth, foreign trade, urbanization and foreign direct investment (FDI) for the period of 1990 to 2014. The authors used autoregressive distributed lags (ARDL) and vector error correction model (VECM) techniques to determine the nature of relationship of HDI with its expected determinants. The results showed a positive and significant impact of ICT and growth on human development in Pakistan. The authors also found a bidirectional causality between HDI and aforesaid variables.

Iqbal et al. (2019) is a panel data study for the period of 1990 -2016 based on five selected Asian countries to determine the impact of information and communication technology and economic growth on the level of human development. The proxies used for the measurement of ICT is mobile phone usage and internet penetration. The results by Driscoll-Kraay standard error algorithm suggest that mobile phone helps in improving human development whereas internet penetration does not. The growth rate in the economies also have a positive and significant impact on the value of human development. A number of control variables used in model show an alternative impact on human development. The impact of foreign trade on human development is significantly positive and negative in case of foreign direct investment.

Tripathy (2019) is a study to determine the impact of urbanization on HDI in the presence of some other control variables in the model. For the measurement of urbanization, a number of proxies have been used, for example, percentage of the urban population,

percentage of the population living in million-plus agglomeration, total urban population and urban population growth rate. The author used random effect Tobit panel data estimation method on the data for the period of 1990 to 2017. The data is taken from 187 member countries of the World Bank by dividing the whole sample into high income, upper middle income, lower middle income and low income countries. The impact of urbanization is significant and positive by all measures of urbanization. The author suggested urbanization as always good for human development with better basic urban services.

Khan et al. (2018) is another study for Pakistan to determine the impact of two main macro variables of economic growth and terrorism on HDI in the presence of other control variables of electric power consumption and urbanization. The proxy used for the measurement of terrorism is terrorism incidence per year and is obtained from global terrorism data base (GTD). The authors applied the cointegration technique of autoregressive distributed lags (ARDL) and found a significant and inverse relationship of terrorism on HDI and an insignificant relationship for GDP growth. A number of justifications provided for no relationship of economic growth with HDI including corruption, high inequality and exploitation of majority working class in Pakistan. Although the same author has found a significant and positive impact of GDP growth on HDI for Pakistan in his study of Khan et al. (2019).

Arisman (2018) is a study of ten ASEAN countries. It used panel data fixed effect model to determine the impact of different variables on HDI by using data from 2000 to 2015. According to the findings of study, a significant relationship exists between populations and per capital growth rate and HDI and an insignificant relationship for other

two regressors of variable inflation rate and unemployment. Consequently, the study suggested the role of government for control of population and acceleration of economic growth. The study quoted the case of Brunei Darussalam and Singapore being low populated and on the top of HDI ranking for ASEAN countries.

Caglayan-Akay and Van (2017) is a study to determine the impact of seven variables on HDI by using data of 130 countries from 2009 to 2014. The independent variables used in the study are gross domestic product (GDP), health expenditure, life expectancy at birth, rural population, internet users, share of expected years of schooling and seats in parliament. The authors used Bayesian ordered probit model technique for analysis. According to the findings of the study, all the seven explanatory variables on right hand side of model effect HDI in short run, whereas the variables of GDP, health expenditure, share of expected year of schooling, internet users and seats in the parliaments have their effect in long run as well. However, life expectancy at birth, and rural population effect negatively to human development in the long run.

Biagi et al. (2017) determined a positive association between HDI and tourism specialization. In addition, the authors study the impact of tourism on the components of HDI for host country. The education out of the three ingredients of HDI is found to have more effected by tourism. It is a study of 63 countries for the data period of 1996 to 2008. The study used a composite index of tourism by joining both the demand and supply indicators of tourism. The authors established the robustness of their results by applying different possible econometric techniques used in case of Panel data. Apart from doing analysis with static model, the GMM and system GMM methods of dynamic models are

also estimated and a persistent consistency is found for the relationship of HDI with tourism specialization.

Amate-Fortes et al. (2016) is a panel data study of 171 member countries of the UN for the period of 1995 to 2010 inclusive. There has been a list of twenty explanatory variables related to the areas of socioeconomic, demographic, geography, institutional, and infrastructure, to study their impact on the value of human development. The authors have used techniques of Feasible Generalized Least Square (FGLS), Panel Corrected Standard Errors (PCSE) and Robust Generalized Method of Movements (RGMM) and found very contrasting results. The coefficients of Inflation rate, Investment, Unemployment and Gini for inequality are hardly significant or inconclusive by the given models. However, for all other variables, the coefficients are significant by all models, which include official development assistance (ODA), openness, infant mortality, spending on R & D, economic freedom index, civil liberties index, control of corruption index and political stability index etc.

Attari and Chaudhary (2015) is a study conducted on thirty five districts of Punjab Pakistan. The districts of Punjab are unit of study to determine the role of different determinants of human development. It includes social infrastructure, remittances, industrialization and population density as the main variable which affects human development in Punjab. The authors used ordinary least square regression to determine the impact of given factors on HDI. According to the findings of study, all four variables have positive and significant impact on value of HDI. The districts with better social/communal infrastructure, higher remittances, more industrialization and thick population have higher values of HDI and vice versa.

Singlariya (2014) explore the determinants of human development in various states of India. The author used principle component analysis and multiple linear regression technique, and found that there is negative association of HDI with the variables of incidence of poverty, infant mortality rate, household with no facility of latrine and marriages below age eighteen. Similarly, some other variables which are found to have positive association with the value of HDI. These variables are literacy, per capital income, female engaged in salaried work, household facilities like telephone and electrification availability and share of urban population. The conclusion of the study is to empower women and enhance household facilities for high value of HDI.

Most of the studies have used panel data and quite similarities exist in their findings except one or two studies. For example, the study by Khan et al. (2018) for Pakistan where the authors were not able to establish a significant relationship of GDP and HDI unlike many other studies. Perhaps it is because of unique circumstances of Pakistan economy through which the authors have justified their findings. Similarly, there is another Panel data study by Amate-Fortes et al. (2016) for 171 member countries of the UN for the period of 1995 to 2010 inclusive. Although the authors used a detailed list of twenty variables to study their impact on HDI, however the very much discussed variables of Inflation rate, Investment, Unemployment and Gini for inequality were hardly significant or remained inconclusive by the given three models of study.

3.5 Summary

The whole literature has been divided into four parts. The first part is all about theory of *Maqasid al-Shariah*. It starts from the basics of *Maqasid al-Shariah* written by the fuqaha of three to fifth Islamic century. They wrote about objectives of *Shariah* for different

Islamic injunctions. Their writings are not directly related to now a days refined form of five *Maqasid al-Shariah*. However, their work provided basic guidelines and foundations which lead to the contemporary *Maqasid al-Shariah*. The main names of this list include Al-Tirmidhi al-Hakim (who wrote about prayers and purposes, and pilgrimage and its secrets), Abu Zayad al-Balkhi (his work include, revealing purposes in religious practices) and Ibn Babawayh al-Qummi (who wrote about the reasons behind the rulings). There are other names as well and their details have already been provided in earlier part of literature review. The now a days five *Maqasid al-Shariah* are the consequence of the work of three names; Abu al-Maali al-Juwayni, Abu Hamid al-Ghazali and Abu Ishaq al-Shatibi. The most recent work on the subject of *Maqasid* is by Ibn Ashur through his eminent book, 'Ibn Ashur Treatise of *Maqasid al-Shariah*'. For the last two centuries, there is too much discussion for the addition of some new objectives in the list of five. A list of these suggested new objectives has been compiled by Dr. Nijatullah Siddiqi in his book named, *Maqasid al-Shariah*. It includes objectives such as justice, human dignity, freedom, poverty alleviation and foreign relations/cooperation.

The second and third parts of the literature review is on conventional and Islamic measures of human wellbeing. The main conventional measures of wellbeing are HDI and MPI. The measure of HDI has been updated many times since its inception in 1990. The most recent addition in the calculation of HDI are discussed in the Human development reports of 2019 and 2020. The calculation of HDI in 2019 is calculated with its focus on inequality. Similarly, the human development report of 2020 included a very concerning issue of climate change and environment consideration under the title of human

development and the Anthropocene. A bit details of the two recent reports have been provided in main part of the literature review.

The characteristic feature of the second type of measures is the addition of non-materials aspects of human being. The earlier studies of this type is by Dar (2004), Chapra (2008) and Anto (2011). The most recent study on Islamic measures of wellbeing is by Ali and Hasan (2018). The main difference of this latest study and others is the nature of data used in the measurement of wellbeing. The study by Ali and Hasan used micro data to measure the five dimensions of *Maqasid al-Shariah*, whereas all earlier studies have used different macro variables as proxies for the measurement of five dimensions of *Maqasid al-Shariah*. As discussed above, the major issues of the value embedded measures of welfare are the measurement of qualitative type of variables, such as freedom, human dignity and faith etc. Another issue in case of composite index (such as *Maqasid al-Shariah* index of five dimensions) is the assignment of weightage to five dimensions in the context of their relevant importance. There should be some globally set standards of weightage of dimensions to follow for the purpose of comparisons of values of socioeconomic measures in different societies.

The last part of the literature discussed different studies on determinants of human development. Different studies explored different determinants of wellbeing. The nature of relationship of same variables with the objective variable of human wellbeing is almost same in different studies. For example, there is a direct impact of real GNI, inflation, inequality and expenditure by the government on education and health. Others have indirect impact on the development of people, it include urbanization, R & D, infrastructure etc. According to most of the studies, the variables which have positively affected the

socioeconomic wellbeing of people are real GNI, literacy rate, information and communication technology (ICT), urbanization and foreign direct investment. Similarly, studies under consideration also explored some variables which affects negatively the wellbeing of people, it include terrorism, unemployment rate, population growth, Gini index and rural population as a percentage of total population. The variables of trade and inflation have different impact in different countries under different situations on the wellbeing of people. There is difference between the conventional measure of human development and the measure of socioeconomic development based on *Maqasid al-Shariah* (MS). Consequently, we have used some qualitative type of social variables to study their impact on the value of MSH (MS based headcount) and MSPI (MS based Multidimensional Poverty Index) in our study.

Theoretical Framework and Methodology

4.1 Introduction

The details of all theoretical framework and methodologies used in the study are described in this chapter. The Islamic concept of welfare is described first based on the *Shariah* references. It is tried to distinguish success and prosperity from *Shariah* viz a viz conventional perspectives. In theoretical framework, the relationship of five dimensions of *Maqasid al-Shariah* with socioeconomic welfare is built by providing complete insight of dimensions. What is meant by each dimension and how it helps in the development of the lives of individuals as well as society. How achievements of people in five dimensions of *Maqasid* leads them to develop materially as well as spiritually. Material and non-material components of human existence are separated into the five dimensions. The fifth dimension of wealth and property protection is material in nature, whereas the previous four are non-material. Similarly, based on previous literature and the proposed index's *Shariah* orientation, the possible determinants of measured value of MS based poverty index were also discussed. Each expected determinant's nature and relationship to human development are described.

The second part of this chapter is to describe the methodologies used to achieve the given objectives of study. It is comprises on three parts, first part is about the details of focused group opinion survey, which is to endorse the suggested questions of the survey used for the measurement of five dimensions. To create and measure *Maqasid al-Shariah* based

uni-dimensional and composite poverty indicators, the Alkire foster (2011) dual count methodology is employed. Decomposability is a key feature of this methodology, as it allows results to be broken down into subgroups and regions. The third and final section discusses the regression technique that was used to model a measured index with expected determinants. Finally, there is a definition and description of the data sources used in the study.

4.2 The Islamic Concept of Welfare

Islamic concept of welfare is based on two lives and their two types of requirements. The worldly life which is a temporary life and a place of test and trial.⁴⁰ And the life hereafter which is a life of reward and outcomes.⁴¹ There are numerous *Shariah* references talked about the shallowness of this life and the reality of the life hereafter.⁴² Similarly, there are two types of needs required to be achieved in order to enjoy real happiness and satisfaction. These are material and non-material needs. The concept of welfare based on the above views is different than the concept of material welfare related to this world life only.

Ahmed (2011) defines development by dividing human being into two components of matter and soul and their relevant material and non-material needs. As he discussed, there should be a balance between both the components of human body. If materialism in someone outweighs his spiritualism, his soul will suffer from unhappiness which will cause harm to inner satisfaction. This situation with an individual will have repercussion for

⁴⁰ "Who hath created life and death that He may try you which of you is best in conduct; and He is the Mighty, the Forgiving". (Al-Qurán, 67:2)

⁴¹ "Then, as for him whose scales are heavy (with good works), He will live a pleasant life. But as for him whose scales are light, A bereft and Hungry One will be his mother". (Al-Qurán, 101:6-9)

⁴² (Sahih Bukhari, No. 6414)

others in the society, being dependent on each other.⁴³ Someone guided by self-interest will have nothing to do with feelings and welfare of others. Contrary to the above, an individual lead by spiritualism (morally and socially responsible attitude) will be quite satisfied in terms of his own development and responsibilities towards others.⁴⁴ With this backdrop, it is quite clear that the concept of development is different in secular and religious perspectives.

4.3 Theoretical Framework

4.3.1 *Maqasid al-Shariah* based Socioeconomic Development Index

Since its introduction in the inaugural Human Development Report in 1990, the UNDP's Human Development Index (HDI) has grown in popularity as a globally acknowledged measure of development. Although human development is at the heart of Islamic economic development (Ahmad, 2006), however, the HDI is not totally compatible or suitable for gauging socioeconomic development in Muslim countries. As a result, a socioeconomic development index based on ethics and Islamic values is required.

The theoretical underpinning for achieving socioeconomic Development is the accomplishment of the five *Maqasid al-Shariáh* objectives, which are based on *Shariah* principles. These goals encompass both the material and non-material aspects of human welfare. The objective of *Hifz ul Mal* is materialistic in nature and caused material welfare of the people. It is related to the ownership of resources and their distribution. Islam

⁴³ "Say: If your fathers, and your sons, and your brethren, and your wives, and your tribe, and the wealth ye have acquired, and merchandise for which ye fear that there will no sale, and dwellings ye desire are dearer to you than Allah and His messenger and striving in His way: then wait till Allah bringeth His command to pass. Allah guideth not wrongdoing folk". Al-Qurán (9:24).

⁴⁴ "Who is it that will lend unto Allah a goodly loan, so that He may give it increase manifold? Allah straiteneth and enlargeth. Unto Him ye will return". (Al-Qurán, 2:245)

recognizes the importance of material resources and allows for its private ownership along with just distribution among society members as a mean for achieving welfare (Shafi & Mutahar, 1979; Rahim, 2013; Zaman, 2018). In the Islamic scheme of resource allocation, a lower degree of ownership with a just distribution is preferred over a higher level of ownership with a very unequal distribution.⁴⁵ The Islamic method for resource (financial resource) distribution is quite systematic, based on both obligatory and non-obligatory procedures having ramifications for this life and the life to come. Higher levels of material welfare are associated with better resource ownership and distribution.

The other four objectives of *Magasid al-Shari'ah* comprises on all non-material aspects but fundamental for achieving *Maslahah* (Public welfare). These are related to, the safety and security of lives (*Hifz al-nafs*), intellect – related to education and science (*Hifz al- aql*), expansion and extension of posterity (*Hifz al-nasl*), and above all establishing the belief of people on Allah (*Hifz al-din*).

The peace and security has always been taken as top priority under social and state objectives. This is the reason it got second position (*Hifz al-Nafs*) in the list of five objectives of MS. It include better law and order, strong defense, health and living situation etc. consequently, it causes businesses to grow, foreign investment, economic prosperity and healthy, wealthy and longer lives (Czinkota et al., 2010; Polat & Uslu., 2013; Khan et al., 2018). After building Allah's house (Baitullah) in Makkah with his son Prophet Ismail, the first thing Prophet Ibrahim asked from Allah, was peace and security for the people of

⁴⁵ "Whatever (from the possessions of the towns' people) Allah has bestowed on His Messenger belongs to Allah, and to the Messenger, and to his kinsfolk, and to the orphans, and to the needy, and to the wayfarer, so that it may not merely circulate between the rich among you". (Al-Qurán, 59:7)

Makkah. In surah *al-Baqra* ayah no. 126, his prayers were incorporated into the Holy Quran.⁴⁶ In comparison to other countries, countries with a better *Hifz ul Nafs* status might predict higher life expectancy for their inhabitants. In relative terms, the longer one's life (*Hifz-ul-Nafs*), the better one is. Longer life might be interpreted as more opportunities to accomplish many good things, which is beneficial to obtaining *Maslahah*. As mentioned in a hadith of the Prophet SAW regarding the longevity of life and performance of deeds (*Al-Amal*), narrated by Abu Huraira (RTA): “*The Prophet SAW said, Allah will not accept the excuse of any person whose instant of death is delayed till he is sixty years of age*”.⁴⁷

Similarly, the third objective of *Magasid al-Shariah* is Knowledge and Science (*Hifz ul Aql*), which play an important part in growth and development, and so every member of society must be able to succeed in education. Learning knowledge and skills, as well as required steps to preserve human brain and wisdom, are all integral to achieving this goal (Harrison, 2005; Cooray, 2009; Hanushek & Woessmann, 2020). This is what has been proved in the history of human. It causes nations to achieve increased productivity, higher earning, better living and play leading role in the world. The importance and attainment of education is beyond any doubt as according to *Shariah* teachings⁴⁸. The first ayah of *wahi* (first time arrival of the angel *Gibrail* to the Prophet SAW with the message of Allah) is all about knowledge/learning and creation of human being.⁴⁹ It is important to quote here that there is no mention of any particular kind of knowledge here – rather an

⁴⁶ “*And when Abraham prayed: My Lord! Make this a region of security and bestow upon its people fruits, such of them as believe in Allah and the Last Day. He answered: As for him who disbelieveth, I shall leave him in contentment for a while, then I shall compel him to the doom of Fire - a hapless journey's end!*” (Al-Qurán, 2:126)

⁴⁷ (*Sahih Bukhar*; 6419)

⁴⁸ ‘*Ask them, can those who know and those who do not know ever be equal?*’ (Al-Qurán, 39:9)

⁴⁹ ‘*Read: In the name of thy Lord Who created*’ (Al-Qurán, 96:1)

open message about knowledge and learning. However, divine knowledge is most authentic knowledge, which cannot be underestimated at all.⁵⁰

The process of development will be more effective and efficient if family (*Hifz ul Nasl*) and social structure is strong and based on moral and ethical values. There is an inevitable role of family system and standards in building generation to come which is very helpful for sustainable development.⁵¹ The Islamic teachings always advocates for social life over individual life.⁵² In modern growth theories, it has been added in growth models under the title of social capital (Sequeira et al., 2011; Aldrich & Meyer, 2015). It has been proved empirically that the nations who are better in terms of their social capital can better grow and sustain (Whiteley, 2000; Schuller, 2001). There is a principle of management sciences that '*more connection you have more you will earn*'. People with higher social connections are more influential and productive for themselves and others. The connected societies have better resilience against natural and artificial upheavals.

And lastly, the importance of religiosity (*Hifz ul Din*) of society is matchless according to Islamic perspective. This is like the right of Allah upon mankind. Every son of Adam AS must bear witness (*Shahdah*) on the oneness of Allah and Muhammad SAW being the last prophet. This is so important requirement for which there is no substitute.⁵³ In *Qurán*, whenever there is discussion on *Falah* (success), which is an end outcome of all

⁵⁰ "Among them are unlettered folk who know the Scripture not except from hearsay. They but guess." (Al-Qurán, 2:78)

⁵¹ "And hold fast, all of you together, to the cable of Allah, and do not separate. And remember Allah's favor unto you: How ye were enemies and He made friendship between your hearts so that ye became as brothers by His grace." (Al-Qurán, 3:103)

⁵² "A person cannot be a true Muslim when he eat full and his neighbor is hungry". (Mishkah. Ch. Mercy on the creation, vol. 3, no.4991)

⁵³ "Lo! Allah forgive not that a partner should be ascribed unto Him. He forgive (all) save that to whom He will. Whoso ascribed partners to Allah, he hath indeed invented a tremendous sin". (Al-Qurán, 4:48)

development activities, is always conditioned upon faith and righteous deeds, “*Whosoever acts righteously – whether a man or woman - and embraces belief, we will surely grant him a good life; and will surely grant such persons their reward according to the best of their deeds*”.⁵⁴ Being developed in terms of faith is pre-requisite and necessary condition according to the Islamic approach to development. This is something for which no substitute exists at all and cannot be compromised at any costs or any level. On the other side, there is promise of Allah to those who take care of their faith that they will always be successful and satisfied in both the lives.⁵⁵ This is exactly the concept of *falah* we are talking about.

Following the above dimensions and details, it can be concluded that development in Islam is to achieve both material and non-material welfare so that to have the holistic welfare in this life (temporary life) as well as in the life hereafter (permanent and forever). The ingredients of material welfare are four dimensions of MS except *faith*. However, there is inevitable role of faith in the protection and preservation of four dimensions of material welfare. For example, roots

The above association of dimensions of *Maqasid al-Shari‘ah* with Islamic concept of welfare (or socioeconomic development) can be expressed in functional form as follows:

⁵⁴ “*Whosoever doeth right, whether male or female, and is a believer, him verily we shall quicken with good life, and We shall pay them a recompense in proportion to the best of what they used to do.*” (Al-Qur‘an, 16:97).

⁵⁵ “*Lo! Those who say: Our Lord is Allah, and afterward are upright, the angels descend upon them, saying: Fear not nor grieve, but hear good tidings of the paradise which ye are promised. We are your protecting friends in the life of the world and in the Hereafter. There ye will have (all) that your souls desire, and there ye will have (all) for which ye pray*”. (Al-Qur‘an, 41:30-31)

Socioeconomic Development = Protection and Preservation of religion, life, Intellect, Progeny and Wealth)

OR

Socioeconomic Development = *Hifz ul Din + Hifz ul Nafs + Hifz ul Aql + Hifz ul Nasl + Hifz ul Mal* (4.1)

The next step is to develop indicators, measurable for above dimensions. The World Value Survey (WVS) is a best publically available source for getting indicators' information on the above five dimensions. The WVS conducts nationally represented surveys on regular intervals after five years on social, political, economic and cultural values of the people in the world. Every survey has added information at household level for almost 100 countries of the world. The indicators for the measurement of five dimensions of *Maqasid* are selected from the last latest round of World Value Survey, WVS-7 (2017-2020).

For achieving the first objective, which is to construct and measure individual index of each dimension for OIC countries present in the survey (WVS-7), the indicators for the given dimensions of *Maqasid al-Shari'ah* are obtained from the last survey of WVS-7. A list of questions used measurement of MS dimensions shortlisted and finalized on the basis of focused group opinion survey are given in the Appendix 02. The countries are then ranked on the basis of their achieved deprivation score in each dimension. In the list of OIC member countries, most deprived countries are ranked 1 and least deprived as 15 for each dimension. The achieved deprivation score of each country is converted into policy score by subtracting achieved ranking into possible highest ranking. A higher score mean low policy emphasis is required for given dimension of MS.

For achieving the second objective, which is based on measuring a composite index of five dimensions, the above measured individual dimensions are used by employing counting approach of Alkire and Foster (2011) methodology. Here again countries are ranked on the basis of their deprivation score in overall composite index. Most deprived countries are ranked 1 and least deprived are ranked 15.

To achieve the third objective of study, the MSH index (just like HDI) measured on the basis of above five dimensions of *Maqasid al-Shariáh*, is modeled with the corresponding determinants of socioeconomic development (e.g. education, health, income, government expenditures, inequalities, inflation etc.). The following studies have estimated the relationship of HDI with above mentioned determinants, for example, (Çaglayan-Akay & Van, 2017; Kpolovie et al., 2017; Dianaputra & A(SWT) itari, 2017; Shah, 2016; Bangun, 2016; Bintang et al., 2015; Bhakti et al., 2014; Yuliani & Saragih, 2014).

4.3.2 Empirical Modelling of MSH and MSPI

In the context of trends determined in the literature on relationship of HDI with different macroeconomic variables, and the unique nature of *Maqasid al-Shariáh* based HDI, we used a number of determinants which includes GNI per capita, Coefficient of human inequality measured by the value of Gini, Judicial effectiveness, Social values, Social capital and Ethical values for 49 countries of the world value survey - 7. As is evident from the studies given in the literature there could be other variables to effect socioeconomic development from MS perspective. For example, Government expenditure on education as a ratio of GDP, Tax to GDP ratio, inflation, population growth and urbanization. But data availability remained an issue for 49 sample countries of the WVS 7. Consequently we

have drop many relevant variable in our model due to data unavailability. The total number of observations in the form of available data for analysis is another issue to decide about the explanatory variables due to problem of degrees of freedom.

Education and learning always have a positive effect on economic development because as education increases, the knowledge and capabilities of how to lead a prosperous life also increases. The Attainment of knowledge, along with increase in possibilities of earning, improves healthy nutrition input and minimizes various health risks. Level of education is measured by various indictors, gross school enrollment, as average years of schooling, expenditure on higher education in the form of research and development (R & D).

Disposable income is positively associated with the value of HDI for diverse reasons. More income means more resources for better situations of food, housing and medical care. Here country wide data is preferred on individual data, for example, a wealthy person living in a poor country is less likely to have quality services of food, shelter, medical care and infrastructure than a wealthy person living in a rich country.

To capture the effect of income distribution for countries with similar average income, on various other indicators of health and education, the Gini coefficient will be used due to availability of data. The Gini Index, CO2 emission, and inflation rate are expected to have negative impact on the value of HDI, whereas life expectancy, fertility rate, real income per capita and education Index should have positive effect. The above-mentioned variables are taken from the human development reports of UNDP and various other studies. The data on above variables will be obtained by OIC official website. Seven

variables for cross country analysis will be obtained, namely GDP per capita, literacy rate, life expectancy, Inflation rate, CO₂ emission, fertility rate, Gini Index.

A Table of the studies on determinants of HDI and their corresponding details is provided in Appendix 4.

The general form of the relationship between MSH and various determinants can be represented by the following equation:

After incorporating the above variables, above equation can be written as:

$MSH = f(Real\ GNI, Inequality, Judicial\ Effectiveness, Social\ Capital, Social\ Values, Ethical\ Values)$

Similar type of model has been used by certain other studies to establish the impact of above-mentioned determinants on HDI. Çaglayan-Akay and Van (2017) determined that in the short-term the variables of rural population, health expenditure, GDP, internet users, life expectancy at birth, and the share of expected years of schooling had affected the human development Index. In the long term, the variables that had a positive effect on human development Index are health expenditure, GDP, internet users, the share of expected years of schooling.

Dianaputra and ASWTtitari (2017) found that government financing in the education and health sectors affected the human quality Index. Furthermore, government financing in the education and health sectors has an indirect effect on economic growth through the human development Index.

Shah (2016) also found a significant relationship between HDI and Gini Index, fertility rate, CO₂, GDP per capita, life expectancy, and literacy rate. In regional comparison, he ranked central Asia, Latin America, central Europe, and Caribbean at higher level than South Asia and Sub-Saharan Africa in human development Index. Bintang et al.

(2015) show that the factors that influence the development Index in OIC countries are the education budget, the per capita income level, and the Gini Index. The other side, the health budget, and total population do not affect the human development Index in OIC countries.

Bhakti et al (2014) found that factors affecting the human development Index in Indonesia are a gross regional domestic product and provincial budget for health, dependency ratio and household consumption for food. On the other side, the provincial budget for education does not affect the human development Index. Economic growth, income distribution, population control, poverty alleviation, and improved health and education services are essential to improve the human development Index. Singariya (2014) shows that infant mortality rate, the incidence of poverty and marriage below age eighteen play an important role in reducing the value of HDI. The primary focus of these countries is the education dimension to reach the standards of top nations (Eren et al., 2014). Yuliani and Saragih (2014) show that unemployment, economic growth, and the government spending affect the human development Index in Central Java Province. Countries having high HDI values have concentrated on four determinants: life expectancy at birth, expected years of schooling, labor participation rate, and GDP per capita to design their policies.

Fruin et al. (2013) indicate that there is a relatively massive variation in the rate of income growth into human development. Setiawan and Hakim (2013) find GDP and income taxes in both the short-term and long-term to affect the value of HDI. Also, the result found that the economic crisis in 2008 affects the HDI. The 1997 crisis and government decentralization do not affect HDI. Baseri and Kia (2008) suggest that it is

crucial to improve the expenditure of physical and human investments in order to improve the quality of human life in a region.

The human development Index is closely related to improving the quality of human life in the education sector and the health sector. The government should allocate specifically to increase budget allocation in both sectors. Physical investment and investment in human capital is essential in building quality human resources. Qualified human resources will be a significant capital base in accelerating economic growth in a country. Indonesia has been working hard to do this. The 20% budget allocation policy of the National Budgetary for the education sector is one of the affirmative policies undertaken to improve the quality of human resources. The various programs currently underway by the Indonesian government, both in the education sector and in the health sector, are among the efforts undertaken to improve the quality of human life.

4.4 Methodology

To construct the deprivation index of each dimension and a composite index of MSH of five dimensions for each country, the following steps are involved: The first of all we find the relevant indicators (questions) of each dimension of *Maqasid al-Shari'ah* for selected OIC countries from the World Value Survey 7. These measures are in the form of questions asked under different topics of religiosity, morals, social values, science & technology, security and corruption. In order to determine the relevance of our selected questions of five dimensions we conduct a survey of scholars called as focused group opinion survey. The focused group opinion survey of renowned academicians and researchers is conducted by circulating the selected questions of WVS-7 to determine their relevancy/compatibility for the measurement of corresponding *Maqasid al-Shari'ah* dimensions.

4.4.1 Focused Group Opinion Survey

The Focused group opinion survey was conducted to determine the relevancy of selected questions (of World Value Survey 7) with the given dimensions of *Maqasid al-Shariah*. A copy of the survey used for focused group opinion survey is attached in the Appendix 01. It is important to note that the number of questions of each dimension in the survey are higher than the number of questions used for the measurement of dimensions. This is because of the issue of missing observations for certain countries in the survey. We have to drop such questions at the time of measurement of dimensions. This is the reason the number of questions of each dimension in the survey form are higher than the number of questions used for measurement of dimensions.

The reasonable number (26)⁵⁶ of scholars of the fields of Shariah & Law, *Usul ud din*, and Islamic Economics and Finance were briefed on the objectives of study and asked to provide their opinion about each question for the measurement of corresponding dimension. The scholars were asked to provide their opinion in the form of four types of responses such as, most relevant, relevant, least relevant and lastly in the form of any other remarks. For the purpose to arrive at some conclusion, the options of most relevant and relevant is merged to make overall two options of either relevant or least relevant. The row wise values of percentages are opinions of relevancy against each question for column wise dimensions. All those questions were decided to use in the analysis for measurement of dimensions where opinion of the scholars is higher than 50%. There is only one question

⁵⁶ The list of scholars along with the short profile is provided in the appendix 07.

(no.23) under the dimension of posterity (*hifz ul nasl*) for which opinion of relevancy was below 50% and so dropped for further analysis.

Table 4.4.1A: Results of the Focused Group Opinion Survey

Questions	Five Dimensions of Maqasid al-Shariah				
	Faith	life	Intellect	Family	Wealth
Q 1	72%	84%	72%	72%	80%
Q 2	84%	80%	84%	76%	96%
Q 3	92%	76%	88%	88%	76%
Q 4	92%	92%	80%	92%	84%
Q 5	96%	76%	80%	72%	84%
Q 6	96%	96%	72%	72%	80%
Q 7	88%	72%	72%	60%	80%
Q 8	92%	80%		84%	60%
Q 9	88%	68%		72%	60%
Q 10	88%	92%		60%	72%
Q 11	52%	80%		64%	72%
Q 12		72%		56%	92%
Q 13		72%		60%	84%
Q 14		72%		64%	72%
Q 15		76%		68%	64%
Q 16		72%		64%	88%
Q 17		52%		64%	
Q 18		96%		68%	
Q 19				60%	
Q 20				68%	
Q 21				76%	
Q 22				64%	
Q 23				48%	

* According to the focused group opinion survey, the percentage numbers next to each question reflect how relevant each question is for measuring five dimensions. The percentage value of each question is obtained by dividing the number of responses which are relevant with total number of responses. For example Question No.1 for dimension of faith 18 out of 25 scholars select the response of relevant, so $18/25*100 = 72\%$

Later at the stage of measurement of dimensions out of the approved questions of focused group opinion survey, some more questions were dropped to deal with the issue of missing observations in the data. The final list of questions used in the measurement of each-dimension along with their cut-off level is provided here.

Table 4.4.1B: Final list of questions used in the measurement of five Dimensions of *Maqasid al-Shariah*

Dimension	Q. No.	Survey Questions used as Indicators to measure the dimension	Likert Scale Min. & Max Value	Dep. Cut-off
Faith	160	Do we depend too much on science and not on faith?	1 10	4
	164	How important is Allah in your life?	1 10	4
	165	Do you Believe in Allah?	1 2	1
	166	Do you Believe in Life after Death?	1 2	1
	169	In conflict of Religion and Science, Religion is always right.	1 4	2
	171	How often do you attend Religious Services?	1 7	4
	172	How often do you Pray?	1 8	4
	173	Are you a Religious / Not a Religious / Atheist Person?	1 3	2
		Sum	8 46	22
Anyone having score at or below 22 is considered poor (Deprived) in Faith dimension				
Life	47	How would you describe your State of Health?	1 5	2
	48	Do you have free choice and control over your Life?	1 10	4
	51	How often you or your family remained without enough food?	1 4	2

	52	How often you or your family felt unsafe from crime in your surroundings?	1	4	2
	131	How secure do you feel these days?	1	4	2
	137	How frequently, the street violence and fights occur in your neighborhood?	1	4	2
	139	Do you not carry much money for reasons of security?	1	2	1
	140	Do you prefer not to go out at night for reasons of security?	1	2	1
	144	Have you been a victim of crime during past year?	1	2	1
		Sum	9	37	17

Anyone having score at or below 17 is considered poor in Life dimension

	133	How frequently the alcohol consumption occur in the streets?	1	4	2
	136	How frequently the drug sale occur in the streets?	1	4	2
Intellect	143	To what degree are you worried about not being able to give my children a good education?	1	4	2
	275	What is the highest level of education you have attained?	0	8	0
	276	What is the highest level of education your spouse has attained?	0	8	0
		Sum	3	28	6

Anyone having score at or below 6 is considered poor in Intellect dimension

	22	Would you like to have homosexuals as your neighbors?	1	2	1
	25	Would you like to have unmarried couples living together?	1	2	1
Posterity	32	Being a housewife is just as fulfilling as working for pay.	1	4	2
	37	It is a duty towards society to have children.	1	5	3

	38	Adult children have the duty to provide long-term care for their parents.	1	5	3
	46	Taking all things together, would you say you are (happy / unhappy).	1	4	2
	59	Do you trust people from your neighborhood?	1	4	2
	135	How frequently the racist behaviors occur in your neighborhood?	1	4	2
	182	What do you think about Homosexuality, is it justifiable?	1	10	9
	183	What do you think about Prostitution, is it justifiable?	1	10	9
	184	What do you think about Abortion, is it justifiable?	1	10	4
	186	What do you think about Sex before marriage, is it justifiable?	1	10	9
	193	What do you think about having Casual sex?	1	10	9
	253	How much Respect is there for individual human rights in the country?	1	4	2
	255	How close (involved) do you feel to your village/town/city?	1	4	2
		Sum	15	88	60

Anyone having score at or below 60 is considered poor in Intellect dimension

Wealth	13	Should children be encouraged at home to learn about thrift, Saving money?	1	2	1
	50	How satisfied are you with the financial situation of your household?	1	10	4
	54	In last 12 months, how often you or your family gone without a cash income?	1	4	2
	81	How much confidence you have in Charitable/humanitarian organizations?	1	4	2
	112	What are you views about corruption in your country?	1	10	4
	132	How frequently, the robberies occur in your neighborhood?	1	4	2

	142	To what degree are you worried about losing your job or not finding a job?	1	4	2
	279	Are you employed now or not?	1	8	5
	287	Do you belong to (Upper class/ Upper middle class/ lower middle class)?	1	5	1
	Sum		9	41	23

Anyone having score at or below 23 is considered poor in Property dimension

4.4.2 Alkire and Foster (2011) Approach for the construction and measurement of *Maqasid al-Shariah* based Poverty Index

The widely recognized Alkire and Foster (2011) methodology of multidimensional poverty is used to construct MS Index of human development. The A & F methodology satisfies some very useful properties for analysis and policy perspectives. A key property is decomposability which allow the outcomes to be broken down into subgroups of regions and ethnicity. It helps in detailed analysis of individual dimensions of *Maqasid al-Shariah* based headcount of poverty (MSH) within regions which is not possible in case of simple measure of standard head count ratio.

The dual count method of multidimensional poverty fulfil three important characteristics of poverty measurement. It is 'poverty focused', any improvement in the achievement level of non-poors leave poverty level unchanged. It is also 'deprivation focused', any improvement in non-deprived dimensions of poors does not affect the poverty level, which means a person's status as non-poor does not change by the betterment in the non-deprived dimensions. Finally, the above method of identification can be safely

applied to ordinal data because it does not alter the status of poor/non-poor after monotonic transformations of dimensions along with corresponding cutoffs.⁵⁷

After finalizing the relevant questions of each dimension as discussed in earlier section, a subjective type of first cut off was applied to each question on the basis of statement of question and number of responses to each question. The threshold values (or cut-point) of each indicator is decided in the light of *Shariah* guidance and general perception in Islamic society. The cutoff point of each question is decided so as to clearly define deprivation of an individual on the basis of question asked. For example, in the dimension of faith, a question included is no.169 in the survey and states, 'In conflict of religion and science, religion is always right', there are four responses with details as 1 (strongly agree), 2 (agree), 3 (disagree) and 4 (strongly disagree). Clearly in this question, all those with responses 1 and 2 are non-poor and those with responses of 3 and 4 are poor (or deprived in faith dimension). It was quite easy to decide about deprived or non-deprived in such a clear situation of responses. Here we assign 1 to all those who are poor or deprived and zero otherwise. Or it is clear that all those with responses 1 and 2 are non-poor and assign zero and all those with responses 3 and 4 are poor in faith and assign 1.

In case of questions where list of responses are long starting from 1 to 10, we applied cut off criteria similar to the one used by UNDP in the construction of HDI which is 33% level. For example, question number 48 in the survey used in the measurement of dimension of life (*Hifz ul Nafs*) states that 'do you have free choice and control over your life' and response ranges from 1 (No Choice at all) to 10 (A great deal of choice), so one

⁵⁷ For details see Alkire and Foster (2011)

being on deprived side, by applying the cutoff of 33%, all those with responses 4 and below were called as poor or deprived in life dimension. In this way, on the basis of subjective cut-off criteria each selected indicator or question of a given dimension is transformed into the category poor (mean 1) or non-poor (mean zero)

Similarly, there were number of responses for many questions in the form of 'Don't know' and 'No answer'. The fate of such responses were decided on the basis of nature of question. For example, when a question asked like, 'do you believe in Allah and response is in the form of don't know and no answer, we consider such responses for those who are poor or deprived in faith dimension who have no idea of belief in Allah. Similarly, another example of question no.81 used in the measurement of dimension of wealth, the question is about the role and importance of charitable organization in the society and if people respond in the form of don't know and no answer, we again considered them poor who are ignorant for the importance of charitable organization in the welfare of people.

Also, there were a unique type of response in the form of 'Not asked' for certain specific questions such as the one discussed above, 'do you believe in Allah' in the countries with almost 100% Muslim population such as Middle eastern countries of Iraq, Egypt and Iran. We considered such responses to be considered as non-deprived in faith dimension due to nature of question which is very straight forward and asked in a country with 100% Muslim population. On average, the number of such responses mentioned above (like don't now, no answer and no asked) is not very high and remained as low as 3% to 4% of the total sample of 70867 in the whole wave 7. The total number of questions used in the measurement of five dimensions along with their cut offs are provided in **Appendix 3.**

Following Alkire and Santos (2011), we assign weights to the outcome of each indicator according to the number of indicators of given five dimensions.⁵⁸ For example, for the dimension of faith we used 8 indicators, so a weight of 1/8 is assigned to the outcome of each indicator of faith dimension and add them together,

$$\begin{aligned} \text{Value of Faith} = & \left(\frac{1}{8} * F160 \right) + \left(\frac{1}{8} * F164 \right) + \left(\frac{1}{8} * F165 \right) + \left(\frac{1}{8} * F166 \right) + \left(\frac{1}{8} * F169 \right) \\ & + \left(\frac{1}{8} * F171 \right) + \left(\frac{1}{8} * F172 \right) + \left(\frac{1}{8} * F173 \right) \end{aligned} \quad (4.2)$$

In the above equation, 1/8 is the weight assigned to faith on the basis of number of questions used in the measurement of dimension. The questions of the survey are transformed into F⁵⁹ form after applying subjective cut-off on the question and converting it in the form of an outcome of 1 (deprived) or zero (non-deprived) as depicted earlier. After multiplying with weight of the dimension and adding them together, if sum of the indicators for faith dimension for an individual is equal to or greater than 0.33⁶⁰, he or she is poor in faith dimension and non-poor otherwise.

Similarly, we used nine question for the measurement of second dimension of life. The cut off at the level 33% mean anyone whose sum of dimension indicators after adjustment of weights is equal to or greater than 0.33, is poor in the dimension of life and non-poor otherwise. The supposed equation used for the calculation of life dimension

⁵⁸ Here outcome of indicator mean the transformation of a question from Q form to F form for faith and similarly for other dimensions, which mean the responses of the question have been transformed into 1 and zero form or poor and non-poor category.

⁵⁹ F form and similarly representation of questions in L, I, P and W represent the transformation of questions after applying the subjective cut-offs with a status of 1 or 0. 1 for poor and 0 otherwise.

⁶⁰ According to 33% criteria of UNDP used in the measurement of MPI. If value of faith ≥ 0.33 , an individual is poor and non-poor otherwise.

adjusted for the value of weight which is based on the number of questions can be written as,

$$\begin{aligned} \text{Value of Life} = & \left(\frac{1}{9} * L47 \right) + \left(\frac{1}{9} * L48 \right) + \left(\frac{1}{9} * L51 \right) + \left(\frac{1}{9} * L52 \right) + \left(\frac{1}{9} * L131 \right) \\ & + \left(\frac{1}{9} * L137 \right) + \left(\frac{1}{9} * L139 \right) + \left(\frac{1}{9} * L140 \right) \left(\frac{1}{9} * L144 \right) \end{aligned} \quad (4.3)$$

For the dimension of intellect where five indicators are used to measure the dimension, the weight-adjusted cut-off at the rate of 33% is applied to construct intellect index. The equation of intellect index can be written as,

$$\begin{aligned} \text{Value of Intellect} = & \left(\frac{1}{5} * I133 \right) + \left(\frac{1}{5} * I136 \right) + \left(\frac{1}{5} * I143 \right) + \left(\frac{1}{5} * I275 \right) \\ & + \left(\frac{1}{5} * I276 \right) \end{aligned} \quad (4.4)$$

We used fifteen questions to measure the dimension of posterity. The weight adjusted cut-off of 33% is applied to segregate poor from the non-poor. The equation of posterity index can be written as,

Value of Posterity

$$\begin{aligned} & = \left(\frac{1}{15} * P22 \right) + \left(\frac{1}{15} * P25 \right) + \left(\frac{1}{15} * P32 \right) + \left(\frac{1}{15} * P37 \right) + \left(\frac{1}{15} * P38 \right) \\ & + \left(\frac{1}{15} * P46 \right) + \left(\frac{1}{15} * P59 \right) + \left(\frac{1}{15} * P135 \right) + \left(\frac{1}{15} * P182 \right) \\ & + \left(\frac{1}{15} * P183 \right) + \left(\frac{1}{15} * P184 \right) + \left(\frac{1}{15} * P186 \right) + \left(\frac{1}{15} * P193 \right) \\ & + \left(\frac{1}{15} * P253 \right) + \left(\frac{1}{15} * P255 \right) \end{aligned} \quad (4.5)$$

The wealth dimension is measured with nine relevant questions of the survey. The weight adjusted cut-off of 33% is applied on the given equation which is written as,

Value of Wealth

$$\begin{aligned}
 &= \left(\frac{1}{9} * W13 \right) + \left(\frac{1}{9} * W50 \right) + \left(\frac{1}{9} * W54 \right) + \left(\frac{1}{9} * W81 \right) + \left(\frac{1}{9} * W112 \right) \\
 &+ \left(\frac{1}{9} * W132 \right) + \left(\frac{1}{9} * W142 \right) + \left(\frac{1}{9} * W279 \right) \left(\frac{1}{9} * LW287 \right)
 \end{aligned} \quad (4.6)$$

The level of protection achieved by each individual is calculated by aggregating the indicators of each dimension on the basis of weighted averaging method. The various indicators are summed to get a single value of each dimension which also overcome the problem of random measurement error of indicators. So a level of deprivation of each dimension is determined for every individual. The level of deprivation is decided on the basis of cut-off mentioned above. The indicators of each dimension are not equal. The indicators used to measure each dimension along with their cut-off levels are given in the **Appendix 03**.

Next, we applied the second cutoff across dimensions to execute the complete identification process. So the third step involved is the implementation of second cut-off of dimensions. A person is known as poor if he/she is deprived in 33%⁶¹ or higher than total deprivations of all dimensions of *Maqasid al-Shari'ah*. In this way, second cut off is applied on number and level of dimensions by having a matrix of dimensions for everyone based on given methodology. An equal weight is assigned to each dimension. Then based on deprivations in dimensions viz a viz total dimensions, individuals are categorized as deprived/non-deprived in *Maqasid al-Shari'ah* perspectives.

$$\text{Value of MS} = \left(\frac{1}{5} * Faith \right) + \left(\frac{1}{5} * Life \right) + \left(\frac{1}{5} * Intellect \right) + \left(\frac{1}{5} * Posterity \right)$$

⁶¹ A 33% deprivation criteria is based on Global Multidimensional Poverty index methodology of UNDP.

$$+ \left(\frac{1}{5} * Wealth \right) \quad (4.7)$$

The cut-off of MS is represented by MSC which is equal to the sum of the score of all five dimensions and if $MS \geq 0.33$, then $MSC = 1$ and zero otherwise. The MSC means *Maqasid al-Shari'ah* cut-off and 1 stands for poor and zero for non-poor individuals.

By applying Alkire and Foster (2011) methodology, the *Maqasid al-Shari'ah* based head count Index, multidimensional poor, adjusted headcount, shortfall in various dimensions of *Maqasid-al-Shari'ah* is calculated. The adjusted headcount Index (MSPI), also called multidimensional poverty, is an appropriate choice when survey responses are ordinal in nature. All these indices help policy makers to focus on areas of weaknesses in terms of formulation and effective implementation of economic, social and public policies.

The calculation of adjusted headcount Index (MSPI) is a sequence of 12 steps, which are summarized as follows:

Step-1 = Select unit of analysis

Step-2 = Select number of dimensions

Step-3 = Select indicators of dimensions

Step-4 = Decide 1st and 2nd cutoffs for Poverty lines

Step-5 = Use the set Poverty lines

Step-6 = Sum the deprivations for each person on indicators

Step-7 = Apply the second cutoff

Step-8 = Apply second cutoff (k) to get the number of poor to exclude them from all non poors

Step-9 = Calculate the headcount (MSH) by dividing number of poor (q) with total population (N)

$$MSH = \frac{q}{N} \quad 4.8$$

Step-10 = Measure the average poverty gap (MSA), by using the formula

$$MSA = \frac{\sum_1^q C}{N} \quad 4.9$$

Where C is the deprivation score of a multidimensional poor and is obtained by adding the deprivation score in each dimension. If a poor person is deprived in four dimensions, then his score is obtained as follows: $C = c_1 + c_2 + c_3 + c_4$

Step-11 = Calculate the adjusted headcount (MSPI)

$$MSPI = H \times A$$

Step-12 = Decompose by group and breakdown by dimension

$$\text{Contribution}_j = \frac{\sum_i^q c_j / n}{MSPI} \quad (4.10)$$

It shows the contribution of dimension j to multidimensional poverty.

Similar methods of identification have been used in the past by different studies, for example, Mack and Lansley (1985) under the title of Poor Britain, where three or more than three deprivations were used as poverty cut-off out of twenty dimensions. Gordon et

al. (2003), a report by UNICEF on child poverty in 2003, which reported that any child with deprivations in two or more than two dimensions called as extreme poor.

4.4.3 Regression Analysis

The construction of *Maqasid al-Shariyah* based deprivation index is made by using last wave of World value survey-7 for the period 2017-20. The deprivation index value of MSH which ranges from zero to one ranks the countries on the basis of deprivation in five dimensions of *Maqasid al-Shariah*. A higher value of MSH mean more deprivation and vice versa. Then in order to find the determinants of deprivation index, a list of possible determinants were decided based on past literature and *Shariah* orientation of given deprivation index. It is a simple index value (0-1) of cross section series of forty nine countries. The objective variable of MSH is an index of derivation of total forty nine countries of the World Value Wave 7 include both Muslims and non-Muslims. So we have to use a dummy (D) in the regression analysis to segregate Muslim from non-Muslim countries. We used non-Muslim countries as reference category by assigning D =1 for Muslim and 0 for non-Muslim countries. Other than dummy variable, some other macro variables are used in OLS regression to check their relationship with the dependent variable of deprivation index. The following econometric model have been used for determining the value of coefficients,

$$\begin{aligned} \text{MSH}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\ & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\ & + \beta_7 \text{Ethical Values}_i + \beta_8 \text{Tax Revenue}_i + \beta_9 \text{Internet Users}_i \\ & + \beta_{10} \text{Property Rights}_i + \mu_i \end{aligned} \quad (4.11)$$

In next model, we used Multidimensional Poverty Index as a dependent variable to find any variation in the determinants of *Maqasid al-Shariah* based poverty. The MSPI is

different than MSH as its value has been adjusted for the intensity of Poverty. The value of MSH is simple measure of head count of poverty.

$$\begin{aligned}
 \text{MSPI}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
 & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
 & + \beta_7 \text{Ethical Values}_i + \beta_7 \text{Tax Revenue}_i + \beta_7 \text{Internet Users}_i \\
 & + \beta_7 \text{Property Rights}_i + \mu_i
 \end{aligned} \tag{4.12}$$

In order to find the determinants of individual dimensions of MS we also run the five regression models of individual dimensions.

$$\begin{aligned}
 \text{Faith}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
 & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
 & + \beta_7 \text{Ethical Values}_i + \beta_7 \text{Tax Revenue}_i + \beta_7 \text{Internet Users}_i \\
 & + \beta_7 \text{Property Rights}_i + \mu_i
 \end{aligned} \tag{4.13}$$

$$\begin{aligned}
 \text{Life}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
 & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
 & + \beta_7 \text{Ethical Values}_i + \beta_7 \text{Tax Revenue}_i + \beta_7 \text{Internet Users}_i \\
 & + \beta_7 \text{Property Rights}_i + \mu_i
 \end{aligned} \tag{4.14}$$

$$\begin{aligned}
 \text{Intellect}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
 & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
 & + \beta_7 \text{Ethical Values}_i + \beta_7 \text{Tax Revenue}_i + \beta_7 \text{Internet Users}_i \\
 & + \beta_7 \text{Property Rights}_i + \mu_i
 \end{aligned} \tag{4.15}$$

$$\begin{aligned}
 \text{Posterity}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
 & + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
 & + \beta_7 \text{Ethical Values}_i + \beta_7 \text{Tax Revenue}_i + \beta_7 \text{Internet Users}_i \\
 & + \beta_7 \text{Property Rights}_i + \mu_i
 \end{aligned} \tag{4.16}$$

$$\begin{aligned}
\text{Wealth}_i = & \beta_0 + \beta_1 D + \beta_2 \text{Real Income}_i + \beta_3 \text{Human Inequality}_i \\
& + \beta_4 \text{Judicial Effectiveness}_i + \beta_5 \text{Social Capital}_i + \beta_6 \text{Social Values}_i \\
& + \beta_7 \text{Ethical Values}_i + \beta_8 \text{Tax Revenue}_i + \beta_9 \text{Internet Users}_i \\
& + \beta_{10} \text{Property Rights}_i + \mu_i
\end{aligned} \tag{4.17}$$

Where

D = dummy and D = 1 for Muslim and 0 for non-Muslim countries.

Real Income - the log of Real GNI per capita is used in the model.

Judicial effectiveness - a proxy used for measurement of judiciary and rule of law.

Social Capital – a measure of the informal public serving institution, for example, different charity/humanitarian organization working for the wellbeing of the general public.

Social Values – standard set practices in a society for mutual benefiting without any formal contract or binding.

Ethical Values – these are close to the social values with prominent role of religion.

Tax Revenue – taken as percentage of GDP as a measure of resource side of the country.

Internet users – a measure of the level of information and communication technology based on the number of internet users in the country.

Property Rights – a measure of the prevailing situation of resource ownership rights and their implementation in the country.

Human inequality - it is represented by the coefficient of Gini. The human inequality is the average of inequality of Income, education and health.

A detailed description and construction/source of all above variables is given on coming pages in section 3.6

4.5 Diagnostic Tests for Model Robustness

The given final model has been checked for a number of diagnostic tests for model robustness. These are VIF test for Multicollinearity, White test for Heterogeneity (when error variance are not constant) and Ramsey Reset test of Model Misspecification.

4.5.1 Variance Inflation Factor test for Multicollinearity

The Problem of Multicollinearity arises when all (or few) of the regressors included in the model are highly correlated which is an important assumption of classical linear regression model. The existence of Multicollinearity is a matter of degree of association of regressors rather their relationship at ordinary level. For example, for our second parsimonious model of given variables an exact linear relationship will exist if following condition satisfied,

$$b_1D1 + b_2Gini + b_3JE + b_4 + b_5SC + b_6SV + b_7EV = 0 \quad \text{For } b_i \neq 0$$

The problem of Multicollinearity causes an increase in the standard errors of the coefficients, which makes some of the independent variables insignificant when actually they are significant. In the absence of Multicollinearity, the given variables might become significant.

A simple way to check the presence of Multicollinearity is to calculate the variance inflation factor for the variables in the model and the model as a whole. If the value of VIF is equal to or greater than 2 ($VIF \geq 2$), there are reasons to admit the presence of Multicollinearity in the model and vice versa.

4.5.2 White Test for Heterogeneity

The existence of heterogeneity means the variance of error terms in the model are not constant. This is assumption 4 of Classical Regression Model. Mathematically it can be written as,

$$E(u_i^2) = \delta^2 \quad i = 1, 2, 3, \dots, n.$$

$$\text{Or } \delta_i^2 \neq \delta_j^2 \neq \delta_{ik}^2$$

The null hypothesis of the White Test is that the variance of the error terms are equal, ie $H_0 = \delta_i^2 = \delta_j^2$ and alternative hypothesis is $H_0 = \delta_i^2 \neq \delta_j^2$, the OLS estimates obtained in the presence of heteroscedasticity are still unbiased, consistent but no more efficient. Then the results of conventional t and F tests are invalid. So the estimates are no more best linear unbiased estimates (BLUE) due to minimum variance and not being best. In the presence of heteroscedasticity in the model, the solution lies in using Method of Generalized Least Square estimation (GLS) rather than OLS.

4.5.3 Ramsey RESET Test for Omitted Variables

One of the assumption of classical linear regression model (no.9), the regression model used in the analysis is correctly specified. If not we face a problem of model specification error or model specification bias. There are a number of model misspecification situations, for example, wrong functional form, omitted a relevant variable or including an irrelevant one in the model. In practice, omitting a relevant variable from the model is more problematic than including a relevant variable. So model misspecification means the model used for regression analysis is in error. A misspecified model can give biased coefficients and error terms and therefore biased parameter estimates.

In econometrics, in general Ramsey regression equation specification error test (called as Ramsey Reset Test) is used for linear model verification. The null of Ramsey Reset Test is

$$H0: b_1 = b_2 = b_3 = b_4 = b_6 = 0$$

There are different model selection criteria used in case of model misspecification, for example, The R^2 criteria, the Adjusted R^2 , Akaike's Information criterion (AIC) and Schwarz's Information criterion (SIC) etc.

4.6 Data

For the MS Index of OIC countries, suitable proxy measures of MS dimensions are used from last round of World value surveys (WVS-7) for the period 2017-20. The World Value Survey is an Austria based international research program. It conducts a five yearly world value survey on social, political, religious and cultural values of people in the world. It started its first survey in 1981 and since then it has conducted seven waves within 120 countries of the world. The five dimensions of MS are measured by selecting relevant questions of each dimensions from the WVS 7. A list of the questions/indicators (along with cut-off levels) used in the measurement of five dimensions of *Maqasid al-Shariah* are given in the Appendix 03.

In order to study the impact of different determinants of Human wellbeing on MSH, and MSPI, we have used different macro variables which include social values, ethical values, social capital, real GNI per capita, the Gini coefficient of human inequality and judicial effectiveness. The first three variables of social values, ethical values and social capital for the sample countries are constructed from micro data of WVS 7. The real GNI

per capita from the World development indicators (WDI). The coefficient of human inequality from the Human development reports 2017-19. Its value ranges from zero (very equal) to one (very unequal). The coefficient of human inequality is an average of inequalities of three basic dimensions of life expectancy, education and income. One last variable of judicial effectiveness is taken from the Index of Economic freedom. The index of economic freedom is constructed by an American think tank named The Heritage Foundation.

4.7 Definition and Construction of Variables

The variables used in the study including the main variable of *Maqasid al-Shariah* based headcount of poverty (MSH) are constructed first and then used in the analysis. Here is the detail of each variable and its source.

4.7.1 *Maqasid al-Shariah* based Headcount of Poverty (MSH)

The MSH is the objective variable of study used as dependent variable in our OLS regression model. It is an index of deprivation of the five dimensions of *Maqasid al-Shariah*. Its values ranges from zero to one. One mean most deprived and zero mean least deprived or no deprivation. The MSH is obtained on the basis of the indices of the five dimensions of MS. First the indices of five dimensions of MS are obtained on the basis of relevant questions of WVS 7. Then by using the five indices of five dimensions to construct composite index of MSH by using Alkire and Foster dual count methodology. First cut off is applied to individual indices of five dimensions which is based on the number of questions/indicators related to each dimension. The cut off level applied on the given number of question is taken from the UNDP used level of 33% which mean is if a person is deprived in 33% or higher number of questions of total questions he is considered as

deprived in that dimension. For example for the dimension of Faith (*Hifz ul Din*) the number of questions used to measure the dimension is eight and the 33% of eight is 2.7 so the cut-off level of questions is 3 which means anyone who is deprived in three or higher number of questions is considered poor or deprived in the dimension of faith. Similar calculation is made for all other dimensions.

Then in order to calculate the value of overall composite index of five dimensions we applied the 2nd cut off on the number of dimensions using the same formula of 33%. According to which anyone who is deprived in two or higher number of dimensions is considered poor or deprived in MSH. The value of MSH for a country is obtained by dividing the total number of deprived with total sample of the country. In this value of MSH is obtained for each country which is then used as dependent or regressed variable in our regression model.

4.7.2 *Maqasid al-Shariah* based Multidimensional Poverty Index (MSPI)

The MSPI is a product of the measures MSH (MS based headcount of poverty) and MSA (MS based average Poverty). It is considered as a better measure of poverty than the simple headcount of poverty being adjusted for the depth or intensity of poverty which is denoted by MSA. Once the value of MSPI is calculated, it is used throughout the analysis of calculating policy scores, contribution of individual dimensions towards overall poverty and in regression analysis.

4.7.3 Real Income per Capita

Real income per capita is used in log form in the regression analysis to avoid the impact of large variation in the values. The value of Real GNI per capita is obtained from the World Development Indicators (WDI). Its value is measured at constant 2017 PPP\$.

4.7.4 Human Inequality (HIE)

The variable of human inequality is represented by IE, and is the average of the inequality of the three dimensions of HDI. The value of human inequality is obtained by taking arithmetic mean of the values of inequality in education, inequality in income and inequality in life expectancy. We have taken the calculated value of human inequality for our sample countries from the data center of human development report 2017-2019.⁶²

4.7.5 Judicial Effectiveness

The value of judicial effectiveness is represented by JE in our regression model. It is a measure of the well-functioning of legal set-up in the country to protect the rights of citizens. It requires availability of fair and efficient judicial system to ensure that laws are properly implemented and prompt actions are taken against all kinds of violations. The free and fast availability of justice is the basis of progress and prosperity. The value of judicial effectiveness for the sample countries is obtained from the Index of Economic Freedom 2019. The index of economic freedom is measured annually by an American think tank named the Heritage Foundation.⁶³ The judicial effectiveness is one of the four sub-component of Index of Economic Freedom.

As provided in the methodology for the calculation of Judicial effectiveness, the value of each country is obtained by averaging three sub-factors weighted equally, judicial independence, favoritism in judicial decisions and quality of judicial process. All of the sub-factors are obtained on the basis of numerical data of the countries normalized by using the following equation.

⁶² <http://hdr.undp.org/en/indicators/135006>

⁶³ <https://www.heritage.org/index/download#>

Sub-factor $j = (\text{Max. of sub-factor} - \text{sub-factor } j / \text{Max sub-factor} - \text{Min sub-factor}) * 100$

Where maximum and minimum values represent the upper and lower bound values of corresponding data set.⁶⁴

4.7.6 Social Values

The social values are set moral principles made by the society dynamics, tradition and cultural history of the community. The social values are defined by the factors like collective responsibility, humanity, dignity and accountability. The communities are better evaluated on the basis of prevailing social values and beliefs. A community is considered to be developed and prosperous where social values are deep and strong.

The variable of Social Values is represented by SV in the model. The value of SV is measured from the WVS 7 from the questions asked under the title of 'Social values, attitudes and stereotypes'. We selected two questions to measure the value of SV for 49 countries of the data set of survey. The questions used to measure of SV are given as:

- 1) Importance of family in life
- 2) Importance of religion in life

The responses of both the questions range from 1 to 4 where one mean not at all important and four mean very important. The middle two responses are in the form of not very important (no.2) and rather important (no.3). If we consider the responses in sequence from 1 to 4, it goes from not at all important (no.1) to very important (no.4). By having responses in this form helps in summing up the response values of all sample for the given country

⁶⁴https://www.heritage.org/index/pdf/2021/book/02_2021_IndexOfEconomicFreedom_METHODOLOGY.pdf

into a single value. The higher the value for a country mean strong social values and the lower value for a country mean lower social value. First, we add the all responses for the sample of a given country. Then by dividing it with total sample size we got the single value of SV for the country.

4.7.7 Social Capital

The variable of social capital is represented by SC in the model. It is measured from the questions taken from the WVS 7 where social capital is defined as, 'Confidence of public on organizations working for socioeconomic development. The questions are selected are from the category of Social capital, trust and organizational membership. Here in the question used for the measurement of SC are stated as, the confidence of public on three main institution of social capital and response of people in terms of their trust on their performance. These three institutions are named as,

- 1) The Press
- 2) Political Parties
- 3) Charitable organizations

The responses of the people are in the range of 1 to 4. One mean none at all (confidence) and four mean a great deal (of trust). Again going through the same steps of measurement of SV, we add together the all responses of sample data for a country and divide it by total sample to get a single value for the country. By measuring value in this way, it can be interested as, the higher value of SC mean strong social capital and better socioeconomic development and vice versa.

4.7.8 Ethical Values

The variable of Ethical value is represented by EV in the model. Ethical values include every action which can distinguish between right and wrong, moral and immoral and good and bad. The good examples of ethical values are honesty, justice, respect for others, charity, trust and kindness. On the basis of ethical values societies set standards of what is permitted and what is prohibited. We use two questions from WVS 7 to measure the value of this variable for sample countries. People were asked to response to the questions in the form 1 to 10 numbers which were entitled as; always justifiable (1) to never justifiable (10). The questions asked are as follows:

- 1) Accepting bribes during duties
- 2) Violence against other people

Again we summed up all the responses of the sample of given countries and then divide the sum of total sample with size of the sample to get single value for each country. A higher value for a country mean more number of people responded either 10 or close to 10 which can be interpreted as the presence of strong ethical values and vice versa.

4.7.9 Tax Revenue (% of GDP)

Due to the importance of resources in the hands of government to allocate for various public welfare projects, the variable of Tax revenue is used as a determinants of poverty index. The data on tax revenue is obtained from World Development Indicators (WDI).

4.8 WVS- 7 Survey

The World Value Survey 7 (WVS 7) is comprises on 290 questions. The survey mainly convers the topics like attitudes and beliefs towards gender, cultural values, attitudes and

experience towards poverty, family and religion, health, education, trust and tolerance. Unlike previous waves, the WVS 7 have questions on the new topics of Justice, corruption, moral principles, accountability, national security, migration and global governance. The WVS 7 also helps in monitoring the targets sets in sustainable development goals decided in UN post 2015 agenda. The questions of the survey contained over 100 indicators helps in evaluating the performance of the following SDGs of no poverty (Goal 1), zero hunger (Goal 2), good health and wellbeing (Goal 1 Goal 3), quality education (Goal 4), gender equality (Goal 5), decent work and economic growth (Goal 8), sustainable cities and communities (Goal 11), climate action (Goal 13), peace justice and strong institutions (Goal 16), and partnership for the goals (Goal 17).

A common questionnaire is used in all countries included in the survey to ensure accuracy and validity of the information. The questionnaire is translated into all languages of a country which are first language of 15% or higher of the population. The survey team are allowed to exclude any question (s) not compatible to the cultural context of the country. Similarly, the teams can also include up to 40% of additional questions related to the main theme of the WVS.

4.8.1 Sampling Design of WVS 7

The sample used in the survey is probability based for the population with age 18 years or older. A perfect probability sampling is the one where every member has equal chance of being selected. It is a pre requisite to use list of all households or voters of the country to have a representative sample. In order to minimize costs, the multistage territorial stratified sampling is also applied in certain cases. *Stratified sampling is a probability sampling*

technique wherein the entire population is divided into different subgroups or strata, then randomly selects the final subjects proportionally to its population from the different strata. While following stratified sampling criteria, the primary sampling units (PSUs) make the first stage of sampling and selection of households from PSUs make the second stage where simple probability sampling is used. The possibility of using other sampling criteria based on the country specific situations subject to the approved from WVSA.

The survey teams can use any standard sampling criteria according to country specific situation and circumstances. However any given sampling method is required to match following WVSA basic conditions.

- The WVS must cover whole population (not just the citizens) aged 18 and over.
- The final sample must be a representative sample which mean it should reflect the distribution across country population in terms of gender, rural/urban population and age groups etc.
- In certain situations, the age limit can be reduced to meet minimum sampling size for the country.
- The minimum approved sample size is 1200, however, countries with population less than two million can have sample size as low as 1000 respondents.
- The countries with large population and greater distribution (Russia, China, USA and Brazil) would have bigger sample size with minimum limit as 1500 respondents.

The formal method used for getting information from the respondents is face-to-face interview at home or place of work. The answers of the respondents are recorded on paper or computer based interview recorder. The other means of data collection (such as internet

panel, telephone interview, postal interview) are also applied depends on justified reasons and 95% plus population coverage.

In addition, going for any other means of getting data depends on the country to country situation plus approval of WVSA. The data base of the WVS for all previously conducted waves is available with free access on the main website of the organization.⁶⁵

⁶⁵ <https://www.worldvaluessurvey.org/WVSContents.jsp>

Chapter 5

Results and Discussions

5.1 The individual indices of five Dimensions

First, we constructed the individual indices of five dimensions of *Maqasid al-Shariah*. The individual indices are more important from policy perspective than the overall index of five dimensions. The countries can better deal with the decline of individual dimensions of MS by knowing the relative situations through the ranking of indices. As the five dimensions of *Maqasid al-Shariah* are based on different fields of human life so it is rather important to rank countries on the basis of their performance in all respective five dimensions. While it is not possible to discuss the situation of each country in all five dimensions so we prefer talking about the top and lowest performers only.

Table 5.1 *Maqasid al-Shariah* dimension-wise deprivation indices for Muslim Countries

COUNTRY	Hifz ul Din	Hifz ul Nafs	Hifz ul Aql	Hifz ul Nasl	Hifz ul Mal
Bangladesh	0.0642	0.3292	0.6867	0.1167	0.8433
Indonesia	0.0594	0.3459	0.5631	0.1638	0.8672
Iran	0.1881	0.2762	0.3462	0.1494	0.7779
Iraq	0.1358	0.3408	0.6675	0.2692	0.9608
Kazakhstan	0.4820	0.3440	0.4663	0.5627	0.7422
Jordan	0.1172	0.2211	0.3940	0.0333	0.8861
Kyrgyzstan	0.3350	0.2642	0.4383	0.1983	0.6825
Lebanon	0.2725	0.2767	0.5067	0.4517	0.8800
Malaysia	0.1912	0.5636	0.5849	0.6062	0.7860
Nigeria	0.0404	0.6249	0.7720	0.4155	0.9652
Pakistan	0.0581	0.4822	0.7323	0.3008	0.9273
Tajikistan	0.3967	0.1050	0.1792	0.3625	0.6192
Tunisia	0.2425	0.4189	0.7823	0.2864	0.9164

Turkey	0.2683	0.3801	0.4104	0.3598	0.7665
Egypt	0.0533	0.2550	0.5783	0.1142	0.9292

The case of Faith dimension being first in the five dimensions of *Maqasid* which is measure of religiosity and religious values among the citizen of the country. The value of faith index is based on the types of questions such as belief in Allah, belief in life after death and presence in religious services. The most deprived three countries of Kazakhstan, Kirghizstan and Tajikistan are close neighbors and remained in the dominance of communist Russia for almost seventy years. So these countries have very much influence of communism and proved as least religious in the list of fifteen Muslim countries. On the other hand according to our index value the most religious countries are Pakistan, Egypt and Nigeria. Pakistan and Egypt are traditional Muslim countries with almost 100% Muslim population. However, in case of Nigeria the Muslim Population is 75% but remaining 25% are also orthodox Christian, which is a divine religion and have belief on ALLAH SWT.

The second in the list of *Maqasid* is *Hifz ul Nafs* which is a measure of the life and security of the people of the country. The index's value is determined by the types of questions answered, which include street violence and crimes, people's emotions about their safety, robbery, and being out late at night. The value of the index shows that Nigeria, Malaysia and Pakistan being most deprived in terms of providing safety and security to their citizens. While Tajikistan Jordan and Egypt relatively safer countries to live. The countries who perform well in this dimension are good in terms of their policing, courts and over all living and feelings of the people.

The third index is a measure of deprivation in the dimension of *Hifz ul Aql* which is based on the situation of intellect (education, science and research) in these countries. As *Hifz ul Aql* is one of the objectives of *Maqasid al-Shariah* so the index is measured from the questions other than years of school and literacy rate such as alcohol consumption and drug sales in the streets. The countries which remained most deprived in the dimension of Intellect are Tunisia, Nigeria and Pakistan while others three which are least deprived are Jordan Iran and Tajikistan. The values of the index of intellect is quite justified on the basis of literacy rates of most deprived (Tunisia – 79.04%)⁶⁶ and least deprived (Tajikistan – 99.80%)⁶⁷ countries in the list.

The index of Posterity is fourth in the list of five. The index value of Posterity is to see the situation of progeny and future of generations. The indicators used to measure this index value include the questions about role of women in the society, mutual interaction and trusting people being neighbors and some questions are related to prevailing moral values such sex before marriage, homosexuality and prostitution. The two dimensions of faith and posterity covered the area of huinan life where Muslims need to be far better than all others. This is what we observed in the measured value of indices. However within our list of Muslim countries, we found Malaysia, Kazakhstan and Lebanon being most deprived in the dimension of Posterity. Bangladesh Egypt and Jordan being least deprived with better situation of Posterity. One reason for Bangladesh, Egypt and Jordan relatively better because of the following of strong social and family values in these countries. The societies in these countries are conservatives and feel proud of their culture and history.

⁶⁶ <https://www.statista.com/statistics/575173/literacy-rate-in-tunisia/>

⁶⁷ <https://knoema.com/atlas/Tajikistan/topics/Education/Literacy/Adult-literacy-rate>

We found a correlation between index values for faith and posterity for countries which supports above claim. The countries which are better in faith are also better in posterity and vice versa. We only found this trend violated for two countries Malaysia and Nigeria and there are obvious reasons for that. One factor is common which presence of religious beliefs among the people but in both countries Islam is not only religion of the people which is a reason of difference in values in case of posterity.

Next we measured the index of *Hifz ul Mal* which is all about economic stiatution in the country. Here value of the index shows the income level and living of the people. The value of this index has been measured by using the type of indicators such as employment situations, role of humanitarian organization and level of corruption. Here the least deprived countries are Kazakhstan, Kyrgastan and Tajikistan in terms of economic welbeing. The most deprived are Nigeria, Iraq and Egypt. Nigeria and Irqa are victim of wars and violence which has badly effect the economies of these countries. Sametime in Egypt the situation of uncertainty and political instiablity has badly affect the economy of the country. The Egypt has a history of military dictatorship and internal disruption which has converted its econmmy in a situation of permanent crisis.

5.2 The Composite Index of Five Dimensions of *Maqasid al-Shariah*

The measured value of MSPI in the third column is a product of first two columns of head count of MS based poverty (MSH) and MS based average poverty (MSA), the multidimensionally poor people experience. The average deprivation is also called intensity or breadth of deprivation which is the average deprivation of the multidimensionally poor people.

Table 5.2: The Composite Indices of *Maqasid al-Shariah* based Headcount of Poverty (MSH) Average Poverty (MSA) and Multidimensional Poverty (MSPI)

Country	MSH (HC)	MSA	MSPI
Nigeria	0.6791	0.4267	0.2897
Tunisia	0.6002	0.4285	0.2572
Pakistan	0.5248	0.4031	0.2116
Kazakhstan	0.5102	0.4153	0.2119
Malaysia	0.5027	0.4250	0.2136
Iraq	0.4900	0.4030	0.1974
Lebanon	0.4183	0.4101	0.1716
Turkey	0.3698	0.4254	0.1573
Bangladesh	0.3325	0.3902	0.1297
Egypt	0.3200	0.3999	0.1280
Indonesia	0.2878	0.3892	0.1120
Kyrgyzstan	0.2567	0.3943	0.1012
Iran	0.2141	0.4036	0.0864
Jordan	0.1829	0.3931	0.0719
Tajikistan	0.1625	0.3814	0.0620

There is difference of interpretation of each value of MSH, MSA and MSPI for any country. For example, the head count value of 67.91% for Nigeria shows an incidence of poverty which means 67.91% of sample population is deprived in more than two dimensions of MS. Whereas the intensity or depth of poverty is measured by the value of average poverty which is 42.67% for Nigeria. It means the average poor person is deprived in 42.67% of dimensions. Similarly the multidimensional Poverty (MSPI) which is obtained by multiplying MSH with MSA, which means the head count is adjusted for intensity of poverty. The value of MSPI is also important in the context of adjusted head count. The low value of MSPI for almost all countries in the list shows that although the head count is high but intensity of the poverty is not very high. Our results are consistent with Ali and Hasan (2018) with many countries at almost same ranking level with the exception of few countries which may be because of the time laps of five years.

5.3 Contribution of each Dimension to Overall Deprivation/Poverty

Table 4.3 shows the contribution of five dimensions towards overall derivation of MS for each country. It is computed using equation number 3.10. We focus only on the countries which are most deprived and least deprived. For example, Nigeria is the most deprived country in the list of fifteen, and wealth and intellect are the two dimensions where Nigerian people are far behind than relative to other dimensions. Faith is the dimensions where Nigeria perform well least contribution of 6% towards overall deprivation. Tajikistan is the country which is least deprived in overall MSH. For Tajikistan, the dimensions of faith and wealth contribute mainly towards overall deprivation with a share of 24% and 25% respectively.

Table 5.3: Share of each dimension towards over all deprivation (in %)

COUNTRY	Faith	Life	Intellect	Posterity	Wealth
Bangladesh	8.9	17.5	35.2	11.5	26.9
Indonesia	8.9	16.1	34.7	12.9	27.3
Iran	17.9	18.0	22.7	14.2	27.3
Iraq	10.0	15.8	30.6	12.9	30.7
Kazakhstan	20.2	14.2	23.7	18.7	23.2
Jordan	10.6	17.3	29.7	8.9	33.4
Kyrgyzstan	18.8	15.8	28.6	14.5	22.4
Lebanon	15.3	13.6	26.5	18.3	26.3
Malaysia	12.5	20.2	24.6	20.4	22.3
Nigeria	5.8	19.8	29.5	14.9	30.0
Pakistan	7.7	17.7	32.3	14.5	27.9
Tajikistan	24.1	11.5	22.2	17.3	24.9
Tunisia	11.5	16.3	32.2	12.7	27.2
Turkey	15.3	18.5	23.0	17.8	25.4
Egypt	8.2	16.0	32.5	12.4	30.8

5.4 MSPI Score and categorization of countries into 3 classes

Table 4.4 categorizes countries on the basis of their MSPI score into three categories of highly multidimensionally poor, multidimensionally poor and weakly multidimensionally poor. This given categorization of the countries are just arbitrary and made for policy purposes. On the basis of their achieved scores in MSPI, the countries are divided into three categories. The category 1 countries are most deprived and category 3 are least deprived in MS dimensions. The three divisions of countries on the basis of their MSPI score and multidimensional poverty status is given in the footnote of the table.

Table 5.4: MSPI Score and Categorizations of countries into three classes

Country	MSPI	MSPI Categories
Nigeria	0.2897	1
Tunisia	0.2572	1
Pakistan	0.2116	2
Kazakhstan	0.2119	2
Malaysia	0.2136	2
Iraq	0.1974	2
Lebanon	0.1716	2
Turkey	0.1573	2
Bangladesh	0.1297	2
Egypt	0.1280	2
Indonesia	0.1120	2
Kyrgyzstan	0.1012	2
Iran	0.0864	3
Jordan	0.0719	3
Tajikistan	0.0620	3

*1=MSDPI > = 20% Highly Multidimensionally poor
2=MSDPI > = 10% Multidimensionally poor
3=MSDPI < 10% Weakly Multidimensionally Poor

5.5 MSPI Rank and Deprivations in MS Dimensions

Table 4.5 rank the countries on the basis of their MSPI score. In our list of 15 Muslim countries Nigeria is ranked 1 and most deprived and Tajikistan as 15 and least deprived in five dimensions of *Maqasid*. In this table ranking positions of individual countries are explained through their corresponding achievements in five MS dimensions. For example, Nigeria as the most deprived nation in MSPI has also poor performer in almost all dimensions except faith. The bad situation of economy and security in Nigeria causes to lower score in the dimensions of life, intellect and wealth. Faith being better in Nigeria because it is a country with 99.94% population either Muslim or orthodox Christian. It has been empirically proved that low income people are more religious than high income people and this phenomenon works very well in the countries like Nigeria, Pakistan and Bangladesh. The least poor in MSPI ranking is Tajikistan. When we at look the situation of its performance in five MS dimensions, it perform very well in three dimensions of life, intellect and wealth except faith and posterity. The reasons for being most deprived in typical faith and posterity dimension is because of the past of this country. Tajikistan remained part of communist Russia for almost 60 years.

Table 5.5: MSPI and Dimension-wise ranking

	MSPI Rank	Deprivation Ranking in each MS Dimension					
		Country	Most Poor	Faith	Life	Intellect	Posterity
Nigeria	1		15	1	2	4	1
Tunisia	2		6	4	1	8	5
Pakistan	3		13	3	3	7	4
Kazakhstan	4		1	7	10	2	13
Malaysia	5		7	2	6	1	10
Iraq	6		9	8	5	9	2

Lebanon	7	4	10	9	3	7
Turkey	8	5	5	12	6	12
Bangladesh	9	11	9	4	13	9
Egypt	10	14	13	7	14	3
Indonesia	11	12	6	8	11	8
Kyrgyzstan	12	3	12	11	10	14
Iran	13	8	11	14	12	11
Jordan	14	10	14	13	15	6
Tajikistan	15	2	15	15	5	15
	Least Poor					

5.6 Policy Scores for each dimension of OIC Countries

Table 4.6 has been obtained by Table 4.4 by simply subtracting the actual rank of a country from the possible highest rank in the given dimensions. For example, for intellect dimension rank of Iran is 14, therefore the policy score of Iran for Intellect is 1. The low policy score in a dimension means low policy emphasis is required and vice versa. The policy score are just opposite of ranking of countries. When a country is ranked high in a dimension which mean the country least deprived in that dimension and the policy calculated on the basis given formula will be low. Low policy score we mean low emphasis is required for that dimension. We can apply this criteria for any country to any dimension. For example, Nigeria ranked one two four and one in the dimensions of life intellect posterity and wealth respectively. The policy score of Nigeria for these dimensions should be fourteen thirteen eleven and fourteen respectively. All of the policy score for Nigeria are high so Nigeria need higher policy emphasis in all these four dimensions for having higher score of these dimensions. Similarly the policy score of Iran for the same dimensions obtained through the same calculations are four one three and four. So the Iran required relatively less policy score for these dimensions respectively.

Table 5.6: Policy Scores for each dimension of OIC Countries

Country	MSPI Rank	Policy Scores				
	Most Poor	Faith	Life	Intellect	Posterity	Wealth
Nigeria	1	0	14	13	11	14
Tunisia	2	9	11	14	7	10
Pakistan	3	2	12	12	8	11
Kazakhstan	4	14	8	5	13	2
Malaysia	5	8	13	9	14	5
Iraq	6	6	7	10	6	13
Lebanon	7	11	5	6	12	8
Turkey	8	10	10	3	9	3
Bangladesh	9	4	6	11	2	6
Egypt	10	1	2	8	1	12
Indonesia	11	3	9	7	4	7
Kyrgyzstan	12	12	3	4	5	1
Iran	13	7	4	1	3	4
Jordan	14	5	1	2	0	9
Tajikistan	15	13	0	0	10	0
	Least Poor					

*Policy score for a dimension = (Maximum Possible Rank - Actual Rank in a dimension), for example Jordan rank 10 in faith dimension and highest possible rank is 15 so policy score for of Jordan for faith dimension = 15-10 = 5

5.7 Average Policy Emphasis of Dimensions

In Table 4.7, the average score for each dimension and each category of countries is calculated. The dimensions which got higher average score are highlighted for the purpose policy emphasis. In other words, the bold font dimensions are relatively weaker in each category and required more attention of policy makers for improvement.

Table 5.7 Policy emphasis of dimensions

<i>Highly Multidimensionally Poor</i>				
FAITH	LIFE	INTELLECT	POSTERITY	WEALTH
<i>Multidimensionally Poor</i>				
FAITH	LIFE	INTELLECT	POSTERITY	WEALTH
<i>Weakly Multidimensionally Poor</i>				
FAITH	LIFE	INTELLECT	POSTERITY	WEALTH

5.8 Relative Achievement of Countries in the Five Dimensions of MS

Table 4.8 shows the relative achievement of the countries in the given five dimensions. We have set a 50% achievement criteria in the ranking of 1 to 15 of fifteen countries. If a country is ranked at eighth or above in a dimension considered as non-deprived in that dimension and it will be its achievement. Similarly if the ranking of a dimension for a country is less than eight considered as deprivation. The relative achievement of the countries is calculated by diving the number of non-deprived dimension by total number of dimensions. On the basis of this classification, only Iran is the country which has 100% achievement which means it has ranked at eighth (8th) or above eighth in all five dimensions. But it does not mean Iran has achieved everything it required rather it is only relative achievement relative to other countries. Otherwise Iran needs improvement in the dimensions such as Faith (where it ranked at 8th only), life and wealth. However performance of Iran is far better in the two dimension of Posterity and intellect. Posterity is better due to strict following of Islamic laws in Iran and Intellect is better due to continues increase in literacy rate in the country, recent figure for 2020 is 96% between the age of 10 to 49.⁶⁸

⁶⁸ <https://knoema.com/atlas/Iran/topics/Education/Literacy/Adult-literacy->

Similarly the situation of many other countries is not bad, for example Jordan, Indonesia and Bangladesh have 80% relative achievement. It shows these countries are least deprived in four out five dimensions of MS. The countries who got lower relative achievement of 20% are Nigeria, Tunisia and Pakistan which mean these most deprived in four of out five dimensions.

Table 5.8: Relative Achievement of Countries in the Five Dimensions of MS

Country	Most Deprived	Least deprived	Relative Achievement (%)
Nigeria	4	1	20
Tunisia	4	1	20
Pakistan	4	1	20
Kazakhstan	3	2	40
Malaysia	4	1	20
Iraq	3	2	40
Lebanon	3	2	40
Turkey	3	2	40
Bangladesh	1	4	80
Egypt	2	3	60
Indonesia	1	4	80
Kyrgyzstan	1	4	80
Iran	0	5	100
Jordan	1	4	80
Tajikistan	2	3	60

5.9 Summary Statistics

A brief overview of the data utilized in the analysis is called descriptive statistics. It helps in a better understanding of the study's variables and the type of data used in the analysis. It informs readers about the variables' background information, which is used to do the analysis. Knowing the nature of data can sometimes assist you comprehend the study's limits.

Table 5.9: Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
MSH	49	58.246	19.573	16.25	89.444
MSPI	49	.25	.094	.062	.419
Dummy	49	.306	.466	0	1
Real Income	49	21358.548	16806.362	2103.667	63139.667
Human Inequality	49	18.395	9.544	5.85	55
Judicial Effectiveness	49	47.737	19.417	12.3	88.5
Social Values	49	7.025	.7	5.608	7.97
Social Capital	49	8.083	.943	6.233	10.174
Ethical Values	49	18.119	1.095	14.054	19.436
Tax Revenue	49	15.461	6.387	1.978	31.7
Property Rights	49	54.951	18.092	20.5	95

We have used eleven variables in our study including the objective variables of MS based headcount of Poverty (MSH), MS based Multidimensional Poverty (MSPI) and a dummy variable to segregate Muslim form non-Muslim countries. The MSH/MSPI are indices of deprivations of MS dimensions. Their values ranges from zero to 1, where one mean most deprived and zero mean least deprived. The average or mean values of these variables are 0.59 and 0.25 respectively.

The GNI per capita is measure of average per capita income of the people in the countries. It has been measured at constant 2017 US dollar by using PPP formula. Its value ranges from the minimum 2103 to the maximum of 63139 with average value of 21358 US dollar. The higher the gap between highest and lowest values mean higher inter country inequality. The value of Gini coefficient as usual ranges from 0 to 1. Zero value of a country mean no inequality and one mean perfect inequality. The value of Gini is used to measure intra country inequality of income. The value of Gini in our data ranges from 0.05 to 0.55 with an average value of 18.39.

The values of judicial effectiveness are given in the form of ranking of the countries on the basis of effectiveness of judiciary and rule of law in these countries. This ranking is made annually by an American think tank named The Heritage Foundation. The ranking of the countries used in the data ranges from 12 to 89 with average ranking of 48.

The values of the three variables of social capital, social values and ethical values are calculated from micro data of WVS 7. These values for given countries are calculated by adding the responses of all the people in the sample and then taking then taking the average to get a single of the country. These responses were given in the form of numbers from 1 to 5 and sometimes higher than five. The given maximum and minimum values of the data are those of highest and lowest values of responses.

5.10 Regression Results

Table 5.10 shows the output of two types of econometric models. In the first table 4.10A, there are results for two regressions models. In the first model, the *Maqasid al-Shariah* based headcount index of poverty (MSH) is regressed for number of its determinants. In the second model, the more accurate measure of poverty in the form of MS based Multidimensional Poverty Index (MSPI) is regressed for almost similar determinants. The MSPI is a product of MSH and MSA, where MSA represents average poverty or average deprivation of poors in five dimensions of MS. The first variable in the two models is Dummy to segregate Muslim from non-Muslim countries. The reference category is non-Muslim which mean D=1 for Muslim and zero otherwise.

Similarly, the regression results of five dimensions of MS with their expected determinants are represented in **Table 5.10B**. We have used the same determinants of

composite indices of poverty for individual five dimensions to determine which variable affects which dimension of *Maqasid al-Shariah*. There is presence of dummy as well in the model of individual dimensions to segregate Muslim from non-Muslim countries. Due to limited number of observations which are 49, we rely mainly on the theoretical significance of the regressors rather than statistical significance.

Because our data is limited to 49 countries, there are a number of variables that are statistically insignificant but have meaningful interpretations in terms of MSH and MSPI objective variables. These variables include real income, human inequality and judicial effectiveness. The variable of human inequality is an average of the three variables of inequalities of income, education and health. There are other variables which are significant both statistically as well theoretically. These variables include social value, social capital and ethical values including the variable of dummy. The results of the first two models are given in **Table 5.10A**.

The coefficients of the variable of dummy is negative and significant in the both the models. It shows an inverse relationship of the index value of deprivation with countries. As the value of dummy is 1 for Muslim countries, it can be stated as, on average in case the country is Muslim there will be low value of index of deprivation than the non-Muslim countries. The variable of dummy is significant with negative value of coefficient. If a country is Muslim in the list of countries, there are more chances of lower value of MSH/MSPI which are measures of deprivation in the five dimensions of *Maqasid al-Shariah*. In other words Muslim countries are less deprived with respect to MSH/MSPI than the non-Muslim countries.

The variance inflation factor value of each variable is less than 10, which is an evidence of no Multicollinearity among the variables of the models. Similarly, the mean value of VIF for both the models is also less than five. The coefficient of real income per capita is negative and statistically insignificant due to data limitation. It shows a negative relationship of average income of the country and indices of MS deprivation. So on average, keeping all other variables constant, higher the value of income per capita mean lower the value of MS deprivation and vice versa. The value of the coefficient of human inequality is positively associated with the dependent variables MS deprivation indices. It shows a direct relationship of inequality in the country and MS poverty. Higher the inequality of income, health and education exist in a country, more will be the MS based poverty in the country. Or it can be concluded as the countries in order to develop people in terms of MS achievement, they should keep inequality of the three given measures of income, education and health at lowest possible level.

Next is the coefficient of judicial effectiveness which is a measure of the situation of law and order and judiciary. The value of the coefficient is negative which shows an inverse relationship of the performance of judiciary with the level of MS deprivation in the countries. On average and keeping the effect of other variables constant, for every one unit increase in the performance of judiciary, there is 0.16 unit decrease in the index of MS deprivation. The next three variables of Social value, Social capital and Ethical values are all statistically significant at 5%. The negative sign of coefficient shows an inverse relationship of all three variable with the value MS deprivation indices of MSH and MSPI. On the basis of sign and coefficients of these variables, we can conclude that for every one

unit increase in the situation of these variables, there is a corresponding decrease in the level of MSH and MSPI indices.

The variable of Tax revenue is a measure of total tax revenue as ratio of GDP in the country. A higher value of tax revenue as a ratio of GDP mean more money with the government to spend for the welfare of the people in the country. In the context of five dimensions of MS, higher revenue can be used to increase the wellbeing of people in terms of intellect (*Hifz ul Aql*) and financial situation (*Hifz ul Mal*) of the people in the country. Similarly, the variable of Internet users is measure of the situation of information and communication technology (ICT) in the country. Nobody can deny the importance of ICT for growth and development in contemporary world. Now-a-days most powerful nations are also the leaders in the field of information and communication technologies. The value of coefficients of both the variables of tax revenue and internet users are negative to show an inverse relationship of these variables with the values of the indices of MS deprivations. The R square values are a measure of the model's goodness of fit and it shows how much variance in the dependent variable is explained by the independent variables in the overall model. Although the R squared and adjusted R squared values are not very high, they can be justified based on the cross section data we used.

The three types of diagnostic tests have been performed to endorse the results of the models. These tests include Breusch-Pagan (to see the presence of Heteroscedasticity), Ramsey-RESET (for model misspecification) and Variance Inflation Factor (for presence of Multicollinearity in the independent variables in the model). The null of "no problem exist" have been do not rejected in all the three tests according the value of probabilities.

The value of VIF for all the independent variables and their mean value is also less than 10 to reject any possibility of the presence of Multicollinearity in the models.

Table 5.10A Regression Results for Model 1 (MSH) and Model 2 (MSPI)

Variable Name	Model 1		Model 2	
	MSH		MSPI	
	Coefficient	VIF	Coefficient	VIF
dummy	-18.9114*** (5.9094)	1.90	-0.0916*** (0.029)	1.90
Real income	-2.5794 (6.4892)	7.82	-0.0125 (0.0318)	7.82
Human inequality	0.3354 (0.2382)	1.30	0.0013 (0.0012)	1.30
Judicial effectiveness	-0.1572 (0.1657)	2.60	-0.0007 (0.0008)	2.60
Social value	-14.7793** (5.8257)	4.17	-0.0645** (0.0286)	4.17
Social capital	-6.226** (2.6649)	1.59	-0.0328** (0.0131)	1.59
Ethical values	-4.5229** (2.1711)	1.42	-0.0212* (0.0107)	1.42
Tax revenue	-0.3517 (0.3641)	1.36	-0.0018 (0.0018)	1.36
Internet users	-0.1016 (0.2403)	7.28	-0.0004 (0.0012)	7.28
Constant	338.2364*** (94.0551)		1.5627*** (0.4614)	
Obs.	49		49	
R-squared	0.5945		0.5738	
Adj. R-Squared	0.5009		0.4754	
Diagnostic Tests				
Breusch-Pagan	1.43		0.13	
P Value	0.2316		0.7234	
Ramsey RESET	1.21		1.34	
P Value	0.3218		0.2761	
VIF Mean	3.27		3.27	

There are another five models and their results are given in the table below. These are to explore which of the determinants of above MSH and MSPI have their effects on the individual dimensions of MS. Here again only limited number of variables are statistically significant rather most of the variables are theoretically significant with justified interpretation of all variables with respect to objective variables of five dimensions. The obvious reason for most of the variables being statistically insignificant is of limited number of observations, which are 49 only.

The estimates of explanatory variables are significant at 1%, 5% and 10% level of significance. When individual dimensions are regressed for the same determinants of MS deprivation. We found a number of determinants affecting five dimensions. The dimension of faith is affected by ethical values, real income (when jointly used with education of the income holders), use of internet, and social values. These all variables affect faith positively and improvement in any of these variables causes reduction in faith deprivation which is our dependent variable for model 1. Income when acquired without education cause deprivation in faith. However the separate effect of income on faith positive and causes increase in faith deprivation. For the second model of *Hifz ul Nafs* (peace and security), the variables of real income, ethical values, judicial effectiveness, social capital and tax revenue affect life and security of the people. On the basis of the results of the mode, It can be stated that for the improvement in each of the above variables, the safety and security of the people increases and causes reduction in life deprivation index of the country.

The dimension of *Hifz ul Aql* (Intellect) which is a measure of education and wisdom through research and learning is related with a number of variables. The deprivation index

of intellect is negatively associated with ethical values prevailing in the societies, real income of the people, judicial effectiveness and the situation of information and communication technology. The betterment of all of the above variables causes reduction in deprivation index of intellect except inequalities whenever exist. The human inequalities causes class conflict, self interest and other social ailments which promotes personal interests by suppressing national goals. The presence of high inequalities in the societies promotes poverty, reduces growth and development and damages all constructive measures of learning and earning.

The dimension of *Hifz ul Nasl* (posterity) is a measure of the situation of families and future generations. It covers the aspects of family relations and social ties. The coefficient of dummy is significant at 1%, which shows a strong association of Muslim societies and the situation of posterity. It can be stated that there is inverse relationship of deprivation index of posterity and Muslim societies. Or deprivation index of posterity in case of Muslim societies is low and vice versa. The relationship of other variables with deprivation index of posterity is negative except inequality and internet users. The variables of social values, social capital and ethical values when increases, it causes a corresponding decrease according to the magnitude of coefficients in the value of deprivation index of Posterity. The coefficients of inequality and internet users are positively associated with the value of deprivation index of posterity. A higher values of these coefficients means a higher values of deprivation in posterity and vice versa. A very negative use of internet and social media justifies the value of the coefficient of internet users. The current use of internet especially among the youth causes a direct and immediate impact on promoting vulgarity and indecency in the societies. The people of higher ages can make positive use of information

technology but they are not very much qualified for newly emerging field of ICT especially in developing countries.

Finally the dimension of *Hifz ul Mal* (wealth and financial resources) mean better financial resources and living of the people. It is measured through the availability of material resources and their efficient usage for the growth and development. The coefficient of dummy although not statistically significant but the sign of the coefficient shows a positive relationship of dummy with deprivation index of wealth. The positive sign of the coefficient shows that in case of Muslim countries, the value of deprivation index is increases and vice versa. This positive sign of the coefficient of dummy is quite justifiable in the current economic situation of Muslim countries with average and lower per capita income in majority Muslim countries. The value of the coefficient of real income is negative with deprivation index of wealth which makes an obvious sense. In the same way, an expected positive sign of the coefficient of inequality with deprivation index of wealth is rational and practical. More inequality always leads to poverty and deprivation without discrimination of Muslim and non-Muslim countries. The value of R-squared and adjusted is quite better form almost all the five models except model 2 of life deprivation index which is because of cross section data for all models and none of the variable is significant at 1% in case of life deprivation model.

Table 5.10B: Regression Results for the five Models of Individual Dimensions

Variable Name	Model 1	Model 2	Model 3	Model 4	Model 5
	Faith	Life	Intellect	Posterity	Wealth
Dummy	-0.01565 (0.03599)	-0.0954* (0.053)	-0.08509* (0.04573)	-0.2624*** (0.06386)	0.03174 (0.0346)
Ethical Value	-0.01453 (0.01303)	-0.0222 (.0229)	-0.03359 (0.02003)	-0.03825* (0.02171)	-0.01094 (0.01513)

Real income	0.02748 (0.04909)	-0.06 (0.0422)	-0.04614 (0.0624)		
Real Income* Education	-0.00009 (0.00016)				
Human inequality			0.0070*** (0.00219)	0.00006 (0.00255)	0.00193 (0.00173)
Judicial effectiveness		-0.0015 (0.0018)	-0.0047*** (0.00145)		-0.00279* (0.00154)
Social Capital		-0.0609** (0.0278)		-0.0855*** (0.02693)	-0.0769*** (0.01738)
Internet Users	-0.00038 (0.00157)		-0.00084 (0.0023)	0.00301* (0.00153)	
Social Value	-0.3697*** (0.03205)			-0.09756 (0.06013)	
Tax Revenue		-0.0059 (0.004)			-0.00462* (0.00261)
Property Rights					-0.00111 (0.00165)
Constant	3.11475*** (0.46915)	2.0412*** (0.7048)	1.7813*** (0.515)	2.5394*** (0.82445)	1.8317*** (0.3499)
Obs.	49	49	49	49	49
R-squared	0.9033	0.3394	0.6375	0.7313	0.6141
Adj. R-Squared	0.8895	0.2451	0.5858	0.6929	0.5483

Chapter 6

Conclusion and Policy Implications

6.1 Conclusion

The development initiatives increasingly focus on non-material and ethical aspects of human communities. It is now widely accepted that a single monetary measure (such as real GNI per capita) or even a multidimensional measure (such as the UNDP's HDI or MPI) is insufficient and lacks vital spiritual and moral elements. Amartya Sen's work in this area was revolutionary, as he completely disregarded conventional metrics of human progress by adding the traits of freedom, potential, human dignity, and spirituality (Sen, 1985-2000).

For obvious reasons, Muslim societies cannot be judged using the same standards as non-Muslim societies. The meaning and significance of development for believers and non-believers are radically opposed. For example, from the standpoint of secularism, which is based on value neutrality, life is all about making the most of available resources. However, according to Islamic teachings, this life is nothing more than a test and trial to see how well one can perform in order to be successful in the afterlife and enjoy eternal peace and prosperity.⁶⁹

On the basis of model developed with this background, it is important to propose some measures of socioeconomic development to evaluate Muslim societies on the basis of

⁶⁹ “*Then only that one will be truly successful, who escapes from the Hell-fire and is admitted to the Garden*”. (Al-Qurán, 4:185)

“*But ye prefer the life of the world. Although the Hereafter is better and more lasting*”. (Al-Qurán, 87:16-17)

standards set by *Shariáh* teachings. We found reasonable work from the pages of development literature on the Islamic measures of human welfare (Ahmad, 2006; Chapra, 2008; Ahmed, 2011; Kasri & Habib, 2015). By achieving the objectives of this study, we hope that this work will be a valuable addition to the literature on socioeconomic welfare of human being based on the teachings of *Shariáh* (*Maqasid al-Shariáh*).

In the context of the objectives of study, we have constructed five indices of *Maqasid al-Shariah* for fifteen Muslim countries present in the final round of WVS -7. The goal of computing individual dimensional indices is to quantify deprivation in the sample Muslim nations from the standpoint of five MS dimensions. Although the composite index of five dimensions appears to be a good way to rank nations based on the overall value of MSH, from a policy standpoint, it is vital to look at the status of countries in terms of their performance from five different angles. It will assist countries in focusing their attention and resources on overcoming the shortcomings of individual dimensions. We have countries on the list that are significantly better in one or more dimensions while extremely deficient in others.

Majority Muslim countries are able to perform well (being least deprived) in the dimensions of faith and posterity but much deprived in other dimensions of peace and security (*Hafiz ul Nafs*), intellect (*Hifz ul Aql*) and wealth (*Hifz ul Mal*). For example, Egypt, Pakistan, Nigeria, Indonesia and Bangladesh have very low head count value of faith deprivation as 5%, 5%, 4%, 6% and 6% respectively, all under 10%. However, the deprivation of the dimension of intellect for the same countries are 58%, 73%, 77%, 56% and 69% respectively, all above 50%. Similarly, the countries like Tajikistan, and

Kazakhstan are more deprived in the dimension of faith (39%, 48%) and posterity (36%, 56%) but are relatively less in the dimension of life (11%, 34%) respectively.

Apart from the head count of MS deprivation in the form of MSH, we have also calculated the values of average poverty/deprivation (MSA) and the MS based multidimensional poverty (MSPI). The value of MSPI is calculated by multiplying the values of MSH and MSA. The purpose of calculating the values of MSPI is to get the value of poverty adjusted for intensity or breadth of poverty. So the values of MSPI can be called as adjusted head count of deprivation.

The countries are then classified on the basis of their MSPI values into three categories of highly multidimensionally poor, multidimensionally poor and weakly multidimensionally poor. The class of countries which are highly multidimensionally poor are seriously deprived in almost all the dimensions of MS. The weakly multidimensionally poor countries are relatively better in most of the dimensions of MS.

In Table 4.5 of the chapter of Results and Discussion, the relative situation of deprivation in five dimensions of MS are given for all countries along with their MSH ranking. It will help in analyzing the relative performance of most poor and least poor countries in the five dimensions of MS. For example Nigeria being most deprived in MSH, is also unable to perform in four dimensions of MS (life 62%, Intellect 77%, Posterity 41% and Wealth 96%) except faith (4%). Similarly, the least MSH deprived country of Tajikistan has relatively lower deprivation in four (faith 39%, life 10%, intellect 18% and posterity 36%) of five dimensions except wealth (62%). The purpose of this particular table is to compare the values of composite index of MS with performance of individual dimensions of the countries.

We have also calculated the policy scores (from policy perspectives) of five dimensions of MS for all sample countries. The policy scores of five dimensions of MS are calculated on the basis of deprivation ranking of the countries in these dimensions. This is as easy as the subtracting the ranking of each country in a given dimension from possible highest ranking. For example if Pakistan ranked 13 in faith deprivation index which means less deprived when ranking is made from 1 (most deprived) to 15 (least deprived). When ranking of 13 is subtracted from the possible highest ranking of 15, Pakistan achieved policy score of 2 (15-13) in faith dimension. The lower score in a dimension mean lower policy emphasis is required in that dimension.

Table 4.7 highlight the policy emphasis dimensions of three categories of countries. For example, highly multidimensionally poor, multidimensionally poor and weakly multidimensionally poor. According to the findings of study, highly multidimensionally poor countries which include Nigeria, Tunisia, Pakistan, Kazakhstan, Malaysia, Iraq and Lebanon should focus on the dimensions of intellect and posterity. Similarly the multidimensionally poor countries Turkey, Bangladesh, Egypt, Indonesia, Kyrgyzstan and Iran should focus on all the dimension except posterity. The weakly multidimensionally poor countries of Jordan and Tajikistan should focus on the dimension of faith.

Finally the contribution of different dimension toward overall deprivation of the countries measured under MSH. This table is simply another way of looking the same results. On the basis of information provided in this table countries can find the dimension (s) which causes these countries to achieve higher deprivation in MSH. In other words, countries can reduce their deprivation by working on the dimensions which have caused them more deprived countries. For example, the most deprived nation in the list is Nigeria

and its worst performed dimensions are wealth and intellect. Similarly, the weak dimensions of each country can be identified on the basis of contribution of dimensions towards overall deprivation.

In order to work on the fourth objective of study, we explored a number of determinants of MSH/MSPI on the basis of past literature and expected relationship of different variables with socioeconomic welfare of people. We use OLS regression with our cross section data of total 49 countries of WVS 7. A dummy is used to categorize countries into Muslim (15 out of 49) and non-Muslim (34 out of 49). We use non-Muslim as reference category and assign D=1 for Muslim countries and zero otherwise. In our final model we found a significant and sensible relationship of MSH and MSPI with Gini coefficient of human inequality, judicial effectiveness, Social values, Social capital, Ethical values and a variable of dummy. The coefficient of dummy, judicial effectiveness, social values, social capital and ethical values are all negative and significant which mean if the countries are doing well in terms of all these variables they can lower their deprivation of MSH if any and vice versa. The coefficient of human inequality is positive and significant which is a measure average inequality of three dimensions of income, education and health. So if the countries can minimize inequality in these dimension they can lower deprivation of MSH for the country. We have also performed some diagnostic test to check the validity of our model results. We conducted Breusch-Pagan test for heteroscedasticity, Ramsey RESET test for model specification and Variance Inflation factor for presence of Multicollinearity. The null hypothesis of no problem do not rejected according to the results of all the tests. In the end, on the basis of our findings here is some policy implications suggested for the countries over all and OIC member countries in particular.

6.2 Policy Implications

The majority Muslim countries are deficient in the dimensions of *Hifz ul Nafs* (Peace and Security), *Hifz ul Aql* (Intellect and Learning), and *Hifz ul Mal* (Intellect and Learning), according to the study's findings (Wealth). Similarly, practically all countries do well in the remaining two dimensions of *Hifz ul Din* (faith and religiosity) and *Hifz ul Nasl* (belief and religiosity) (Posterity). This is the overall state of affairs in the countries. It is urged that OIC member countries ensure law and order, justice, and meritocracy in their countries in order to do well for the safety and financial well-being of their people. There is a link between the state of law and order and the rate of crime. There is also a link between financial security, fairness, and meritocracy. To deal with threats to people's lives and resources, there should be an effective judiciary, policing, and other security agencies. In comparison to the average of advanced countries, life expectancy in the given OIC countries is far too low. This is due to insufficient health services, as well as other food and sanitary difficulties. As a result, a complete policy package is essential to increase people's safety and security.

In comparison to many other countries in the globe, the average years of schooling, educational quality, and government education investment in OIC member countries are all too low. Government priorities must be adjusted in order to redirect attention and resources to education and learning. In today's world, the performance of countries in the disciplines of science and technology has a direct impact on their economies and defense.

Although the OIC member countries are not behind in terms of the natural and artificial resources. A special advantage of human resource can be very useful for the member countries. This advantage is on the basis of strong faith in GOD and good family system

exist in majority Muslim countries which have its roots in Islamic moral and ethical values. Having all these physical and human resources, excluding gulf countries majority Muslim countries still have low growth, low income per capita, poverty and inequality. The solution of all economic and financial problem lies in resources efficiency and just distribution. There should be zero tolerance policy against corruption in public offices. There is need to implement Islamic economic system based on Islamic values and teachings at all levels. There is need to reactivate Zakah system at state level, institution of Waqf and Just distribution of total output among all factor input. As it is said earlier, the success to economic and defense goes through education and learning, similarly, the solution to all individual and collective problems lies in the true following and implementation of Islamic teachings at all levels. There is a need to reassess the imported policies that have been in place for decades and replace them with policies that are based on Allah's divine direction.

6.3 Limitations of the Study

In the social sciences, there has always been a lack of perfection in the results of research. This is because social sciences are founded on human behavior, which is always changing through time and space. People of the same gender, age, and profession may behave differently in different places and at different times. People's tastes and priorities are always influenced by the context and circumstances in which they find themselves. People in different parts of the world, for example, do not make the same decisions about saving, spending, and time allocation. When it comes to behaviour and decision-making in the social sciences, no one can claim anything with 100 percent accuracy. Economics, being one of the most important branches of social sciences, is no exception, and neither is economic research. In economics, the conclusions are always reached in the context of a

given situation and in relative terms. As a result, investigations in the social sciences are constantly subject to restrictions.

The main limitation of this study is the indicators used for the measurement of five dimensions of MS which are borrowed questions from the WVS 7. The reason for using these survey questions is unavailability of direct measures of the five dimensions of MS. We used WVS because of the presence of related and relevant questions on the five dimensions of MS and the presence of data of OIC member countries. Ideally, there should be own prepared questions based on the guidance of references of Quran and Sunnah of the Prophet (SWT) as proxy measures for the measurement of given dimensions of MS. Once a format of standard questionnaire for measuring values of Shariah dimensions is prepared, and is fully supported by guidance of Quran and Sunnah, it will help in constructing *Maqasid al-Shari'ah* based socioeconomic development Index everywhere at all levels of sampling. A number of axioms prepared by Hasan et al. (2018) can be used as guiding principles to prepare questionnaire for the measurement of MS dimensions. A list of these axioms is provided in the Appendix 4.⁷⁰

Another issue is of sample required for analysis. At the time we planned study we were expecting to have data of 100 countries from WVS 7 but due to Covid 19, things went very unusual and we can only found data of 49 countries from the latest round of Wave 7. The management of WVS could not perform survey properly to targeted 100 countries due to Covid situation in most part of the world. Consequently, we have go with

⁷⁰ Hasan et al.(2018)

limited number of observations which also limit the possible number of determinants in the model.

Similarly, we face the issue of getting data of expected determinants of MSH for the given sample of 49 countries we selected from WVS 7. Consequently we have to drop many variables due not unavailability of data for all countries. For certain other variables which were not missing for too many countries we have to find data from the institutions of those countries directly.

The main reason of data problem was due to the given countries WVS 7. The selection for which was made by having relevant proxy measures in the form of survey questions on the five dimensions of MS. It caused us to stick with the given data of 49 countries and the determinants of MSH for these countries only. It was not possible then to alter the number of countries at some later stage. However, even in the presence of given limitations, we hope this study of measuring socioeconomic welfare based on MS index will be a useful addition in the existing literature on the subject. The limitations of study should better be taken as future areas of study.

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Appendices:

Appendix 01: A Copy of the Focused Group Opinion Survey

Respected Academician

We wish you the very best of your *eeman* and health. We are doing a study on '**Socioeconomic Development Index based on *Maqasid al-Shariah*: The Case of OIC Countries**'. The data for measurement of five dimensions of *Maqasid al-Shariah* for OIC countries has been taken from World Value Survey. The World Value Survey (WVS) is a Sweden based agency of social scientists which conduct survey on five yearly frequencies on the topics of gender equality, social capital, religion, subjective well-being, democratization and economic development. We have obtained possible relevant questions for each dimension of *Maqasid al-Shariah* from the latest round of World Value Survey. In the context of canvass of study which is comprises on 30-35 OIC member countries, we have to rely on this only publically available, relevant and reliable WVS source of data. These questions and their responses will be used for measurement of dimensions of *Maqasid al-Shariah* and finally to construct HDI.

You are kindly requested to provide your valuable opinions on the questions selected for measurement of each dimension in term of three types of responses such as; *Least Relevant to Dimension, Relevant to Dimension and Most Relevant to Dimension*. Your responses will be help us in developing a consensus on suitability of given questions towards measurement of dimensions of *Maqasid al-Shariah*. Your guidance and cooperation is very much commendable.

With best wishes,

Personal Details of the Scholar

Name: _____

Title (Mr./Dr./Professor): _____

Qualification: _____

Organization: _____

World Value Survey 7 - Selected questions on five dimensions of *Maqasid al-Shariah*

I- *Maqasid al-Shariah* dimension of Faith (Hifz ul Din) and Survey questions to measure the given dimension:

1. Do we depend too much on science and not on faith?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
2. How important is ALLAH in your life?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
3. Do you believe in ALLAH ?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
4. Do you believe in Life after Death?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
5. Do you believe in Hell?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
6. Do you believe in Heaven?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
7. In conflict of Religion and Science, Religion is always right.
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
8. How often do you attend Religious Services?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
9. How often do you Pray (*Namaz*)?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
10. Are you a Religious / Not a Religious / Atheist Person?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
11. Are you Member of a religious organization?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

II- *Maqasid al-Shariah* dimension of Life (Hifz ul Nafs) and Survey questions to measure the given dimension:

1. How would you describe your State of Health?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
2. Do you have free choice and control over your Life?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
3. In last twelve months, how often you or family remained without enough food?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
4. In last twelve months, how often you or your family felt unsafe from crime in your surroundings?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
5. In last twelve months, how often you or your family gone without a safe shelter?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
6. How secure do you feel these days?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
7. How frequently the police or army interferes with people's private life in your neighborhood?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
8. How frequently, the street violence and fights occur in your neighborhood?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
9. How frequently, the incident of sexual harassment occurs in your neighborhood?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
10. Do you not carry much money for reasons of security? (Yes/ No)

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

11. Do you prefer not to go out at night for reasons of security?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

12. Do you carry Knife, gun or other weapon for security?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

13. Have you been a victim of crime during past year?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

14. Has someone in your family been the victim of crime during past year?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

15. To what degree are you worried about war in your country?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

16. To what degree are you worried about a terrorist attack?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

17. To what degree are you worried about civil war?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

18. Should government has the right to keep people under video surveillance in public areas?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

III- *Maqasid al-Shariah* dimension of Intellect (Hifz ul Aql) and Survey questions to measure the given dimension:

1. How frequently the alcohol consumption occur in the streets?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
2. How frequently the drug sales occur in the streets?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
3. How much Respect is there for individual human rights in the country?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
4. To what degree are you worried about not being able to give your children a good education?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
5. What is the highest level of education you have attained?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
6. What is the highest level of education your spouse has attained?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
7. What is the highest level of education your mother has attained?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
8. What is the highest level of education your father has attained?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

IV- *Maqasid al-Shariah* dimension of Posterity (Hifz ul Nasl) and Survey questions to measure the given dimension:

1. Would you like to have unmarried couples living together?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
2. Being a housewife is just as fulfilling as working for pay.
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
3. It is a duty towards society to have children.
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
4. Adult children have the duty to provide long-term care for their parents.
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
5. Taking all things together, would you say you are Happy / unhappy.
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
6. Comparing your standard of living with your parents, would you say you are better off / worse off?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
7. Would you say most people can be trusted or need to be careful in dealing with people?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
8. Do you trust people from your family?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
9. Do you trust people from your neighborhood?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----
10. How much confidence do you have in your elections?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

11. Should government or People themselves take responsibility to ensure that everyone is better off?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

12. How would you evaluate the impact of immigrant on the development of your country?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

13. In the context of your country, do immigrants lead to social conflict?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

14. How frequently the racist behaviors occur in your neighborhood?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

15. What do you think about Homosexuality, is it justifiable?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

16. What do you think about Prostitution, is it justifiable?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

17. What do you think about Abortion, is it justifiable?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

18. What do you think about Sex before marriage, is it justifiable?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

19. What do you think about Terrorism as a political, ideological or religious mean?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

20. What do you think about having Casual sex?
a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

21. What do you think about Death Penalty?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

22. How satisfied are you with how the political system functioning in your country?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

23. How close (involved) do you feel to your village/town/city?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

V- *Maqasid al-Shariah* dimension of Property (Hifz ul Maal) and Survey questions to measure the given dimension:

1. Should children be encouraged at home to learn about thrift, Saving money and things?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

2. How satisfied are you with the financial situation of your household?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

3. In last 12 months, how often you or your family gone without a cash income?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

4. How much confidence you have in Charitable or humanitarian organizations?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

5. What are your views about corruption in your country?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

6. How frequently, the robberies occur in your neighborhood?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

7. To what degree are you worried about losing your job or not finding a job?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

8. Is it justified to claim government benefits for which you are not entitled?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

9. Is it justified to avoid paying fare on public transport?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

10. Is it justified to cheat on taxes if you have a chance to?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

11. Is it justified for accepting bribe in the course of duties?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

12. Are you employed?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

13. During the past year, did your family Saved money/Just get by/ spent some saving/ spent saving and borrowed?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

14. Would you describe yourself as belonging to Upper class / Upper middle class / lower middle class/ working class?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

Would you describe your income group as lowest group / highest group?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

15. Private or Government ownership of business or industry, which one should be increased?

a) Most Relevant b) Relevant c) Least Relevant d) Any Other Remarks -----

Appendix 02: List of questions used in the measurement of five Dimensions of MS

Dimension	Q. No.	Survey Questions used as Indicators to measure the dimension
Faith	Q 160	Do we depend too much on science and not on faith?
	Q 164	How important is ALLAH in your life?
	Q 165	Do you Believe in ALLAH ?
	Q 166	Do you Believe in Life after Death?
	Q 169	In conflict of Religion and Science, Religion is always right.
	Q 171	How often do you attend Religious Services?
	Q 172	How often do you Pray?
	Q 173	Are you a Religious / Not a Religious / Atheist Person?
Life	Q 47	How would you describe your State of Health?
	Q 48	Do you have free choice and control over your Life?
	Q 51	In last twelve months, how often you or your family remained without enough food?
	Q 52	In last twelve months, how often you or your family felt unsafe from crime in your surroundings?
	Q 131	How secure do you feel these days?
	Q 137	How frequently, the street violence and fights occur in your neighborhood?
	Q 139	Do you not carry much money for reasons of security?
	Q 140	Do you prefer not to go out at night for reasons of security?
	Q 144	Have you been a victim of crime during past year?
Intellect	Q 133	How frequently the alcohol consumption occur in the streets?
	Q 136	How frequently the drug sale occur in the streets?
	Q 143	To what degree are you worried about not being able to give my children a good education?
	Q 275	What is the highest level of education you have attained?
	Q 276	What is the highest level of education your spouse has attained?
Posterity	Q 22	Would you like to have homosexuals as your neighbors?
	Q 25	Would you like to have unmarried couples living together?
	Q 32	Being a housewife is just as fulfilling as working for pay.

	Q 37	It is a duty towards society to have children.
	Q 38	Adult children have the duty to provide long-term care for their parents.
	Q 46	Taking all things together, would you say you are (happy / unhappy).
	Q 59	Do you trust people from your neighborhood?
	Q 135	How frequently the racist behaviors occur in your neighborhood?
	Q 182	What do you think about Homosexuality, is it justifiable?
	Q 183	What do you think about Prostitution, is it justifiable?
	Q 184	What do you think about Abortion, is it justifiable?
	Q 186	What do you think about Sex before marriage, is it justifiable?
	Q 193	What do you think about having Casual sex?
	Q253	How much Respect is there for individual human rights in the country?
	Q 255	How close (involved) do you feel to your village/town/city?
Wealth	Q 13	Should children be encouraged at home to learn about thrift, Saving money and things?
	Q 50	How satisfied are you with the financial situation of your household?
	Q 54	In last 12 months, how often you or your family gone without a cash income?
	Q 81	How much confidence you have in Charitable or humanitarian organizations?
	Q 112	What are your views about corruption in your country?
	Q 132	How frequently, the robberies occur in your neighborhood?
	Q 142	To what degree are you worried about losing your job or not finding a job?
	Q 279	Are you employed now or not?
	Q 287	Would you describe yourself as belonging to (Upper class/ Upper middle class/ lower middle class)?

Appendix 03: Questions used in the measurement of MS dimensions

<i>Maqasid al-Shariah</i> Dimension	World Value Survey (WVS 7)			
	Question No.	Minimum Value	Maximum Value	Deprivation Cut-off
Faith (<i>Hafiz ul Din</i>)	Q 160	1	10	4
	Q 164	1	10	4
	Q 165	1	2	1
	Q 166	1	2	1
	Q 169	1	4	2
	Q 171	1	7	4
	Q 172	1	8	4
	Q 173	1	3	2
	Sum	8	46	22

Anyone having score at or below 22 is considered poor (Deprived) in Faith dimension

Life (<i>Hifz ul Nafs</i>)	Question No.	Minimum Value	Maximum Value	Deprivation Cut-off
	Q 47	1	5	2
	Q 48	1	10	4
	Q 51	1	4	2
	Q 52	1	4	2
	Q 131	1	4	2
	Q 137	1	4	2
	Q 139	1	2	1
	Q 140	1	2	1
	Q 144	1	2	1
	Sum	9	37	17

Anyone having score at or below 17 is considered poor in Life dimension

Intellect (<i>Hifz ul Aql</i>)	Question No.	Minimum Value	Maximum Value	Deprivation Cut-off
	Q 133	1	4	2
	Q 136	1	4	2
	Q 143	1	4	2
	Q 275	0	8	0
	Q 276	0	8	0
	SUM	3	32	6

Anyone having score at or below 6 is considered poor in Intellect dimension

Progeny (<i>Hifz ul Nasl</i>)	Question No.	Minimum Value	Maximum Value	Deprivation Cut-off
	Q22	1	2	1
	Q 25	1	2	1
	Q 32	1	4	2

	Q 37	1	5	3
	Q 38	1	5	3
	Q 46	1	4	2
	Q 59	1	4	2
	Q 135	1	4	2
	Q 182	1	10	9
	Q 183	1	10	9
	Q 184	1	10	4
	Q 186	1	10	9
	Q 193	1	10	9
	Q253	1	4	2
	Q 255	1	4	2
	SUM	15	88	60

Anyone having score at or below 60 is considered poor in Intellect dimension

Property (<i>Hifz ul Mal</i>)	Question No.	Minimum Value	Maximum Value	Deprivation Cut-off
Q 13	1	2	1	
Q 50	1	10	4	
Q 54	1	4	2	
Q 81	1	4	2	
Q 112	1	10	4	
Q 132	1	4	2	
Q 142	1	4	2	
Q 279	1	8	5	
Q 287	1	5	1	
SUM	9	51	23	

Anyone having score at or below 23 is considered poor in Property dimension

Appendix 04: Summary of Studies on Determinants of HDI

Name of Study	Determinants of HDI	Impact on HDI
Tripathy (2019), for 187 world bank member countries. Data for the period of 1990-2017.	Urbanization and its different measures in the form of %age of urban population, total urban population and urban population growth rate.	Impact is positive and significant for all measures of Urbanization.
Iqbal et al. (2019), for five selected Asian countries.	Information and communication technology (ICT) and economic growth. The proxy measure for ICT is mobile phone usage internet penetration.	The mobile phones helps in improving human development and internet penetration does not. Again eco. Growth has positive and significant impact on HDI.
Khan et al. (2019), for Pakistan.	Information and communication technology (ICT), economic growth, urbanization, foreign direct investment and trade	ICT and economic growth have positive and significant impact on HDI. Urbanization, FDI and trade discourage HDI in case of Pakistan.
Khan et al. (2018), for Pakistan.	Economic growth and terrorism. The proxy measure for terrorism is incidence per year	There exists significant and inverse relationship of Terrorism and HDI and insignificant relationship with economic growth.
Arisman, A. (2018). For ASEAN Countries.	Population growth, income per capita, inflation and unemployment.	Population growth and per capita income have significant impact on HDI, whereas inflation and unemployment have no influence on HDI
Çaglayan-Akay and Van (2017)	Rural population, health expenditure, GDP, internet users, life expectancy at birth, and the expected years of schooling.	Health expenditure, GDP, internet users, the expected years of schooling have +ve and significant impact on HDI

Shah, S. (2016). A region-wise analysis of Arab states, East Asia and Pacific, Europe and Central Asia, Latina America and the Caribbean, South Asia and Sub-Saharan Africa	Gini Index, fertility rate, CO2, GDP per capita, life expectancy, literacy rate, inflation rate	Apart from Inflation, all other variables show significant impact on HDI. In term of sign of coefficient, GDP, life expectancy and literacy rate are positive and other three variables of Gini Index, fertility and CO2 have negative.
Bintang et al. (2015), for OIC countries.	Education budget, per capita income level, and the Gini Index, health budget, and total population.	Education budget, per capita income level, and the Gini Index have significant impact on the value of HDI in OIC countries where as health budget, and total population have no impact on HDI.
Qasim and Chaudhry (2015), district level study of province Punjab, Pakistan	Social infrastructure, industrialization, remittances and population density.	All four variables show positive and significant impact on HDI.
Singariya (2014), for India,	Infant mortality rate, the incidence of poverty and marriage below age eighteen, per capita income, literacy, female engaged in salaried work, share of urban population and household facilities like electrification and telephone accessibility	Infant mortality rate, the incidence of poverty and marriage below age eighteen play role in reducing value of HDI. However, per capita income, literacy, female engaged in salaried work, share of urban population and household facilities like electrification and telephone accessibility are crucial for the high value of HDI.

Appendix 05: Regression Results

MSH	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dummy	-	5.909	-3.20	.003	-30.864	-6.958	***
	18.911						
Real Income	-2.579	6.489	-0.40	.693	-15.705	10.546	
Human Inequality	.335	.238	1.41	.167	-.146	.817	
Judicial Effectiveness	-.157	.166	-0.95	.349	-.492	.178	
Social Value	-	5.826	-2.54	.015	-26.563	-2.996	**
	14.779						
Social Capital	-6.226	2.665	-2.34	.025	-11.616	-.836	**
Ethical Value	-4.523	2.171	-2.08	.044	-8.914	-.131	**
Tax Revenue	-.352	.364	-0.97	.34	-1.088	.385	
Internet Users	-.102	.24	-0.42	.675	-.588	.384	
Constant	338.23	94.055	3.60	.001	147.992	528.481	***
	6						
Mean dependent var		58.246	SD dependent var		19.573		
R-squared		0.594	Number of obs		49.000		
F-test		6.352	Prob > F		0.000		
Akaike crit. (AIC)		405.291	Bayesian crit. (BIC)		424.209		

*** $p < .01$, ** $p < .05$, * $p < .1$

MSPI	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dummy	-.092	.029	-3.16	.003	-.15	-.033	***
Real Income	-.013	.032	-0.39	.697	-.077	.052	
Human Inequality	.001	.001	1.13	.267	-.001	.004	
Judicial Effectiveness	-.001	.001	-0.84	.404	-.002	.001	
Social Value	-.065	.029	-2.26	.03	-.122	-.007	**
Social Capital	-.033	.013	-2.51	.016	-.059	-.006	**
Ethical Value	-.021	.011	-1.99	.054	-.043	0	*
Tax Revenue	-.002	.002	-0.99	.327	-.005	.002	
Internet Users	0	.001	-0.35	.727	-.003	.002	
Constant	1.563	.461	3.39	.002	.629	2.496	***
Mean dependent var		0.250	SD dependent var			0.094	
R-squared		0.574	Number of obs			49.000	
F-test		5.833	Prob > F			0.000	
Akaike crit. (AIC)		-115.801	Bayesian crit. (BIC)			-96.883	

*** $p < .01$, ** $p < .05$, * $p < .1$

Faith Dep. Index	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dummy	-.016	.036	-0.43	.666	-.088	.057	
Ethical Value	-.015	.013	-1.12	.271	-.041	.012	
Ln Income	.027	.049	0.56	.579	-.072	.127	
Ln Income*	0	0	-0.53	.6	0	0	
Education							
Internet Users	0	.002	-0.24	.809	-.004	.003	
Social Value	-.37	.032	-11.53	0	-.434	-.305	***
Constant	3.115	.469	6.64	0	2.168	4.062	***
Mean dependent var		0.432	SD dependent var			0.276	
R-squared		0.903	Number of obs			49.000	
F-test		65.390	Prob > F			0.000	
Akaike crit. (AIC)		-88.529	Bayesian crit. (BIC)			-75.286	

*** $p < .01$, ** $p < .05$, * $p < .1$

Life Dep. Index	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dummy	-.095	.053	-1.80	.079	-.202	.012	*
Ethical Value	-.022	.023	-0.97	.339	-.068	.024	
Ln Income	-.06	.042	-1.42	.163	-.145	.025	
Judicial	-.002	.002	-0.83	.409	-.005	.002	
Effectiveness							
Social Capital	-.061	.028	-2.19	.034	-.117	-.005	**
Tax Revenue	-.006	.004	-1.47	.148	-.014	.002	
Constant	2.041	.705	2.90	.006	.619	3.464	***
Mean dependent var		0.375	SD dependent var			0.183	
R-squared		0.339	Number of obs			49.000	
F-test		3.597	Prob > F			0.006	
Akaike crit. (AIC)		-34.477	Bayesian crit. (BIC)			-21.235	

*** $p < .01$, ** $p < .05$, * $p < .1$

Intellect Dep. Index	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Dummy	-.085	.046	-1.86	.07	-.177	.007	*
Ethical Value	-.034	.02	-1.68	.101	-.074	.007	
Ln Income	-.046	.062	-0.74	.464	-.172	.08	
Human	.007	.002	3.23	.002	.003	.012	***
Inequality							
Judicial	-.005	.001	-3.30	.002	-.008	-.002	***
Effectiveness							
Internet Users	-.001	.002	-0.36	.718	-.005	.004	
Constant	1.781	.515	3.46	.001	.742	2.821	***
Mean dependent var		0.550	SD dependent var			0.211	
R-squared		0.638	Number of obs			49.000	
F-test		12.312	Prob > F			0.000	
Akaike crit. (AIC)		-50.079	Bayesian crit. (BIC)			-36.836	

*** $p < .01$, ** $p < .05$, * $p < .1$

Posterity Dep. Index	Coef.	St. Err.	t- value	p- value	[95% Conf	Interval]	Sig
Dummy	-.262	.064	-4.11	0	-.391	-.134	**
Ethical Value	-.038	.022	-1.76	.085	-.082	.006	*
Human Inequality	0	.003	0.02	.982	-.005	.005	
Social Capital	-.085	.027	-3.18	.003	-.14	-.031	**
Internet Users	.003	.002	1.97	.055	0	.006	*
Social Value	-.098	.06	-1.62	.112	-.219	.024	
Constant	2.539	.824	3.08	.004	.876	4.203	**
							*
Mean dependent var		0.582	SD dependent var		0.276		
R-squared		0.731	Number of obs		49.000		
F-test		19.054	Prob > F		0.000		
Akaike crit. (AIC)		-38.550	Bayesian crit. (BIC)		-25.307		

*** $p < .01$, ** $p < .05$, * $p < .1$

Wealth Dep. Index	Coef.	St.Err.	t- value	p- value	[95% Conf	Interval]	Sig
Dummy	.032	.035	0.92	.364	-.038	.102	
Ethical Value	-.011	.015	-0.72	.473	-.041	.02	
Human Inequality	.002	.002	1.11	.271	-.002	.005	
Judicial Effectiveness	-.003	.002	-1.81	.077	-.006	0	*
Social Capital	-.077	.017	-4.43	0	-.112	-.042	***
Tax Revenue	-.005	.003	-1.77	.084	-.01	.001	*
Property Rights	-.001	.002	-0.67	.505	-.004	.002	
Constant	1.832	.35	5.24	0	1.125	2.538	***
Mean dependent var		0.791	SD dependent var		0.154		
R-squared		0.614	Number of obs		49.000		
F-test		9.323	Prob > F		0.000		
Akaike crit. (AIC)		-75.956	Bayesian crit. (BIC)		-60.822		

*** $p < .01$, ** $p < .05$, * $p < .1$

Appendix 06: Guideline Axioms to measure five dimensions of MS

1. Faith Protection Axioms:

- 1.1 Prayers: MS Index should increase for easy access to Masjid for daily prayers
- 1.2 Umrah/Hajj: MS Index should increase with affordability for performing Umrah/ Hajj
- 1.3 Fasting: MS Index should increase for purposive in fasting during Ramadan.
- 1.4 Zakat: MS Index should increase for easy access to zakat collection/payment.
- 1.5 Religious education: MS Index should increase with easy access to quality Islamic education
- 1.6 Time spent: MS Index should increase for time spent on religious education and programs or time spent in Masjid.
- 1.7 Ghuloo: MS Index should decrease for exceeding what is required.

2. Life Protection Axioms:

- 2.1 Security: MS Index should increase when life security increases.
- 2.2 Health: MS Index should increase if there is an access to health facilities.
- 2.3 Time use and leisure activities: MS Index should increase if time is better utilized in Shari'ah compliant activities.
- 2.4 Physical fitness: MS Index should increase for easy and affordable access to sports and fitness facilities.

3. Intellect Protection Axioms:

- 3.1 Fairness: MS Index should increase if there is fair access to learning for all.
- 3.2 Harmfulness: MS Index should decrease if there is an easy access to activities harmful for intellect.
- 3.3 Practice: MS Index should increase if religious knowledge is turned into practice.
- 3.4 Education: MS Index should increase with the level of education.
- 3.5 Research: MS Index should increase for useful and applied research.

4. Posterity Protection Axioms:

- 4.1 Marriage: MS Index should increase for easy and affordable access to marriage
- 4.2 Family life: MS Index should increase for happy family life

4.3 Solidarity: MS Index should increase if children spending time with their parents and grand parents

4.4 Immorality: MS Index should decrease for access to immoral activities

4.5 Mortality: MS Index should decrease for child mortality in family

4.6 Home: MS Index should increase for mother staying at home for upbringing children

4.7 Time spent: MS Index should increase if children spent time in Shari'ah compliant activities

4.8 Respect: MS Index should increase for respect of parents.

4.9 Religious practice for kids: MS Index should increase if children memorizing part or whole Qur'an and going to Masjid.

5. Wealth Protection Axioms

5.1 Transfer: MS Index should increase whenever Zakat and Sadaqat are transferred from an individual above the poverty line to an individual below the poverty line.

5.2 Intergenerational Transfer: MS Index should increase whenever inheritance amount is transferred according to Shari'ah to all heirs.

5.3 Exchange: MS Index should decrease whenever money is borrowed/lent on interest (Riba).

5.4 Spending: if spending increases in Israf or Tabzeer then MS Index should decrease in value. In case of moderation (Iqtisad) in spending in Halaal and Mubaah goods and services then MS Index should increase in value.

5.5 Earning: If halal earning increases then MS Index should increase and if earning through haraam means (like gambling, hoarding, less-than full measurement tatfeef, riba, etc) increases then MS Index should decrease.

5.6 Accumulation: if wealth accumulates with regular payment of Zakat and Sadaqat then MS Index should increase and if wealth accumulates without any payment of Zakat then MS Index should decrease.

5.7 Risk: if risk of loss of wealth increases then MS Index should decrease.

5.8 Fairness: if there is fair access to earning then MS Index should increase.

**Appendix 07: List of the Scholars interviewed for Focused Group
Opinion Survey**

Sr. No.	Name	Qualification	Organization
1	Dr. H. M Yasin	PhD Economics	IIUI
2	Dr. M. Tahir Mansoori	PhD Shariah	IIUI
3	Dr. Aziz ur Rehman	PhD Law	IIUI
4	Dr. Ruhul Amin	PhD Hadith	IIUI
5	Dr. Atiq ur Rehman	PhD Econometrics	University of AJK
6	Dr. Abu Bakar A.	PhD Shariah & Int'l Law	IIUI
7	Dr. Mir Akbar Shah	PhD Dawah & Islamic Culture	IIUI
8	Dr. Anwar Shah	PhD Economics	QAU Islamabad
9	Dr. Muhammad Hanif	PhD Finance	FAST NU Ibd
10	Dr. Muhammad Ilyas	PhD Economics	AIOU Islamabad
11	Dr. Zahid Siddique	PhD Economics	NUST Islamabad
12	Dr. Hayatullah	PhD Hadith	IIUI
13	Dr. Habib ur Rehman	PhD Law (Islamic Jurisprudence)	IIUI
14	Dr. Mazhar Iqbal	PhD Economics	CUST Islamabad
15	Dr. Ghulam Yousaf	PhD Shariah	AIOU Islamabad
16	Dr. Atiquzzafar Khan	PhD Economics	Riphah Islamabad
17	Dr. Suhail Hasan	PhD	IIUI
18	Muhammad Ayub	MSc	Riphah Islamabad
19	Dr. Ataullah Khan	PhD Shariah	IIUI
20	Dr. Atique Tahir	PhD Law	IIUI
21	Dr. Samiullah Zubairi	PhD Arabic	AIOU Islamabad
22	Dr. Abdul Hameed	PhD Islamic Law	Shariah Academy IIUI
23	Dr. Ashgar Shahzad	PhD Islamic Finance	Shariah Academy IIUI
24	Dr. M. Mushtaq Ahmad	PhD Shariah	Shariah Academy IIUI
25	Dr. Sham ul Haq Amin	PhD Shariah	Shariah Academy IIUI
26	Mr. Suleman Afzal	MS Economics	IIUI

Appendix 8: WVS 7 Questionnaire



2017 -2020 WORLD VALUES SURVEY WAVE 7

MASTER SURVEY QUESTIONNAIRE

Before beginning survey fieldwork, please, double check with the WVS secretariat (wvs.secretariat@gmail.com or ksenniya.kizilova@gmail.com) that you are using the most recent, final version of the questionnaire

A. Survey wave number: 7

B. Country code (write in 3-digit code from list below; contact WVS if your country not listed): _____

8	Albania	226	Equatorial Guinea	466	Mali	705	Slovenia
12	Algeria	231	Ethiopia	470	Malta	706	Somalia
16	American Samoa	232	Eritrea	474	Martinique	710	South Africa
20	Andorra	233	Estonia	478	Mauritania	724	Spain
24	Angola	246	Finland	480	Mauritius	736	Sudan
28	Antigua and Barbuda	250	France	484	Mexico	740	Suriname
32	Argentina	268	Georgia	492	Monaco	752	Sweden
51	Armenia	270	Gambia	496	Mongolia	756	Switzerland
36	Australia	624	Guinea-Bissau	498	Moldova	760	Syria
40	Austria	276	Germany	504	Morocco	410	South Korea
31	Azerbaijan	288	Ghana	508	Mozambique	891	Serbia and Montenegro
50	Bangladesh	292	Gibraltar	104	Myanmar	911	Serbia
52	Barbados	300	Greece	912	Montenegro	626	Timor-Leste
56	Belgium	320	Guatemala	807	Macedonia	762	Tajikistan
60	Bermuda	324	Guinea	516	Namibia	764	Thailand
64	Bhutan	328	Guyana	524	Nepal	768	Togo
68	Bolivia	826	Great Britain	528	Netherlands	780	Trinidad
70	Bosnia	332	Haiti	554	New Zealand	788	Tunisia
72	Botswana	340	Honduras	558	Nicaragua	158	Taiwan
76	Brazil	344	Hong Kong	562	Niger	792	Turkey
84	Belize	348	Hungary	566	Nigeria	795	Turkmenistan
100	Bulgaria	352	Iceland	578	Norway	834	Tanzania
854	Burkina Faso	356	India	408	North Korea	784	United Arab Emirates
108	Burundi	360	Indonesia	512	Orman	800	Uganda
112	Belarus	364	Iran	586	Pakistan	804	Ukraine
116	Cambodia	368	Iraq	591	Panama	840	United States
120	Cameroon	372	Ireland	598	Papua New Guinea	850	U.S. Virgin Islands
124	Canada	376	Israel	600	Paraguay	858	Uruguay
148	Chad	380	Italy	604	Peru	860	Uzbekistan
152	Chile	400	Jordan	608	Philippines	704	Viet Nam
156	China	388	Jamaica	616	Poland	862	Venezuela
170	Colombia	392	Japan	620	Portugal	887	Yemen
384	Côte d'Ivoire	398	Kazakhstan	275	Palestine	894	Zambia
184	Cook Islands	404	Kenya	630	Puerto Rico	716	Zimbabwe
188	Costa Rica	414	Kuwait	634	Qatar		
191	Croatia	417	Kyrgyzstan	642	Romania		
192	Cuba	418	Laos	643	Russia		
196	Cyprus	422	Lebanon	646	Rwanda		
203	Czech Republic	426	Lesotho	682	Saudi Arabia		
180	Dem. Rep. of Congo	428	Latvia	144	Sri Lanka		
208	Denmark	430	Liberia	686	Senegal		
214	Dominican Republic	434	Libya	690	Seychelles		
818	Egypt	450	Madagascar	694	Sierra Leone		
218	Ecuador	454	Malawi	702	Singapore		
222	El Salvador	458	Malaysia	703	Slovakia		

C. COW COUNTRY CODE (Correlated of War country code; to be coded by the data archive):

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D. Interview number (write in 4-digit number identifying each interview):

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The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

- 1 Don't know
- 3 Not applicable (filter)
- 2 No answer/refused
- 5 Missing; Not applicable for other reasons

(Introduction by interviewer):

Hello. I am from the _____ (indicate name of the survey organization). We are carrying out a global study of what people value in life. This study will interview samples representing most of the world's people. Your name has been selected at random as part of a representative sample of the people in _____ (mention country in which interview is conducted). I'd like to ask your views on a number of different subjects. Your input will be treated strictly confidential, but it will contribute to a better understanding of what people all over the world believe and want out of life.

SOCIAL VALUES, ATTITUDES & STEREOTYPES

(SHOW CARD 1)

For each of the following, indicate how important it is in your life. Would you say it is (read out and code one answer for each):

		Very important	Rather important	Not very important	Not at all important
Q1	Family	1	2	3	4
Q2	Friends	1	2	3	4
Q3	Leisure time	1	2	3	4
Q4	Politics	1	2	3	4
Q5	Work	1	2	3	4
Q6	Religion	1	2	3	4

(SHOW CARD 2)

Here is a list of qualities that children can be encouraged to learn at home. Which, if any, do you consider to be especially important? Please choose up to five! (Code five mentions at the maximum):

Interviewer: do NOT ask "yes" or "no" for every item; give a LIST with all qualities to the respondent and code as "mentioned" those 5 qualities named by the respondent. It should be NO more than 5 qualities!

		Mentioned	Not mentioned
Q7	Good manners	1	2
Q8	Independence	1	2
Q9	Hard work	1	2
Q10	Feeling of responsibility	1	2
Q11	Imagination	1	2
Q12	Tolerance and respect for other people	1	2
Q13	Thrift, saving money and things	1	2
Q14	Determination, perseverance	1	2
Q15	Religious faith	1	2
Q16	Not being selfish (unselfishness)	1	2
Q17	Obedience	1	2

(SHOW CARD 3)

On this list are various groups of people. Could you please mention any that you would not like to have as neighbors? (Code an answer for each group):

		Mentioned	Not mentioned
Q18	Drug addicts	1	2
Q19	People of a different race	1	2
Q20	People who have AIDS	1	2
Q21	Immigrants/foreign workers	1	2
Q22	Homosexuals	1	2
Q23	People of a different religion	1	2
Q24	Heavy drinkers	1	2
Q25	Unmarried couples living together	1	2
Q26	People who speak a different language	1	2

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know -3 Not applicable (filter)
-2 No answer/refused -5 Missing; Not applicable for other reasons

For each of the following statements I read out, can you tell me how strongly you agree or disagree with each. Do you strongly agree, agree, disagree, or strongly disagree? (Read out and code one answer for each statement):

		Strongly agree	Agree	Disagree	Strongly disagree
Q27	One of my main goals in life has been to make my parents proud	1	2	3	4
Q28	When a mother works for pay, the children suffer	1	2	3	4
Q29	On the whole, men make better political leaders than women do	1	2	3	4
Q30	A university education is more important for a boy than for a girl	1	2	3	4
Q31	On the whole, men make better business executives than women do	1	2	3	4
Q32	Being a housewife is just as fulfilling as working for pay	1	2	3	4

**How would you feel about the following statements? Do you agree or disagree with them?
(Read out and code one answer for each statement):**

		Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly
Q33	When jobs are scarce, men should have more right to a job than women	1	2	3	4	5
Q34	When jobs are scarce, employers should give priority to people of this country over immigrants	1	2	3	4	5
Q35	If a woman earns more money than her husband, it's almost certain to cause problems	1	2	3	4	5
Q36	Homosexual couples are as good parents as other couples	1	2	3	4	5
Q37	It is a duty towards society to have children	1	2	3	4	5
Q38	Adult children have the duty to provide long-term care for their parents	1	2	3	4	5
Q39	People who don't work turn lazy	1	2	3	4	5
Q40	Work is a duty towards society	1	2	3	4	5
Q41	Work should always come first, even if it means less spare time	1	2	3	4	5

(SHOW CARD 4)

Q42. On this card are three basic kinds of attitudes concerning the society we live in. Please choose the one which best describes your own opinion? (Please, code only one option from the list below)

- 1 The entire way our society is organized must be radically changed by revolutionary action
- 2 Our society must be gradually improved by reforms
- 3 Our present society must be valiantly defended against all subversive forces

I'm going to read out a list of various changes in our way of life that might take place in the near future. Please tell me for each one, if it were to happen, whether you think it would be a good thing, a bad thing, or don't you mind? (Code one answer for each).

		Good	Don't mind	Bad
Q43	Less importance placed on work in our lives	1	2	3
Q44	More emphasis on the development of technology	1	2	3
Q45	Greater respect for authority	1	2	3

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

SOCIAL CAPITAL, TRUST & ORGANIZATIONAL MEMBERSHIP

Q57. Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people? (Code one answer):

- 1 Most people can be trusted
- 2 Need to be very careful

I'd like to ask you how much you trust people from various groups. Could you tell me for each whether you trust people from this group completely, somewhat, not very much or not at all? (Read out and code one answer for each):

		Trust completely	Trust somewhat	Do not trust very much	Do not trust at all
Q58	Your family	1	2	3	4
Q59	Your neighborhood	1	2	3	4
Q60	People you know personally	1	2	3	4
Q61	People you meet for the first time	1	2	3	4
Q62	People of another religion	1	2	3	4
Q63	People of another nationality	1	2	3	4

I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (Read out and code one answer for each):

		A great deal	Quite a lot	Not very much	None at all
Q64	The [churches] ¹	1	2	3	4
Q65	The armed forces	1	2	3	4
Q66	The press	1	2	3	4
Q67	Television	1	2	3	4
Q68	Labor unions	1	2	3	4
Q69	The police	1	2	3	4
Q70	The courts	1	2	3	4
Q71	The government	1	2	3	4
Q72	Political parties	1	2	3	4
Q73	Parliament	1	2	3	4
Q74	The civil service	1	2	3	4
Q75	Universities	1	2	3	4
Q76	Elections	1	2	3	4
Q77	Major companies	1	2	3	4
Q78	Banks	1	2	3	4
Q79	Environmental organizations	1	2	3	4
Q80	Women's organizations	1	2	3	4
Q81	Charitable or humanitarian organizations	1	2	3	4
Q82	The [European Union] ²	1	2	3	4
Q83	The United Nations	1	2	3	4

¹ Replace with the relevant for your culture term (i.e. mosque, temple etc.)

² Use one of the following regional organizations relevant for your country/ society: **African Union (AU)**, **European Union (EU)**, **Caribbean Community (CARICOM)**, **Mercado Común del Sur (MERCOSUR)**, **North American Free Trade Agreement (NAFTA)**, **Arab League (AL)**, **Association of Southeast Asian Nations (ASEAN)**, **South Asian Association for Regional Cooperation (SAARC)**, **Shanghai Cooperation Organization (SCO)**.

You can ask respondents also about other regional organizations by introducing additional variables Q82A; Q82B etc. However, one organization from the above list should be obligatory included into your questionnaire.

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

Q291. Now we would like to ask few more questions about the parliament, government and the United Nations. In particular, do you agree or disagree with the following statements?

		Agree strongly	Agree	Neither agree nor disagree	Disagree	Disagree strongly
How you feel about the <name of the national parliament or national congress> in your country?						
P1	Overall, <parliament> is competent and efficient	1	2	3	4	5
P2	<Parliament> usually carries out its duties very well	1	2	3	4	5
P3	<Parliament> usually acts in the interest of citizens	1	2	3	4	5
P4	<Parliament> wants to do its best to serve the country	1	2	3	4	5
P5	<Parliament> is generally free of corruption	1	2	3	4	5
P6	<Parliament's> work is open and transparent	1	2	3	4	5
How you feel about the government in your country?						
G1	Overall, the government is competent and efficient	1	2	3	4	5
G2	The government usually carries out its duties very well	1	2	3	4	5
G3	The government usually acts in the interest of citizens	1	2	3	4	5
G4	The government wants to do its best to serve the country	1	2	3	4	5
G5	The government is generally free of corruption	1	2	3	4	5
G6	The government's work is open and transparent	1	2	3	4	5
How you feel about the United Nations (UN)?						
UN1	Overall, the UN is competent and efficient	1	2	3	4	5
UN2	The UN usually carries out its duties very well	1	2	3	4	5
UN3	The UN usually acts in the interest of all countries	1	2	3	4	5
UN4	The UN wants to do its best to serve the world	1	2	3	4	5
UN5	The UN is generally free of corruption	1	2	3	4	5
UN6	The UN's work is open and transparent	1	2	3	4	5

Speaking more about the international organizations, how much confidence would you say you have in the following of them? Is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (Read out and code one answer for each):

		A great deal	Quite a lot	Not very much	None at all
Q84	The International Monetary Fund (IMF)	1	2	3	4
Q85	International Criminal Court (ICC)	1	2	3	4
Q86	The North Atlantic Treaty Organization (NATO)	1	2	3	4
Q87	The World Bank	1	2	3	4
Q88	The World Health Organization (WHO)	1	2	3	4
Q89	The World Trade Organization (WTO)	1	2	3	4

Q90. Nowadays there's a lot of talk about international organizations. People sometimes say that international organizations should prioritize improving people's lives, even if this may imply that decisions are not made democratically. What do you think should international organizations prioritize, being effective or being democratic? If your views are somewhat mixed, choose the appropriate number in between. (SHOW CARD 7)

Being effective	Being democratic
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Here are some questions about international organizations. Many people don't know the answers to these questions, but if you do please tell me. Only ONE answer per question! (SHOW CARD 8)

		A	B	C
Q91	Five countries have permanent seats on the Security Council of the United Nations. Which one of the following is not a member? A) France, B) China, C) India	1	2	3
Q92	Where are the headquarters of the International Monetary Fund (IMF) located? A) Washington DC, B) London, C) Geneva	1	2	3
Q93	Which of the following problems does the organization Amnesty International deal with? A) Climate change, B) Human rights, C) Destruction of historic monuments	1	2	3

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):
 -1 Don't know -3 Not applicable (filter)
 -2 No answer/refused -5 Missing; Not applicable for other reasons

Now I am going to read off a list of voluntary organizations. For each organization, could you tell me whether you are an active member, an inactive member or not a member of that type of organization? (Read out and code one answer for each organization):

		Active member	Inactive member	Don't belong
Q94	Church or religious organization	2	1	0
Q95	Sport or recreational organization, football/baseball/rugby team	2	1	0
Q96	Art, music or educational organization	2	1	0
Q97	Labor Union	2	1	0
Q98	Political party	2	1	0
Q99	Environmental organization	2	1	0
Q100	Professional association	2	1	0
Q101	Humanitarian or charitable organization	2	1	0
Q102	Consumer organization	2	1	0
Q103	Self-help group, mutual aid group	2	1	0
Q104	Women's group	2	1	0
Q105	Other organization	2	1	0

(SHOW CARD 9)

Now I'd like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. (Code one number for each issue):

Q106	Incomes should be made more equal					There should be greater incentives for individual effort					
	1	2	3	4	5	6	7	8	9	10	
Q107	Private ownership of business and industry should be increased	1	2	3	4	5	6	7	8	9	10
Q108	Government should take more responsibility to ensure that everyone is provided for	1	2	3	4	5	6	7	8	9	10
Q109	Competition is good	1	2	3	4	5	6	7	8	9	10
Q110	In the long run, hard work usually brings a better life	1	2	3	4	5	6	7	8	9	10

Q111. Here are two statements people sometimes make when discussing the environment and economic growth. Which of them comes closer to your own point of view? (Read out and code one answer):

- 1 Protecting the environment should be given priority, even if it causes slower economic growth and some loss of jobs.
- 2 Economic growth and creating jobs should be the top priority, even if the environment suffers to some extent.
- 3 Other answer (code if volunteered only!).

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

CORRUPTION

(SHOW CARD 10)

Q112. Now I'd like you to tell me your views on corruption – when people pay a bribe, give a gift or do a favor to other people in order to get the things they need done or the services they need. How would you place your views on corruption in [your country] on a 10-point scale where "1" means "there is no corruption in [my country]" and "10" means "there is abundant corruption in [my country]". If your views are somewhat mixed, choose the appropriate number in between.

There is no corruption
in [my country]

1 2 3 4 5 6 7 8 9 10

There is abundant corruption
in [my country]

Among the following groups of people, how many do you believe are involved in corruption? Tell me for each group if you believe it is none of them, few of them, most of them or all of them?

Interviewer: read out groups and code just one number for each of them!

None Few Most All
of them of them of them of them

Q113 State authorities

1 2 3 4

Q114 Business executives

1 2 3 4

Q115 Local authorities

1 2 3 4

Q116 Civil service providers (police, judiciary, civil servants, doctors, teachers)

1 2 3 4

Q117 Journalists and media

1 2 3 4

Q118. We want to know about your experience with local officials and service providers, like police officers, lawyers, doctors, teachers and civil servants in your community. How often do you think ordinary people like yourself or people from your neighbourhood have to pay a bribe, give a gift or do a favor to these people in order to get the services you need? Does it happen never, rarely, frequently or always? (Interviewer: code just one number?)

Never Rarely Frequently Always

1 2 3 4

Q119. Can you tell me how strongly you agree or disagree with the following statement: "on the whole, women are less corrupt than men"?

1	2	3	4	0
Strongly agree	Agree	Disagree	Strongly disagree	Hard to say

(SHOW CARD 11)

Q120. How high is the risk in this country to be held accountable for giving or receiving a bribe, gift or favor in return for public service? To indicate your opinion, use a 10-point scale where "1" means "no risk at all" and "10" means "very high risk". (Interviewer: show card and code just one number?)

No risk at all

Very high risk

1 2 3 4 5 6 7 8 9 10

Q121. Now we would like to know your opinion about the people from other countries who come to live in [your country] - the immigrants. How would you evaluate the impact of these people on the development of [your country]?

Very good Quite good Neither good, nor bad Quite bad Very bad

5	4	3	2	1
---	---	---	---	---

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know -3 Not applicable (filter)

-2 No answer/refused

-5 Missing; Not applicable for other reasons

(SHOW CARD 12)

From your point of view, what have been the effects of immigration on the development of [this country]? For each of the following statements about the effects of immigration, please, tell me whether you agree or disagree with it:

(Interviewer, for every items code "agree" or "disagree". Don't read "hard to say". code only if mentioned by the respondent)

		Agree	Hard to say	Disagree
Q122	Fills important jobs vacancies	2	1	0
Q123	Strengthens cultural diversity	2	1	0
Q124	Increases the crime rate	2	1	0
Q125	Gives asylum to political refugees who are persecuted elsewhere	2	1	0
Q126	Increases the risks of terrorism	2	1	0
Q127	Offers people from poor countries a better living	2	1	0
Q128	Increases unemployment	2	1	0
Q129	Leads to social conflict	2	1	0

Q130. How about people from other countries coming here to work. Which one of the following do you think the government should do?

1. Let anyone come who wants to
2. Let people come as long as there are jobs available
3. Place strict limits on the number of foreigners who can come here
4. Prohibit people coming here from other countries

SECURITY

Q131. Could you tell me how secure do you feel these days?

Very secure 1
 Quite secure 2
 Not very secure 3
 Not at all secure 4

How frequently do the following things occur in your neighborhood?

	Very frequently	Quite frequently	Not frequently	Not at all frequently
Q132. Robberies	1	2	3	4
Q133. Alcohol consumption in the streets	1	2	3	4
Q134. Police or military interfere with people's private life	1	2	3	4
Q135. Racist behavior	1	2	3	4
Q136. Drug sale in streets	1	2	3	4
Q137. Street violence and fights	1	2	3	4
Q138. Sexual harassment	1	2	3	4

Which of the following things have you done for reasons of security? (MULTIPLE RESPONSE)

	Yes	No
Q139. Didn't carry much money	1	2
Q140. Preferred not to go out at night	1	2
Q141. Carried a knife, gun or other weapon	1	2

To what degree are you worried about the following situations?

	Very much	A good deal	Not much	Not at all
Q142. Losing my job or not finding a job	1	2	3	4
Q143. Not being able to give my children a good education	1	2	3	4

Have you been the victim of a crime during the past year? And what about your immediate family – has someone in your family been the victim of a crime during the last year?

Yes No
 Q144. Respondent 1 2
 Q145. Family 1 2

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-2 No answer/refused -5 Missing: Not applicable for other reasons

To what degree are you worried about the following situations?

	Very much	A good deal	Not much	Not at all
Q146. A war involving my country	1	2	3	4
Q147. A terrorist attack	1	2	3	4
Q148. A civil war	1	2	3	4

Q149. Most people consider both freedom and equality to be important, but if you had to choose between them, which one would you consider more important?

1. Freedom
2. Equality

Q150. Most people consider both freedom and security to be important, but if you had to choose between them, which one would you consider more important?

1. Freedom
2. Security

Q151. Of course, we all hope that there will not be another war, but if it were to come to that, would you be willing to fight for your country? (Code one answer):

1 Yes 2 No

POSTMATERIALIST INDEX

People sometimes talk about what the aims of this country should be for the next ten years. On this 'card are listed some of the goals which different people would give top priority. (SHOW CARD 13)

Q152. Would you please say which one of these you, yourself, consider the most important? (Code one answer only under "first choice")

Q153. And which would be the next most important? (Code one answer only under "second choice")

	Q152. First choice	Q153. Second choice
1. A high level of economic growth	1	1
2. Making sure this country has strong defense forces	2	2
3. Seeing that people have more say about how things are done at their jobs and in their communities	3	3
4. Trying to make our cities and countryside more beautiful	4	4

(SHOW CARD 14)

Q154. If you had to choose, which one of the things on this card would you say is most important? (Code one answer only under "first choice"):

Q155. And which would be the next most important? (Code one answer only under "second choice"):

	Q154. First choice	Q155. Second choice
1. Maintaining order in the nation	1	1
2. Giving people more say in important government decisions	2	2
3. Fighting rising prices	3	3
4. Protecting freedom of speech	4	4

(SHOW CARD 15)

Q156. Here is another list. In your opinion, which one of these is most important? (Code one answer only under "first choice"):

Q157. And what would be the next most important? (Code one answer only under "second choice");

	Q156. First choice	Q157. Second choice
1. A stable economy	1	1
2. Progress toward a less impersonal and more humane society	2	2
3. Progress toward a society in which ideas count more than money	3	3
4. The fight against crime	4	4

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

- 1 Don't know
- 2 No answer/refused
- 3 Not applicable (filter)
- 5 Missing; Not applicable for other reasons

SCIENCE & TECHNOLOGY

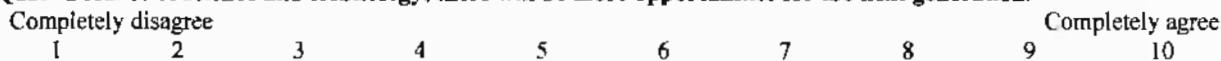
(SHOW CARD 16)

Now, I would like to read some statements and ask how much you agree or disagree with each of these statements. For these questions, a 1 means that you "completely disagree" and a 10 means that you "completely agree." (Code one number for each statement):

Q158. Science and technology are making our lives healthier, easier, and more comfortable.



Q159. Because of science and technology, there will be more opportunities for the next generation.



Q160. We depend too much on science and not enough on faith.



Q161. One of the bad effects of science is that it breaks down people's ideas of right and wrong.



Q162. It is not important for me to know about science in my daily life.



Q163. All things considered, would you say that the world is better off, or worse off, because of science and technology? Please tell me which comes closest to your view on this scale: 1 means that "the world is a lot worse off," and 10 means that "the world is a lot better off." (Code one number):



(SHOW CARD 17)

Q164. How important is God in your life? Please use this scale to indicate. 10 means "very important" and 1 means "not at all important." (Code one number):



Which, if any, of the following do you believe in?

		Yes	No
Q165	God	1	2
Q166	Life after death	1	2
Q167	Hell	1	2
Q168	Heaven	1	2

Please tell us if you strongly agree, agree, disagree, or strongly disagree with the following statements:

	Strongly agree	Agree	Disagree	Strongly disagree
Q169 Whenever science and religion conflict, religion is always right	1	2	3	4
Q170 The only acceptable religion is my religion.	1	2	3	4

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

The general coding for missing codes is as follows (as

-1 Don't know
-2 No answer/refused

- 3 Not applicable (filter)
- 5 Missing: Not applicable for other reasons

(SHOW CARD 18)

Q171. Apart from weddings and funerals, about how often do you attend religious services these days? (Code one answer):

(SHOW CARD 19)

Q172. Apart from weddings and funerals, about how often do you pray? (Code one answer):

1 Several times a day 4 Only when attending religious services 7 Less often
 2 Once a day 5 Only on special holy days 8 Never, practically never
 3 Several times each week 6 Once a year

Q173. Independently of whether you attend religious services or not, would you say you are...? (read out and code one answer):

- 1 A religious person
- 2 Not a religious person
- 3 An atheist

Q174. With which one of the following statements do you agree most? The basic meaning of religion is:

1. To follow religious norms and ceremonies 2. To do good to other people

Q175. And with which of the following statements do you agree most? The basic meaning of religion is:

1. To make sense of life after death
2. To make sense of life in this world

ETHICAL VALUES AND NORMS

Q176. How much do you agree or disagree with the statement that nowadays one often has trouble deciding which moral rules are the right ones to follow?

Completely
agree

Completely
disagree

1 2 3 4 5 6 7 - 8 9 10

(SHOW CARD 20)

Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card. (Read out and code one answer for each statement):

		Never justifiable							Always justifiable		
		1	2	3	4	5	6	7	8	9	10
Q177	Claiming government benefits to which you are not entitled	1	2	3	4	5	6	7	8	9	10
Q178	Avoiding a fare on public transport	1	2	3	4	5	6	7	8	9	10
Q179	Stealing property	1	2	3	4	5	6	7	8	9	10
Q180	Cheating on taxes if you have a chance	1	2	3	4	5	6	7	8	9	10
Q181	Someone accepting a bribe in the course of their duties	1	2	3	4	5	6	7	8	9	10
Q182	Homosexuality	1	2	3	4	5	6	7	8	9	10
Q183	Prostitution	1	2	3	4	5	6	7	8	9	10
Q184	Abortion	1	2	3	4	5	6	7	8	9	10
Q185	Divorce	1	2	3	4	5	6	7	8	9	10
Q186	Sex before marriage	1	2	3	4	5	6	7	8	9	10
Q187	Suicide	1	2	3	4	5	6	7	8	9	10
Q188	Euthanasia	1	2	3	4	5	6	7	8	9	10
Q189	For a man to beat his wife	1	2	3	4	5	6	7	8	9	10
Q190	Parents beating children	1	2	3	4	5	6	7	8	9	10
Q191	Violence against other people	1	2	3	4	5	6	7	8	9	10
Q192	Terrorism as a political, ideological or religious mean	1	2	3	4	5	6	7	8	9	10
Q193	Having casual sex	1	2	3	4	5	6	7	8	9	10
Q194	Political violence	1	2	3	4	5	6	7	8	9	10
Q195	Death penalty	1	2	3	4	5	6	7	8	9	10

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know

-3 Not applicable (filter)

-2 No answer/refused

-5 Missing: Not applicable for other reasons

Do you think that the [COUNTRY] government should or should not have the right to do the following:

		Definitely should have the right	Probably should have the right	Probably should not have the right	Definitely should not have the right
Q196	Keep people under video surveillance in public areas	1	2	3	4
Q197	Monitor all e-mails and any other information exchanged on the Internet	1	2	3	4
Q198	Collect information about anyone living in [COUNTRY] without their knowledge	1	2	3	4

POLITICAL INTEREST & POLITICAL PARTICIPATION

Q199. How interested would you say you are in politics? Are you (read out and code one answer):

- 1 Very interested
- 2 Somewhat interested
- 3 Not very interested
- 4 Not at all interested

Q200. Who you get together with your friends, would you say you discuss political matters frequently, occasionally or never?

- 1 Frequently
- 2 Occasionally
- 3 Never

People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly or never (read out and code one answer for each):

	Daily	Weekly	Monthly	Less than monthly	Never
Q201. Daily newspaper	1	2	3	4	5
Q202. TV news	1	2	3	4	5
Q203. Radio news	1	2	3	4	5
Q204. Mobile phone	1	2	3	4	5
Q205. Email	1	2	3	4	5
Q206. Internet	1	2	3	4	5
Q207. Social media (Facebook, Twitter, etc.)	1	2	3	4	5
Q208. Talk with friends or colleagues	1	2	3	4	5

(SHOW CARD 21)

Now I'd like you to look at this card. I'm going to read out some forms of political action that people can take, and I'd like you to tell me, for each one, whether you have done any of these things, whether you might do it or would never under any circumstances do it (read out and code one answer for each action):

	Have done	Might do	Would never do
Q209. Signing a petition	1	2	3
Q210. Joining in boycotts	1	2	3
Q211. Attending peaceful demonstrations	1	2	3
Q212. Joining strikes	1	2	3

(SHOW CARD 22)

What about these forms of political action and social activism that people can take? Please, tell me for each of them if you have done any of these things, whether you might do it or would never under any circumstances do it (read out and code one answer for each action):

	Have done	Might do	Would never do
Q213. Donating to a group or campaign	1	2	3
Q214. Contacting a government official	1	2	3
Q215. Encouraging others to take action about political issues	1	2	3
Q216. Encouraging others to vote	1	2	3

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

- 1 Don't know -3 Not applicable (filter)
- 2 No answer/refused -5 Missing; Not applicable for other reasons

(SHOW CARD 23)

Now I'd like you to look at this card. I'm going to read out some other forms of political action that people can take using Internet and social media tools like Facebook, Twitter etc., and I'd like you to tell me, for each one, whether you have done any of these things, whether you might do it or would never under any circumstances do it (read out and code one answer for each action; if the respondent does not use Internet and social media, please, code "-3"=not applicable):

		Have done	Might do	Would never do
Q217	Searching information about politics and political events	1	2	3
Q218	Signing an electronic petition	1	2	3
Q219	Encouraging other people to take any form of political action	1	2	3
Q220	Organizing political activities, events, protests	1	2	3

When elections take place, do you vote always, usually or never? Please tell me separately for each of the following levels (Read out and code one answer for each item):

	Always	Usually	Never	Not allowed to vote
Q221. Local level	1	2	3	4
Q222. National level	1	2	3	4

(SHOW CARD 24)

Q223. If there were a national election tomorrow, for which party on this list would you vote? Just call out the number on this card. If DON'T KNOW: Which party appeals to you most?

1. Party 1
2. Party 2
3. Party 3
4. etc.

[INSERT COUNTRY-SPECIFIC LIST OF PARTIES]

In your view, how often do the following things occur in this country's elections?

	Very often	Fairly often	Not often	Not at all often
Q224. Votes are counted fairly	1	2	3	4
Q225. Opposition candidates are prevented from running	1	2	3	4
Q226. TV news favors the governing party	1	2	3	4
Q227. Voters are bribed	1	2	3	4
Q228. Journalists provide fair coverage of elections	1	2	3	4
Q229. Election officials are fair	1	2	3	4
Q230. Rich people buy elections	1	2	3	4
Q231. Voters are threatened with violence at the polls	1	2	3	4
Q232. Voters are offered a genuine choice in the elections	1	2	3	4
Q233. Women have equal opportunities to run the office	1	2	3	4

Q234. Some people think that having honest elections makes a lot of difference in their lives; other people think that it doesn't matter much. How important would you say is having honest elections for you—very important, rather important, not very important or not at all important?

1. Very important
2. Rather important
3. Not very important
4. Not at all important

SDG1. How much would you say the political system in your country allows people like you to have a say in what the government does?

1 2 3 4 5
A great deal A lot Some Very little Not at all

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

The general coding for missing codes is as follows (do not use):

-1 Don't know
-2 No answer/refused

-5 Not applicable (inter)

POLITICAL CULTURE & POLITICAL REGIMES

I'm going to describe various types of political systems and ask what you think about each as a way of governing this country. For each one, would you say it is a very good, fairly good, fairly bad or very bad way of governing this country? (Read out and code one answer for each):

		Very good	Fairly good	Fairly bad	Very bad
Q235	Having a strong leader who does not have to bother with parliament and elections	1	2	3	4
Q236	Having experts, not government, make decisions according to what they think is best for the country	1	2	3	4
Q237	Having the army rule	1	2	3	4
Q238	Having a democratic political system	1	2	3	4
Q239	Having a system governed by religious law in which there are no political parties or elections	1	2	3	4

(SHOW CARD 25)

Q240. In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking? (Code one number):

Left	1	2	3	4	5	6	7	8	9	Right	10
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(SHOW CARD 26)

Many things are desirable, but not all of them are essential characteristics of democracy. Please tell me for each of the following things how essential you think it is as a characteristic of democracy. Use this scale where 1 means "not at all an essential characteristic of democracy" and 10 means it definitely is "an essential characteristic of democracy" (read out and code one answer for each):

Interviewer, do not read this and code only if mentioned by the respondent him-herself: 0 - 'It is against democracy'

Not an essential characteristic of democracy	1	2	3	4	5	6	7	8	9	An essential characteristic of democracy	10
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Q241	Governments tax the rich and subsidize the poor.	1	2	3	4	5	6	7	8	9	10
Q242	Religious authorities ultimately interpret the laws.	1	2	3	4	5	6	7	8	9	10
Q243	People choose their leaders in free elections.	1	2	3	4	5	6	7	8	9	10
Q244	People receive state aid for unemployment.	1	2	3	4	5	6	7	8	9	10
Q245	The army takes over when government is incompetent.	1	2	3	4	5	6	7	8	9	10
Q246	Civil rights protect people from state oppression.	1	2	3	4	5	6	7	8	9	10
Q247	The state makes people's incomes equal.	1	2	3	4	5	6	7	8	9	10
Q248	People obey their rulers.	1	2	3	4	5	6	7	8	9	10
Q249	Women have the same rights as men.	1	2	3	4	5	6	7	8	9	10

(SHOW CARD 27)

Q250. How important is it for you to live in a country that is governed democratically? On this scale where 1 means it is "not at all important" and 10 means "absolutely important" what position would you choose? (Code one number):

Not at all important	1	2	3	4	5	6	7	8	9	Absolutely important	10
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(SHOW CARD 28)

Q251. And how democratically is this country being governed today? Again using a scale from 1 to 10, where 1 means that it is "not at all democratic" and 10 means that it is "completely democratic," what position would you choose? (Code one number):

Not at all democratic	1	2	3	4	5	6	7	8	9	Completely democratic	10
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The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing: Not applicable for other reasons

Q252. On a scale from 1 to 10 where "1" is "not satisfied at all" and "10" is "completely satisfied", how satisfied are you with how the political system is functioning in your country these days?

Not satisfied
at all

1 2 3 4 5 6 7 8 9 10

Completely
satisfied

Q253. How much respect is there for individual human rights nowadays in this country? Do you feel there is (read out and code one answer):

- 1 A great deal of respect for individual human rights
- 2 Fairly much respect
- 3 Not much respect
- 4 No respect at all

Q254. How proud are you to be [country's nationality]? (Read out and code one answer):

- 1 Very proud
- 2 Quite proud
- 3 Not very proud
- 4 Not at all proud
- 5 I am not [country's nationality] (do not read out!)

(SHOW CARD 29)

People have different views about themselves and how they relate to the world. Using this card, would you tell me how close do you feel to...? (Read out and code one answer for each statement):

	Very close	Close	Not very close	Not close at all
Q255. Your [village, town or city]	1	2	3	4
Q256. Your [county, region, district]	1	2	3	4
Q257. [Country]	1	2	3	4
Q258. [Continent; e.g. Europe, Asia etc.]	1	2	3	4
Q259. World	1	2	3	4

Q260. Respondent's sex (Code respondent's sex by observation, don't ask about it!):

- 1 Male
- 2 Female

Q261. Can you tell me your year of birth, please?

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Q262. This means you are _____ years old (write in age in two digits).

Q263. Were you born in this country or are you an immigrant to this country? (Code one answer)

Q264-265. Are your mother and father immigrants to this country or not? Please, indicate separately for each of them (read out and code one answer for each):

Q266-268. In which country were you, your father and your mother (or those who raised you) born? (Interviewer, write the country name as stated by the respondent and use the list of codes to code the country later, after the interview is completed)

	Q263. Respondent	Q264. Mother of the respondent	Q265. Father of the respondent
1. Born in this [country]	1	1	1
2. Immigrant to this [country] (born outside this country)	2	2	2

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

	Q266. Respondent	Q267. Mother of the respondent	Q268. Father of the respondent
Country of birth: write in the name of country CODE this country (use ISO codes)			

Q269. Are you a citizen of this country?

- 1 Yes, I am a citizen of this country.
- 2 Not, I am not a citizen of this country.

Q270. Including yourself, how many people – including children – live here regularly as members of this household?**Q271. Do you live with your parents or your parents in law? (Code one answer):**

- 1 No
- 2 Yes, own parent(s)
- 3 Yes, parent(s) in law
- 4 Yes, both own parent(s) and parent(s) in law

Q272. What language do you normally speak at home? (Code one answer!)

[Please, modify the list of languages to fit your own society by providing up to 5 most spoken languages in your country]

- 1 Option 1
- 2 Option 2
- 3 Option 3
- 4 Option 4
- 5 Option 5

Q273. Are you currently (read out and code one answer only):

- 1 Married
- 2 Living together as married
- 3 Divorced
- 4 Separated
- 5 Widowed
- 6 Single

Q274. Do you have any children? (Code 0 if no, and respective number if yes): _____

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):
 -1 Don't know -3 Not applicable (filter)
 -2 No answer/refused -5 Missing; Not applicable for other reasons

Q275-278. What is the highest educational level that you, your spouse, your mother and your father have attained?

[Interviewer: code for each person separately. The table below uses codes ISCED-2011 – International Standard Classification for Education used by the UN and UNESCO. Your supervisor will provide you with a national-adapted list of codes. If the respondent has no spouse, no father or no mother, code "-3" = not applicable
Note, 'completed' = diploma or certificate]

		Q275. Respondent	Q276. Spouse	Q277. Mother	Q278. Father
0	Early childhood education (ISCED 0) / no education	0	0	0	0
1	Primary education (ISCED 1)	1	1	1	1
2	Lower secondary education (ISCED 2)	2	2	2	2
3	Upper secondary education (ISCED 3)	3	3	3	3
4	Post-secondary non-tertiary education (ISCED 4)	4	4	4	4
5	Short-cycle tertiary education (ISCED 5)	5	5	5	5
6	Bachelor or equivalent (ISCED 6)	6	6	6	6
7	Master or equivalent (ISCED 7)	7	7	7	7
8	Doctoral or equivalent (ISCED 8)	8	8	8	8
	For DK/ NA & other codes				

Please, code the levels of education according to the existing in [your country] classification of education levels:

	Q275A Respondent	Q276A Spouse	Q277A Mother	Q278A Father
Please, code the level of education according to the classification of your national system of education				
For DK/ NA & other codes	_____	_____	_____	_____

Q279. Are you employed now or not? If yes, about how many hours a week? If more than one job: only for the main job.

Q280. Is your spouse employed? In his/her LAST job was he/she employed (either full time or part time) or was he/she self-employed? Interviewer: ask the employment of the spouse **SEPARATELY. Code only **ONE** option from 1 to 8 for the spouse's employment.**

	Q279. Respondent	Q280. Spouse
<u>Yes, has paid employment:</u>		
Full time employee (30 hours a week or more)	1	1
Part time employee (less than 30 hours a week)	2	2
Self employed	3	3
<u>No, no paid employment:</u>		
Retired/pensioned	4	4
Housewife not otherwise employed	5	5
Student	6	6
Unemployed	7	7
Other (write in):	8	8

³ Dear national team leader, when localizing the questionnaire, conducting the survey and doing data entry, please, introduce 2 variables per each person mentioned in Q274-Q277 as following: Q274-Education of the respondent according to ISCED and Q274A-Education of the respondent according to the classification of your national system of education and so on for the spouse, mother and father of the respondent. Please, make sure you have provided then the list of national education codes to the WVSA Secretariat and Data archive.

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

The general coding for missing values is as follows:

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

Q281. To which of the following occupational groups do you belong? Interviewer: ask about respondent's last job if he/she does not have a job now

Q282. To which of the following occupational groups does your spouse belong? Interviewer: ask about the last job if he/she does not have a job now

Q283. When you were 14, to which of the following occupational groups did your father belong? Interviewer: ask about father's last job if he did not have a job or had already died when the respondent was 14 years' old

	Q281. Respondent	Q282. Spouse	Q283. Father
1 Professional and technical (for example: doctor, teacher, engineer, artist, accountant, nurse)	1	1	1
2 Higher administrative (for example: banker, executive in big business, high government official, union official)	2	2	2
3 Clerical (for example: secretary, clerk, office manager, civil servant, bookkeeper)	3	3	3
4 Sales (for example: sales manager, shop owner, shop assistant, insurance agent, buyer)	4	4	4
5 Service (for example: restaurant owner, police officer, waitress, barber, caretaker)	5	5	5
6 Skilled worker (for example: foreman, motor mechanic, printer, seamstress, tool and die maker, electrician)	6	6	6
7 Semi-skilled worker (for example: bricklayer, bus driver, cannery worker, carpenter, sheet metal worker, baker)	7	7	7
8 Unskilled worker (for example: laborer, porter, unskilled factory worker, cleaner)	8	8	8
9 Farm worker (for example: farm laborer, tractor driver)	9	9	9
10 Farm proprietor, farm manager	10	10	10
0 Never had a job	0	0	0

Q284. Are you working for the government or public institution, for private business or industry, or for a private non-profit organization? If you do not work currently, characterize your major work in the past! Do you or did you work for (read out and code one answer):

- 1 Government or public institution
- 2 Private business or industry
- 3 Private non-profit organization

Q285. Are you the chief wage earner in your household? (Code one answer):

- 1 Yes
- 2 No

Q286. During the past year, did your family (read out and code one answer):

- 1 Saved money
- 2 Just get by
- 3 Spent some savings
- 4 Spent savings and borrowed money

Q287. People sometimes describe themselves as belonging to the working class, the middle class, or the upper or lower class. Would you describe yourself as belonging to the (read out and code one answer):

- 1 Upper class
- 2 Upper middle class
- 3 Lower middle class
- 4 Working class
- 5 Lower class

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

(SHOW CARD 30)

Q288. On this card is an income scale on which 1 indicates the lowest income group and 10 the highest income group in your country. We would like to know in what group your household is. Please, specify the appropriate number, counting all wages, salaries, pensions and other incomes that come in. (Code one number):

Lowest group		Highest group							
1	2	3	4	5	6	7	8	9	10

Q289. Do you belong to a religion or religious denomination? If yes, which one? (Code answer due to list below. Code 0, if the respondent answers "no denomination")

No: do not belong to a denomination	0
Yes: Roman Catholic	1
Protestant	2
Orthodox (Russian/Greek/etc.)	3
Jew	4
Muslim	5
Hindu	6
Buddhist	7
Other (write in): _____	8

[NOTE: If your own society does not fit into this coding system, please devise an alternative, following this as closely as possible; for example, in Islamic countries, ask about Sunni, Shia, etc. Send a list of the categories used here along with your data].

Q290. Respondent's ethnic group:

Modify the list for your country/society.

1	Caucasian white
2	Negro Black
3	South Asian Indian, Pakistani, etc.
4	East Asian Chinese, Japanese, etc.
5	Arabic, Central Asian
6	Other (write in): _____

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):	
-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons

OBSERVATIONS BY THE INTERVIEWER

IMPORTANT: all technical codes from this section are **MANDATORY** for recording. If your team faces difficulties with coding ANY of these variables – do notify the WVS Secretariat BEFORE the fieldwork. Technical codes are to be coded by the interviewer or fieldwork supervisor (not the respondent!) and must reflect actual, objective information.

E. Respondent's interest (Code how interested the respondent was during the interview):

- 1 Respondent was very interested.
- 2 Respondent was somewhat interested.
- 3 Respondent was not interested.

E1. Respondent's literacy

- 1 Literate
- 2 Illiterate

F. Interview privacy (Code whether the interview took place in privacy or not):

- 1 There were no other people around who could follow the interview.
- 2 There were other people around who could follow the interview.

G. Code size of town where interview was conducted:

1 Under 2,000	5 20 - 50,000
2 2,000 - 5,000	6 50 - 100,000
3 5 - 10,000	7 100 - 500,000
4 10 - 20,000	8 500,000 and more

G1. Settlement name:

- 1... Add a country-specific list of settlements (cities, towns, villages) where the survey takes place and code for each interview
- 2... (cities, towns, villages) where the survey takes place and code for each interview
- 3... takes place and code for each interview
- 4... the settlement name

H. Code settlement type where interview was conducted:

- 1 Capital city (national capital)
- 2 Regional center (capital/ center/ seat of the region)
- 3 District center
- 4 Another city, town (not a national, regional or district center)
- 5 Village

H1. Settlement type

1. Urban (city, town)
2. Rural (village)

I. Code Primary Sampling Unit number:

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J. Date of the interview:

Date	Month	Year

K. Time of the interview:

Start hour	Start minute	End hour	End minute

L. Interviewer's number: _____**N. REGION CODE**

Please, code the region where the interview was conducted using the ISO-3166-2 codes

Please, code the region ONLY using the list of regional codes ISO 3166-2 for your country/ society (such code will consist of letters and figures)

O. GEOGRAPHICAL COORDINATES

	+ or -	X	X	.	X	X
01. LONGITUDE				.		
02. LATITUDE				.		

The general coding for missing codes is as follows (do not read them and code only if the respondent mentions them):

-1 Don't know	-3 Not applicable (filter)
-2 No answer/refused	-5 Missing; Not applicable for other reasons