Construction of Zakat Multidimensional Poverty Index (ZMPI) in Malaysia based on Maqasid al-Shariah

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Abstract

The concept of poverty is commonly acknowledged to be intricate and multifaceted. The narrow approach to defining poverty, which is centered on a monetary approach, ignores other key elements such as access to education, access to healthcare, type of home, and others that are relevant and can affect quality of life. It is vital for the policymaker to construct a holistic measure of poverty that incorporates both material and non-material areas of deprivation. From an Islamic perspective, the zakat institution plays a critical role in identifying the poor and destitute asnaf and distributing the zakat funds to the qualified recipients. Presently, zakat institutions are solely relying on the Had Kifayah method (HAK), which is a monetary-based approach to identifying the poor and destitute asnaf status and delivering zakat assistance. Thus, the goal of this study is to establish a multidimensional poverty measurement, called the Zakat Multidimensional Poverty Index (ZMPI) that aims to capture different deprivation areas that asnaf experience. An extensive analysis of the past studies, complemented by a semi-structured interview session was conducted to construct and validate the ZMPI. The proposed ZMPI integrates five dimensions, namely religion, health, education, living standards and income and represented by a total of eighteen indicators. Keywords: Zakat, Poverty, Multidimensional Poverty Index, Magasid al-Shariah

Introduction

Traditionally, poverty was measured solely in monetary terms, focusing on income and consumption levels. Wagle (2005) emphasized that the monetary method of measuring poverty is unidimensional. Albeit there are constraints on relying on a single dimension of poverty since there are numerous other aspects of a person's life that need to be accounted for in the assessment of poverty besides income and consumption (Alkire & Foster, 2007). Poverty is defined as a lack of access to education, health care, social liberties, and security. The emergence of ideologies such as the capacity approach, which focuses on people's capabilities and functioning to live a more meaningful life, has matched the evolution of the poverty paradigm.

In practice, most of the poverty measurement focuses on the monetary based approach and uses poverty line income (PLI) which is a monetary based measurement to identify poor and nonpoor individuals. Islamic social finance organizations such as Zakat institutions currently utilize the monetary method to identify the poor and destitute. The measurement of poverty should extend beyond its monetary dimension. Following this, in order to better identify the target population, policymakers and financial institutions including zakat institutions should be concerned with developing a robust poverty assessment that takes into account other nonmonetary factors. In addition, the principle of Maqasid al-Shariah, which is the most fundamental pillar of Shariah law, needs to be incorporated into the process of measuring poverty. Hence, the goal of this study is to develop a multidimensional poverty measurement index for zakat institutions in Malaysia, namely the Zakat Multidimensional Poverty Index (ZMPI) as a complement measurement to the existing method, Had Kifayah (HAK). The proposed index, ZMPI could be seen as a complementary measure for assessing the poor.

Islamic view on poverty

Islam is deeply concerned with the issue of poverty. Islam, being a holistic religion addressing all elements of life, offers clear guidelines and standards in this regard. It is worth noting that most Islamic discussions of economic development and poverty centered on a notion called Maqasid al-shariah (Beik & Arsiyanti, 2006). Maqasid al-Shariah maintain that the safeguarding of five elements including faith (*din*), the human self (*nafs*), intellect (*aql*), posterity (*nasl*), and wealth (*mal*) played crucial roles in human existence. All aspects of human well-being are independent and function as mutual support networks. Poverty in Islam is defined not just in terms of material deprivation, but also in terms of spiritual deprivation, which is linked to faith. Al-Ghazali (1980) distinguishes poverty into two categories which is poverty in terms of material requirements and poverty in terms of spiritual needs. Syukri (2003) added that poverty measurement in Islam should include both tangibles (basic necessities) and intangibles (spiritual level). According to the context of this study, poverty is considered a multidimensional phenomenon that encompasses several dimensions and the important need to satisfy both material and spiritual dimensions.

In a broader context, it is evident that the modern conventional stream's multidimensional poverty concept has a direct relationship with Maqasid al-Shariah, as elements of multidimensional poverty such as health, education, and living standards contribute to the preservation of the five elements of Maqasid al-Shariah (Abdul Rahman et al., 2022). This is because the indicators in the multidimensional poverty assessment, such as health, education, and living standards, may be found to protect a person's *maslahah* under the objective *daruriyyat* level. However, the indicators must be altered to assure that the Shariah and Islamic guidelines are incorporated both conceptually and quantitatively.

Current Poverty Measurement used by Zakat Institution

A poverty line index (PLI) has always been used to identify poor people in a society based on specified criteria and thresholds. This approach has been employed all over the world, at both the national and societal levels, and Zakat institutions are no exception. Nevertheless, its relevance in determining who receives zakat has been called into doubt due to the low value placed on PLI (Beik, 2015). Following to this, Had Kifayah (HAK) has been introduced to identify if a person can be qualified as an asnaf. In practice, HAK may be defined as a level of sustainable necessities based on Islamic principles, which includes shelter, food, education, transportation, and medical supplies. As an alternative to the traditional PLI method, zakat

institutions in Malaysia are now using the HAK mechanism to distribute zakat funds to eligible asnaf.

United Nations Development Program (UNDP) Multidimensional Poverty Index (MPI)

On a global level, the United Nations Development Programme has created the Human Development Index (HDI) in 1990 and Human Poverty Index (HPI) in the United Nations Development Programme Human Development Report 1997. The HDI is a composite index that measures GDP per capita, life expectancy at birth, and educational achievement (school enrollment and adult literacy). More recently, the UNDP launched the Multidimensional Poverty Index (MPI), which was developed by the World Bank (Alkire & Foster, 2007). The MPI integrates three non-monetary dimensions including health, education, and living standards and ten indicators as a measure of acute multidimensional poverty. MPI integrates two key inputs to measure acute poverty which are the incidence of poverty and the intensity of their deprivation. Alkire and Foster (2011) added that due to its ability to directly measure acute deprivation, MPI can be used for comparison between countries, regions, rural and urban areas, ethnic groups or any specific group or community. The MPI has been widely used at the country level (Alkire & Shen, 2017; Battiston et al., 2013; Chen et al., 2019) and group or district level ((Deka, 2018; Henao-Cespedes et al., 2021; Sydunnaher et al., 2019; Y. Wang & Wang, 2016. In the local context, most of the studies focused on specific groups or communities to focus on key areas and issues that a specific group encounters (Abdullah et al., 2019; Ismail et al., 2018; Nadia Nabila Ibrahim et al., 2011; Solaymani et al., 2019; Solaymani & Kari, 2014).

Multidimensional Poverty Index (MPI) by the Eleventh Malaysia Plan

Malaysia's MPI was established in 2015 as part of the country's Eleventh Malaysia Plan (11MP), a five-year development strategy that spans the years 2016- 2020. The MPI was regarded as a complement to the PLI, a measure of income poverty that has been used since the 1970s. The relevance of the MPI in tracking the progress of the bottom 40% (B40) was stated in 11MP. The MPI was developed by the Prime Minister's Department's Economic Planning Unit (EPU), with support from the Department of Statistics Malaysia (DOSM) and technical inputs from OPHI experts. Malaysia's MPI encompasses four dimensions: education, health, living conditions, and income, as shown in Table 1.

Table 1:

Malaysia's Multidimensional Pover	ty Index based on 11MP
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Dimension	Indicator	Deprivation cut-off	Weight
Education	Years of schoolingSchool attendance	 All household members aged 13-60 have less than 6 years of education 	1/8
		 Any school-aged children (aged 6- 16) not schooling 	1/8
Health	 Access to healthcare facility 	 Distance more than 5 km away and no mobile health facility 	1/8
	 Access to clean water 	 Other than treated pipe water inside house and public water pipe/standpipe 	1/8
Standard of Living	 Conditions of living quarters Overcrowding Toilet facility Garbage collection facility Transportation Basic communication tools 	 Dilapidated or deteriorating Average of more than 2 household members per bedroom Other than pour or flush toilet No garbage collection facility All members in the household do not use private or public transport Does not have consistent fixed line phone or mobile phone 	1/24 1/24 1/24 1/24 1/24 1/24
Income	Household income	 Monthly household gross income less than mean household PLI 	1/4

Source: 11th Malaysia Plan

Past studies on multidimensional poverty from Islamic perspective

development and application of non-monetary indicators for measuring The multidimensional poverty have also been investigated from an Islamic perspective, with several empirical studies applying Islamic principles in poverty assessment. Ali and Hassan (2014) compared the multidimensional poverty measurement for Pakistan derived by the OPHI and UNDP to the Magasid al-Shariah-Based Index. Beik & Arsiyanti (2015) proposed a CIBEST quadrant model that integrates both spiritual and material needs. In the local context, Abdul Rasool (2014) proposed the Islamic Poverty Index (IPI) that includes four dimensions of Maqasid al-Shariah, which are religion or faith, the physical self, wealth, intellect, and posterity. In relation to the zakat beneficiaries, Kasri and Ahmed (2015) discovered in their study that the poverty and well-being of zakat recipients in Indonesia improved following the distribution of zakat funds. Zailani et al., (2022) proposed several indicators for the measurement of wealth (hifz al-mal), which consists of both macro and micro levels. The indicators suggested using both a top-down and bottom-up approach in viewing and measuring the well-being and socioeconomic development of Muslim society.

Based on past studies, several findings and gaps related to the indicators used were found. First, it is observed that most of the indicators suggested in the past studies were macro-levelbased indicators (Zailani et al., 2022). This is particularly useful to measure the socioeconomic and well-being of an ummah at an aggregate level. Nevertheless, this requires the policymaker to rely on secondary or publicly available data to run the assessment. An index that is multidimensional in nature and focused on the micro-level indicator or variable is

required to capture a holistic view of the poverty status of the poor Muslim. The index used should be able to objectively measure and assess the different areas of deprivation that an individual may encounter. In addition, some indicators used by the Malaysian MPI, such as "access to basic communication" and "years of schooling" may be less ambitious and may not be sufficient to capture the basic level of necessities (*daruriyyat*) required by an individual.

Methodology

The study was carried out by evaluating existing literature pertaining to the development of a socioeconomic index based on Magasid al-Shariah and multidimensional poverty measurement. In addition to the content analysis that was conducted by reviewing the relevant literature, a semi-structured interview has been conducted. Face-to-face interviews with experts were arranged such that ZMPI's dimensions, indications, and deprivation threshold could be validated. The face-to-face interview is a method of collecting valid, relevant, and reliable data from a subject to achieve a certain research goal (Creswell, 2005). The academic background and working experience of the respondents were used to select experts to verify the proposed index. Experts were interviewed in a semi-structured format to provide normative judgement and validation. Each dimension and indicator were compared to Maqasid al-Shariah principles in order to arrive at the proposed indicators. A total of 19 experts were interviewed during the session, which was held from July 2021 to January 2022. This was in line with the recommendation of 6 to 20 experts needed because a larger group of experts might enable the gathering of additional knowledge (Rubio et al., 2003. The backgrounds of the respondents selected in this study involved various areas of expertise including Islamic Economics, Islamic Banking, Islamic Development Economics, Development Economics, and zakat administration.

Findings and Discussion

Selection Of Indicators And Deprivation Cut-Off For Zmpi

The study aims to establish ZMPI, which incorporates both material and non-material deprivation aspects of a person, in accordance with the notion of Maqasid al-Shariah. ZMPI focuses on measuring the poverty level of a person, particularly the poor and destitute asnaf. Thus, the study recommends a ZMPI that features several properties including i) an emphasize on indicators related to basic necessities (*daruriyyat*) level, ii) measure of the current state of functioning iii) more objective and measurable indicator and iv) a micro-level-based indicator. The ZMPI adopted the national MPI, released by the government of Malaysia in the Malaysia Eleventh Plan as a baseline. Then, ZMPI is tailored in accordance with the concept of Maqasid al-Shariah and formed to focus on the poverty status of the poor and destitute asnaf.

An integral part of developing the ZMPI is deciding which indicators to use and where to set the poverty threshold. The selected indicators must be able to reflect ZMPI's goal, which is to comprehensively gauge the extent to which Muslims are living in poverty. In the multidimensional poverty measurement, a researcher should fully explain the method and reasoning behind the selection of a dimension and indicators. Alkire and Foster (2011) concluded five methods of selection, most of which were used implicitly:

- I. using ongoing participatory public deliberation
- II. using lists that have achieved a degree of legitimacy through public consensus
- III. implicit or explicit assumptions about what people value or should value

- IV. convenience or a convention that is taken to be authoritative or used because these are the only data available that have the required characteristics
- V. empirical evidence regarding people's values, data on consumer preferences and behaviors, or studies of what values are most conducive to people's mental health or social benefit

Since the ZMPI has been modified from the national MPI issued by the government of Malaysia, this study utilizes the listings that have gained credibility through public acceptance. Furthermore, assumptions about what people value or should value be used to develop the ZMPI dimensions and indicators. ZMPI added a new dimension, namely the religion dimension and represented by several indicators to take into account spiritual poverty. In contrast to the national MPI, ZMPI established several indicators that are relevant, meaningful, and objective. In addition, some of the indicator and deprivation cut-off points used by the national MPI have been modified accordingly. The changes made to the national MPI were made to ensure that the indicators used by the ZMPI are established by Shariah guidance and able to measure poverty profile of the asnaf more accurately. The changes made were illustrated as per Table 2. Meanwhile, Table 3 depicts the initial listing of indicators and deprivation cut-off values for ZMPI.

Table 2:

Changes made to the na	tional MPI (11MP)
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Additional	Additional indicators	Changes of indicator and deprivation	
dimension		cut-off	
Religion	 i. Access to nutrition (health dimension) ii. Access to Islamic health insurance (health dimension) iii. Access to online learning (Education dimension) iv. Basic Islamic education of Household 	 Number of bedrooms. This indicator was replaced by the indicator of sharing a bedroom. Instead of using the number of bedrooms as the deprivation cut-off, ZMPI modified the cut-off to the 	
	 head (religion dimension) v. Financial exchange in non-shariah funds (religion dimension) vi. Access to zakat collection (religion dimension) 		
	vii. Involvement in prohibited activities by Shariah (religion dimension)		

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Table 3:

Religion Dimension	
Indicators	Deprivation cut-off
 Access to mosque Affordability to perform <i>Hajj/Umrah</i> Access to zakat collection Loan financing involved <i>riba</i> transaction Investment or savings in a non-shariah compliant scheme/product Basic Islamic education Access to formal Islamic education 	 Mosque located more than 5km from home Household cannot afford to perform Hajj before the age of 65 Household faces many restrictions in performing the zakat payment and collection Household's money is borrowed or lent on <i>riba</i> (interest) in at least one transaction Household's money is invested or saved in a non-shariah compliant product Head of household do not have basic Islamic education Household members faced at least one restriction to obtain formal Islamic education
Health Dimension	
Indicators	Deprivation cut-off
Access to health facilityAccess to clean water supply	 Health facility in more than 5km from home and no mobile health facility nearby Other than treated water supply connected in houses and public water pipe/stationed pipe or water faucet
Education Dimension	
Indicators	Deprivation cut-off
 Years of schooling School attendance Access to basic Islamic education 	 All household members aged 17-60 have less than eleven years of education Children aged between 6-16 years' old who have not attended school Household members attending school, pre-university and university faced more than one restriction to online learning platform
Living standard Dimension	
Indicators	Deprivation cut-off
 Conditions of living home Sharing of bedrooms Access to basic communication Transportation 	 Deteriorating Sharing of bedroom among the children between different gender, aged 10 years and above There is no internet and mobile subscription All members in the household do not use private or public transportation
Income Dimension	
Household monthly income	Mean household monthly income less than national PLI

Initial list of possible indicators and deprivation cut-off of ZMPI

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Validation of indicators and deprivation cut-off for ZMPI

Most respondents provided both general and specific input on the proposed index's indicators and deprivation cutoff thresholds. In relation to the general comments, the index proposed should constitute indicators that are derived from the elements of Maqasid al-Shariah. Since the index proposed aims to measure the deprivation areas that the poor and destitute asnaf encountered, the indicators should also be designed to focus on the basic level of necessities (*daruriyyat*). The inclusion of indicators that measure higher levels of necessities including *hajiyyat* and *tahsiniyyat* should not be the focus of the index that measures the well-being of the poor and vulnerable individuals. In addition, the indicators incorporated in the index need to be measurable and feature an objective measure of indicators.

Based on the interview sessions conducted with the experts, there were some indicators under the dimension of religion that were omitted including (i) access to mosques, (ii) access to basic Islamic education and (iii) affordability to perform *Hajj/Umrah*. With regards to the indicator of 'access to mosques', the indicator is considered to be less relevant in events such as the emergence of COVID-19 as mobility restriction is more necessary to be implemented for the *maslahah* of the society. Next, the proposed indicator of 'access to basic Islamic education' was omitted since the provision of basic Islamic education is already embedded in the curriculum since primary school under the Malaysian education system. Lastly, the 'affordability to perform Hajj/umrah' indicator was not suggested to be in the final list of ZMPI since performing Hajj or Umrah needs to be completed provided that a person has the physical and financial ability to do so. In this case, the measurement of this aspect is considered not to be suitable for the targeted group, which is the poor and destitute asnaf.

Subsequently, a new indicator was introduced under the religion dimension, which is the "involvement of any household member in *haram* and unethical activity". This includes the involvement of the household member in activities such as gambling, trading or consuming drugs and alcohol, crime activities and unlawful sexual intercourse. This indicator is suggested in line with one of the aspects of Maqasid al-Shariah that is concerned with the preservation of posterity (*nasl*). Islam provides several teachings and rules devoted to the safeguarding of one's soul to maintain human morality and well-being. This should cover prohibitions against self-destruction and harm.

Final list of dimensions, indicators, and deprivation cut-off of ZMPI

The final list of indicators and deprivation cut-off points has been established as illustrated in Table 4. The ZMPI encompasses dimensions and indicators that has been mapped to the objectives of Maqasid al-Shariah to preserve the five dimensions of Maqasid al-Shariah including the preservation of faith (*din*), wealth (*mal*), life (*nafs*) intellect (*aql*) and posterity (*nasl*).

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Table 4:

	il list of indicators and deprivation cut-o <u>f</u> ligion Dimension	<i>,</i> <u>,</u> <u>,</u>		
	Religion Dimension Indicators Deprivation cut-off			
	Access to zakat collection			
		1.	Household faces many restrictions in performing the	
Ζ.	Loan financing involved <i>riba</i>	h	zakat payment and collection	
	transactions. Investment or savings in a non-shariah compliant	Ζ.	Household's money is borrowed/ lent/ invested in <i>riba</i>	
	•	2	(interest) in at least one transaction Head of household do not have basic Islamic education	
	scheme/product/ loan financing in <i>riba</i> related transaction	3. ⊿		
2	Head of household education	4.	Any household member currently involves in	
			prohibited activities by Islam	
4.	Involvement in prohibited activities by			
	Islam			
1.0.0	Health Dimension	De	aviantian and off	
	dicators		privation cut-off	
	Access to health facility	1.	Health facility in more than 5km from home and no	
2.	Access to clean water supply	2	mobile health facility nearby	
3.	Health insurance coverage Nutrition intake	2.	Other than treated water supply connected in houses	
4.	Nutrition Intake	2	and public water pipe/stationed pipe or water faucet	
		3.	All household members are covered by Islamic health insurance	
		4.	Any household member is undernourished and consume non-halal sources	
Ed	ucation Dimension			
	dicators	Do	privation cut-off	
	Years of schooling		All household members aged 17-60 have less than	
	School attendance	1.	eleven years of education	
	Access to online learning	2	Children aged between 6-16 years' old who have not	
5.	Access to online learning	۷.	attended school	
		3.	Household members attending school, pre-university	
1			and university faced more than one restriction to	
			online learning platform	
	Living standard Dimension			
	Indicators		Deprivation cut-off	
1.	Conditions of living home	1.	Deteriorating	
2.	Sharing of bedrooms	2.	Sharing of bedroom among the children between	
3.	Access to basic communication		different gender, aged 10 years and above	
4.	Transportation	3.	There is no internet and mobile subscription	
		4.	All members in the household do not use private or	
1			public transportation	
Inc	come Dimension			

Final list of indicators and deprivation cut-off points for ZMPI

Notably, each dimension is evidently represented by several indicators that reflect certain objectives of Maqasid al-Shariah. For instance, under the dimension of religion, the indicator of basic Islamic education and financial transactions including investment and loan that involved transactions represent the preservation of faith (*din*). It is clear that the ZMPI

indicators have been customized to fulfill the goals of Maqasid al-Shariah. The indicators provided for building ZMPI embraced Shariah aspects and positioned religion as an essential concept. Although the ZMPI includes a dimension specifically tied to faith, indicators used for other dimensions must also adhere to Shariah guidelines. For instance, the indicator of "sharing of bedrooms" under the living standard dimension has been changed to ensure that the underlying Shariah concept has been applied in the measurement of a Muslim's well-being. The practise of parents encouraging their children to segregate sleeping arrangements serves as an educational measure aimed at safeguarding and upholding the boundaries of awrah, even within familial contexts (MUFTIWP, 2020). The importance of separating the bedroom space among different genders in a family is evidenced based on the hadith reported by Abu Dawud as below:

Command your children to pray when they reach seven years old, and beat them for it (prayer) when they reach ten years old; and arrange their beds to sleep separately

Kitab Al-Salat, 495

Based on the hadith above, it is stipulated that children of opposite genders should be separated in their beds. The availability of different areas or spaces in a dwelling is needed to ensure that beds can be separated. Since sleeping can be considered a private activity, it is recommended to design a house that consists of different bedrooms for different genders among the children. As Muslims have been encouraged to split the bedrooms of kids of different genders, the deprivation cut-off used for the indicator focuses on the segregation of rooms between different genders in the household.

Conclusion

Zakat organizations play a vital role in eradicating poverty in Muslim society. In order to capture the different deprivation aspects that a person may be deprived of, zakat institutions may need to consider a multidimensional poverty measurement that incorporates nonmonetary aspects to holistically understand the profile of the asnaf. The use of multidimensional poverty measurement can complement the existing method of identifying the asnaf, which is the HAK. From the past studies, it has been demonstrated that the application of MPI is advantageous and can be a powerful mechanism for the policymaker to develop an anti-poverty program. The study developed the Zakat Multidimensional Poverty Index (ZMPI) that comprises five dimensions, including religion, education, health, living standards, and income, and is measured by eighteen indicators. As highlighted, the indicators proposed under the ZMPI are designed to focus on the multiple areas of deprivation experienced by the poor and destitute asnaf. The indicators under the ZMPI emphasize the basic necessities that a person needs to fulfil to achieve a decent quality of life and apply more objective and micro level-based indicators. In contrast to the Malaysian MPI, the ZMPI constitutes indicators that are more ambitious to match the economic development level of a country such as Malaysia. The ZMPI also can add value to help better allocate zakat funds by examining the existing zakat schemes offered by the zakat institution and matching them with the deprivation aspect that the asnaf may experience based on the indicators of the ZMPI.

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