The Moderating Effect of zakāh Distribution on the Economic Well-being of the Poor: An Analysis in Kelantan, Malaysia

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\textbf{ABSTRACT}. The main objective of this paper is to study the moderating effect of zakāh distribution on the family structure and the economic well-being of the poor in the state of Kelantan in Malaysia. The state of Kelantan was selected for the survey because it has the highest incidence of poverty in Peninsular Malaysia. The analysis of this study is based on Variance Based Structural Equation Modelling (VB-SEM) technique, while the data mining process, descriptive statistics and demographic data of this study were conducted using SPSS software. This study revealed that zakāh assistance and family structure dimensions positively and significantly affect economic well-being. The result also indicates that the direct effect of age, marital status, and gender is not significant due to the insufficient economic well-being that does not meet their basic needs. The mediating role of zakāh indicates that age, marital status, and gender have both significant indirect effect and insignificant direct effect on economic well-being, which means that the indirect effect of family structure on economic well-being is fully mediated by zakāh.

\textbf{KEYWORDS}: Structure Equation Model (SEM), Poor and Needy, zakāh Distribution, Poverty, Kelantan, Malaysia.

\textbf{JEL CLASSIFICATION}: D13, D31, I32

\textbf{KAUJIE CLASSIFICATION}: E12, E15, N4
1. Introduction

One of the fundamental dimensions of human development is economic well-being (OECD, 2013, p. 27). The basic need of all human beings is the pursuit to fulfil their basic needs, such as food and shelter. Copestake (2007) advocated that well-being is a state of society in which people's basic needs are met, they can act effectively and meaningfully in pursuit of their goals, and they would feel satisfied with their lives (Copestake, 2007, p.18). A high level of well-being means that the individual or group leads a positive life, while a low level of well-being is associated with adverse events (Guttman & Levy, 1982, p. 163). Although the concept of well-being is widely used, there is no commonly agreed definition. However, the OECD states that the key components of people's well-being are their income and expenditure (OECD, 2013, p.27).

Zakāh is one aspect of Islamic economy that has direct substantial implications for the Muslim. The primary purpose of zakāh is to redistribute society's wealth among the poor (Qardhawi, 2000, p.6). The method requires Muslims (well-to-do) to distribute a small portion of their wealth to eight types of people (zakāh recipients)\(^1\) to reduce poverty and achieve their economic emancipation (Ahmed, 2004, p.15).

In Islam, poverty is considered to have been eradicated once the bare minimum standard of living for everyone has been achieved (Qardhawi, 2000, p.264). This concept would be absolute if it were viewed in terms of a fixed quantity of basic material needs to be met. However, Islam does not define a fixed criterion of poverty that applies to everyone, so the concept of poverty in Islam is broader and covers more than food and services (Qardhawi, 2000, p.14).

This study focuses on analyzing the moderating impact of zakāh assistance on the economic well-being of the poor as this aspect is crucial for a long-term economic policy. Malaysia has been facing a burden on the family structure due to the aging of society, high urban-rural cost of the living gap, gender inequality, high number of single parents, and increase in the number of nuclear families, which are likely to have a significant impact on public revenues and expenditures. Due to tight budgetary constraints, non-growth enhancing expenditures may crowd out outlays that could stimulate economic growth and would undoubtedly cause "budget crowding out" (Roloff, 2002, p.150). Therefore, the question of which government spending can promote permanent movements in economic growth rates becomes increasingly important. More specifically, this study has two objectives. First, it attempts to measure the effect of zakāh on improving the economic well-being of the poor. Second, this study attempts to examine the effect of family structure in reducing the burden on the economic well-being of the poor among zakāh recipients.

The structure of this paper is composed of the present section which deals with the introduction of the study. Section II discusses the method of zakāh distribution in Kelantan, which is the study area of this study. Section III explains the concept of economic well-being among the poor in Malaysia. Section IV presents the literature review and the development of the hypothesis. Section V reviews the literature and the development of the hypothesis. Section VI discusses the research design for this study. Section VII presents the empirical results and discussion of this study, and Section VI concludes the paper and suggests future studies and policy recommendations.

2. Zakāh Distribution in Kelantan

Zakāh assistance for the poor and needy in Kelantan can be classified into two categories: long-term and short-term assistance. Long-term assistance includes training and skill enhancement programs, education aid, business aid and housing aid, which are given on a one-time basis. Short-term assistance includes monthly aids such as Eidul-Fitr and Eidul Adha, and emergency aids that can be one-time or continuous (monthly). Among the highest zakāh assistance are the monthly zakāh aids paid to the poor and needy whose amount is based on Haddul Kifayah (Zakāh Poverty Line). Zakāh Poverty Line (ZPLI) determines the level of need required by the household based on their daily needs. It is calculated based on various variables such as the number of members in a

\(^1\) Allah s.w.t says in the Qur'an, which means: "Zakāh is for: the poor, the destitute, those who collect it, reconciling people's hearts (new converts), frees slaves, spending in the way of Allah, and travelers. It is a legal obligation from Allah. Allah is all knowing, all wise" [Qur'an,9: 60].
household, and their age groups, etc. The Malaysian government, through JAWHAR, has defined the five main elements to determine the ZPLI (necessity) of a household, based on Maqasid al Sharia (human needs). Establishing the ZPLI will facilitate the zakāh application process, as the committee will be able to immediately identify the applicants’ situation, i.e., whether they are poor or very poor. Table 1 shows the amount of ZPLI in Kelantan.

Table 1. Kelantan Zakāh Poverty Line (Had Kifayah) Per Month (2019) (MYR).

<table>
<thead>
<tr>
<th>Category</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Head</td>
<td>1,297.00/</td>
<td>1,182.00/</td>
</tr>
<tr>
<td></td>
<td>2,549.00</td>
<td>2,380.00</td>
</tr>
<tr>
<td>Adults (working)</td>
<td>236.50</td>
<td>146.00</td>
</tr>
<tr>
<td>Adult (not working / not in school)</td>
<td>139.50</td>
<td>87.50</td>
</tr>
<tr>
<td>Adult (in school)</td>
<td>274.00</td>
<td>203.50</td>
</tr>
<tr>
<td>Adolescents (in school)</td>
<td>236.50</td>
<td>166.50</td>
</tr>
<tr>
<td>Children (in school)</td>
<td>179.50</td>
<td>130.50</td>
</tr>
<tr>
<td>Children (not in school)</td>
<td>103.00</td>
<td>77.50</td>
</tr>
<tr>
<td>Total</td>
<td>1,169.00/</td>
<td>811.50/</td>
</tr>
<tr>
<td></td>
<td>1,718.50</td>
<td>1,191.50</td>
</tr>
</tbody>
</table>

1Single family house; 2Rent house.

Table 1 above shows that the determination of the zakāh poverty line is based on the necessity of a household in Kelantan. For example, a family with both parents working, with an employed adult above 18 years old, a teenager aged 16 and a child aged 6 and live in paid house in urban area, suggests that the necessity of this household is MYR1361.50. If the monthly household income is RM1,500, then this family does not qualify for zakāh distribution because the household income is higher than the ZPLI (higher than MYR1,361.50). Nevertheless, if the household income is MYR 1,000, it qualifies for zakāh distribution. The Kelantan Zakāh Centre (MAIK) will distribute the shortfall (ZPLI gap) of MYR 361.50 to this family to fulfil their basic needs. In addition, if there is a situation such as a disabled or chronically ill household member, the total amount of ZPLI increases.

The Kelantan State Islamic Religious Department (MAIK) periodically reviews the ZPLI based on data from the National Poverty Line Index (PLI). At present, the Kelantan Zakāh Centre uses the Cost of Basic Needs (CBN) method to estimate the zakāh poverty line. The CBN method involves specifying a set of foods to be consumed based on the minimum caloric needs of humans. The cost of the total food consumption is then added to the non-food expenditures of poor households to reach the total poverty line that satisfies basic human needs. However, from Table 1, it is evident that higher zakāh distributions are for non-food items in both urban and rural areas. Although previous studies reveal that most rural areas’ expenditures are higher on food items than urban areas, the analysis of the same pattern between food and non-food expenditures in both areas will create a biased poverty line. Therefore, it is important to analyse the pattern of food and non-food expenditures among this group; ignoring the importance of food and non-food expenditure can make poverty alleviation (i.e. ZPLI) in Kelantan ineffective.

3. Economic well-being among the Poor and Needy in Malaysia

Malaysia has enjoyed a long period of economic growth since independence followed by a declining poverty rate. Cyclical downturns occurred during the Asian crisis of 1997/98 and again in 2017 but it was less severe that year. The current GDP growth in 2017 has returned to double-digit levels (World Bank, 2018, p. 4). This indicates a higher standard of living that shows significant growth in the public’s overall level of income and consumption. In addition to the increase in the magnitude of income and expenditure may create some changes in the composition and types of goods and services demanded. Social and demographic changes have implications for the
behavioural patterns of the Malaysian population (Ishida et al., 2003, p. 66). For example, in 2014, the average monthly household income and expenditure were MYR 6,141 and MYR 3,578, respectively. The average monthly household income increased to MYR 6,958, or 6.2% growth per annum, while average monthly household expenditure increased to MYR 4,033, or 6% per annum in nominal value in 2016 (DOS, 2018, p.15). During this period, house-holds in urban areas recorded an increase in median income (6.6%) and expenditure (5.8%) per annum, while rural households also increased by 6.5% (income) and 5.7% (expenditure) per annum (DOS, 2018, p. 15).

Most studies on the economic well-being focus on a single dimension of household economic well-being (Ada Ferrer-i-Carbonell, 2004, p.645; De Neubourg, De Milliano et al., 2014, p.8; Whelan, Nolan et al. 2014, p.188). However, the concept of economic well-being can be better understood by looking simultaneously (in a multidimensional way) at household income and consumption expenditure. Although there are some problems with the definition and measurement scope, all the essential elements can be included, and at the same time, the consistency of the various measures can be maintained by looking at them comprehensively. Meanwhile, measuring poverty has evolved over time from using income and expenditure-based methods to other methods that are not easily monetized or measured. These changes have been driven by evolving definitions of poverty and the new phenomenon of poverty that is included. A good example of the changing definition of poverty is the advent of multidimensional poverty measurement (Alkire & Foster, 2013, p.31; Alkire, 2009, p.4). According to Selamah Abdullah (2010), changes in poverty definitions are due to social and demographic changes that affect spending and consump-tion behaviour patterns (Selamah Abdullah Yusof & Jarita Duasa, 2010, p. 91). A clear understanding of how Malaysians can acquire and spend their income should play a vital role in the government's implementation of effective strategies to achieve the country's economic goals.

4. Empirical Literature Review and Hypothesis Development

4.1. Impact of age on the economic well-being of the poor

The development process in Malaysia has brought about a significant socio-economic and demographic transformation. The decline in fertility and mortality has resulted in an increase in the population's life span. As a result, the number of elderly people is increasing. The ageing population, which affects Malaysia's demographic profile, has a significant impact on its economic well-being. The main challenge faced by older Malaysians is the lack of savings upon retirement. Some public policies are insufficient to provide benefits to the elderly and retired, such as the government's welfare programs that need to be correctly targeted and paid out effectively (Abd Samad, S., & Mansor, N., 2017, p. 140). At the same time, Mohd. S. (2014) found that the probability of the elderly living in poverty is relatively low at about 2.6%. He, however, suggests that the probability of living in poverty changes with different socio-demographic characteristics (Mohd. S. 2014, p. 2). Therefore, age classification is vital for policymakers to investigate the poverty level among the society, including their early age, productivity, or retirement. The age classification in this study is based on the Malaysian food requirements category obtained from the Ministry of Health Malaysia (MOH, 2005). This study classified age into three subgroups, which means different income generation and expenditure levels. The first category (19-24 years old) comprises people who have just finished secondary school and are very young to work and start a family. The second category (25-59) comprises people who are of working age, most of whom have skills and work experience. The final category (60+) is those of retirement age.

H1: Age has a positive effect on the economic well-being of the poor.

4.2 Impact of family size on the economic well-being of the poor

Family size indicates a strong negative correlation between household size and economic well-being (Lanjouw, P. and Ravallion, M., 1995, p.1). The issue of poverty estimates as a function of household size behaviour has recently attracted considerable attention (Buhmann, B. et al. (1988, p.115), Coulter et al. (1992, p.1068), Dreze and Srinivasan (1997, p.218), Lancaster, et al. (1999, p.178). Most of these studies have focused on economies of scale on household size. Lanjouw and Ravallion's (1995, p.12) study in Pakistan shows that the presence of economies of size in consumption is likely to
counteract the widely held view that large families tend to be poorer in developing countries. Mok (2009, p.94) studied economies of scale among the poor in Malaysia and found that the poor, who typically have larger households, choose to allocate resources to private consumption such as education, transport and medicine due to the large savings in public consumption.

H2: Family size has a positive effect on the economic well-being of the poor.

4.3 Impact of the region on the economic well-being of the poor

Previous studies on poverty in Malaysia demonstrate that poverty is more severe among rural households and those who work in the agricultural sector (Mok, 2009, p.47; Geda et al., 2005, p.11). Mok et al. (2009, p.47) shows that poverty in Malaysia is higher in rural areas than in urban areas. Mukaramah et al., (2011, p.21) studied urban and rural public expenditure in Malaysia and found that education expenditure has a very significant impact on increasing the household income, mainly in urban Malaysian households. The impact of public expenditure in education on urban public investment in education, personal needs, health, and general administration are also favourable programs not only for urban households but also for rural.

H3: The region has a positive effect on the economic well-being of the poor.

4.4 Impact of marital status on the economic well-being of the poor

The marital status of the household head in this study has created a higher intention in the 21st century which is not as popular as in the previous century (Mergenhagen et al., 1985, p.53). This connection may be derived from certain factors that are associated with marriage. Dunga, S. H. (2017, p.28) found out that married households have higher incomes than single, divorced, and widowed households in South Africa. In addition, a married family can significantly improve the family income and wealth (Waite LJ., 1995, p. 505; Light A., 2004, p.505; Zagorsky JL, 2005, p.420). They can also share resources while reducing their economic hardship (Bauman K., 1997, p.320). While being a single parent will have negative economic consequences which are mainly borne by women (Zagorsky J.L., 2005, p.420; Holden KC, 1991, p.70), the family can provide social support and other non-economic resources that help them in times of economic shock or uncertainty (Cohen S, Syme L, 1995, p.680; Hobfall S. E., et. al., 1996, p.414), although the benefits may be less for women than men (Cutrona C. E., 1996, p.47; Neff L. A. et. al., 2005, p.80).

H4: Marital status has a positive impact on the economic well-being of the poor.

4.5 The impact of gender on the economic well-being of the poor

Over the last three decades, many women’s advocates have argued that women tend to be poorer than men, which stems from the concept of the "feminization of poverty". This idea has become popular both in poverty analyses and poverty alleviation strategies. Meanwhile, earlier evidence shows that female-headed households enjoy less social, economic, and demographic benefits than male-headed counterparts, making the former poorer than the latter (Barros et al., 1997, p.24). In addition, Fuwa (2000, p.22) shows that single mothers had a higher deprivation in both income and non-income dimensions than male-headed households. Pahl (1995) found that when men are typically in charge contribute more to domestic finances, women consequently have lower personal expenses than their male partners (Pahl J., 1995, p.370).

H5: Gender has a positive impact on the economic well-being of the poor.

4.6 Moderating effect of zakāh distribution on the economic well-being of the poor family’s structure

Sohag, K., (2015, p.14) shows that zakāh distribution in Bangladesh manages to increase the purchasing capacity of rural recipients. The results also show that household income had a significant and positive effect on total household expenditure. It was assumed that recipients' saving capacity would increase by taking part in the zakāh program. The study confirmed that training of zakāh recipients was positively and significantly related to the total household expenditure. The study also confirmed that household income was positively and significantly
related to savings. This indicates that household savings increase with income. In fact, Zakāh distributed to the poor and needy is an additional income for this group of people, who are given the extra purchasing power directly.

H6: Zakāh distribution reinforces the positive effect of age on the economic well-being of the poor.

H7: Zakāh distribution reinforces the positive effect of family size on the economic well-being of the poor.

H8: Zakāh distribution reinforces the positive effect of the region on the economic well-being of the poor.

H9: Zakāh distribution reinforces the positive effect of marital status on the economic well-being of the poor.

H10: Zakāh distribution reinforces the positive effect of gender on the economic well-being of the poor.

H11: Zakāh distribution has a positive effect on the economic well-being of the poor.

Figure 3 illustrates this study's conceptual model, which highlights the moderating effect of zakāh distribution on their economic well-being. Many studies have examined the effect of public expenditure (i.e., zakāh) on improving economic well-being and reducing poverty among the poor, whether it is a multidimensional or unidimensional construct (Alkire Sabine et al., 2015, p. 216; Aaberge, R., et al., 2015, p. 26). This discrepancy is due to the inconsistency of perceptions regarding the phenomenon of the economic well-being of the poor (Xu, D, et al., 2017, p.67; Cheung, F., & Lucas, R. E., 2016, p.337). However, regarding the growing controversy within the fundamental concept of economic well-being, and in line with the aims and objectives of this study on the concept of economic well-being as a unidimensional construct, this means that all the separate dimensions within the economic well-being construct (income and expenditures) are integrated and analyzed to reflect a single variable: economic well-being.
5. Research Method

5.1. Measurement

This study uses the 5-point Likert scale questionnaire in Bahasa Melayu. The scales range from disagree (0) to agree (5). To study the effectiveness of zakāh, five items were adapted from Fuadah et al. (2015, p. 46) and Fahme et al. (2015, p. 361). The reliability of the items in this measurement scale ranges from 0.88 to 0.89 (Fahme et al., 2015, p. 359). Examples of these items include sufficiency on monthly zakāh, type of zakāh, the period of zakāh assistance received, and the effect of zakāh distribution on family income and expenses. The 25 items were adapted from Manning et al. (2003, p. 10), Andrew Morrison et al. (2007, p. 200), Banovcinova, Andrea (2014, p. 150) and Fahme et al. (2018, p. 53) to measure the dimensions of family structure. The reliability of this measurement scale ranges from 0.60 to 0.83. Examples of these items include the effect of family structure (age, family size, gender, region, and marital status) on economic activity, the impact of family members on the family economy, the contribution and effect of other siblings or relatives on the family economy, and the effect of family structure on family’s wages and economic capacity. Five separate items were adapted from Bauman, K. (2000, p. 5) and Mariano Rojas (2004, p. 5) to measure the dimension of economic well-being; these items include, for example, the effect and adequacy of income on expenditure, the effect of other assistance received (besides zakāh), the sufficiency of monthly food and non-food expenditure and the possession of durable goods. The reliability of this measurement scale is between 0.78 and 0.88.

This study measures the economic well-being of the poor and needy based on the amount of income they receive and the expenditures they make. The sources of income are divided into four, namely income from wages and salaries, transfers and contributions from others (such as relatives), income from property and income from any economic activity. To obtain the amount of total household income, all types of income of all household members are transformed into monetary values. The expenditure amount is obtained from two sources which are 1) food expenditure and 2) non-food expenditure. Food expenditures are classified into two categories: (1) food purchases, including food and (2) food consumed outside the home. For non-food expenditures, nine types of non-food expenditures are collected, namely (1) housing, including utilities and housing contents and services; (2) clothing and footwear; (3) medical care; (4) transportation; (5) education; (6) religion; (7) miscellaneous goods and services, including recreation and insurance; and (8) other expenditures, including other payments, savings, fines, and the money given to others. The items in this section were adapted from the Malaysia Statistics Household Expenditure Survey (2015).

5.2. Sample size and data collection method

The state of Kelantan was selected as the study area for this study. This state has the highest incidence of poverty in Peninsular Malaysia (UPR, 2017, p. 4). In addition, this state has many resources to address poverty, such as zakāh, which is one of the highest zakāh collection states in Malaysia and can be used as a poverty alleviation fund (MAIK, 2016, p. 5). However, to implement a poverty alleviation policy, policymakers must know the consumption pattern at the household and individual level, especially among the poor (Mok, T. et al., 2007, p. 190). The respondents of this study were selected from the 2016 zakāh recipients list of the Kelantan Islamic Religious Council (MAIK) in the category of poor and needy, which is the lowest income quartile in Kelantan. The primary criteria for selecting respondents are those receiving zakāh assistance (long-term or short-term) from MAIK for more than one year. Thanks to the cooperation and assistance of the MAIK zakāh office, the survey covered all ten districts of Kelantan. The multi-stage stratification method was selected and applied because there are three stages in the process of selecting respondents, namely district (ten districts), region (urban-rural) and gender of the household head (male-female). This method is appropriate because it requires the total population to be divided into strata or sub-population, after which the samples are selected randomly but independently (Etikan, I., & Babtope, O., 2019, p.051). The sampling frame was stratified by region and gender of the household head. The list of zakāh recipients was collected from Kelantan Zakāh Department (MAIK), and it will be used as a location reference for the respondents' information.
In order to ensure that the items in the questionnaire achieve the aims, scope and objectives of this study, three senior researchers and experts from the Faculty of Economics and Muamalat, University Sains Islam Malaysia (USIM) and various zakāh centres were invited to review, evaluate and improve the questions. In addition, a pilot study was conducted in Kota Bharu, Bachok and Pasir Putih to test the validity and reliability of the questionnaire and ensure that it can be understood and answered by the respondents while estimating the time required for data collection procedures. Fifty zakāh recipients were involved in the pilot study, which is consistent with existing literature highlighting the relevance of 50 respondents in a pilot test (Ogbeibu, S., 2018, p.338). The pilot study results indicated that out of 40 items, 6 items loaded less than the recommended cut-off (0.70) after analysis using SPSS software. Therefore, they were removed, reducing the total number of indicator items to 34 (Lee, C., 2018, p.303; Sarstedt et al., 2014, p.157; Yong & Pearce, 2013, p.80).

Nevertheless, prior to estimation, all observations of each variable were weighted using as a sample weight variable the rate of masculinity within each household, compared to the gender rate of the regional population (population data from MAIK recipients list, 2016). This operation assigns a load to all the values in the data set to make the sample more representative of the entire regional population, leading to a much more reliable and accurate result (Hahs-Vaughn & Lomax, 2006, p.185; Ogbeibu, S., 2018, p.339; Bollen, K. A., 2013, p.1237). In addition, a stratification variable based on the district of origin of each household creates mutually exclusive and internally homogeneous subgroups that allow for a lower standard error in the estimation. Both stratification and weighting are applied through the survey data option available in the statistical package. The sample size determinant method of Krejcie and Morgan (1970, p. 609) was used to guide the sample size determinant and obtain a stratified proportional sampling of zakāh recipients among the poor and needy. Of the 300 questionnaires that were distributed, 288 were returned, complete and suitable for analysis. This response rate of 96% is consistent with the existing literature (Mistry, R. S., 2002, p.938; Utsey et al., 2008, p.52). The respondents’ profiles in this study are based on the household head's income, family size, region, gender, education level, age and marital status. The justifications for the respondents’ profiles are explained in Table 1.

<table>
<thead>
<tr>
<th>Table (1). Respondent Profile in the Study.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Profile</strong></td>
</tr>
<tr>
<td>Region</td>
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<tr>
<td></td>
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<tr>
<td>Household Head Age</td>
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<td></td>
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<tr>
<td>Family Size</td>
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<td></td>
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<tr>
<td>Household Head Marital Status</td>
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<tr>
<td>Household Head Gender</td>
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<td></td>
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<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

**Source:** Research Question.
The respondents in this study were 55% (158) from urban areas and 45% (130) from rural areas (M=1.93, SD=0.78). The age of the respondents ranged from 19 to over 60 years, with females accounting for 55% and males 45%. The marital status of the respondents indicates the unmarried (19%), married (25%), married but separated (13%), widowed (20%) and divorced (23%).

5.3. Data analysis

Smart PLS 3.0 software was used for this study's exploratory and confirmatory factor analysis (EFA and CFA), where the Variance Based Structural Equation Modelling (VB-SEM) technique was applied. To analyze this study's data mining and descriptive statistics, SPSS software (version 2.2) was used; and to avoid the biases of ordinary methods, the respondents' identity remains completely anonymous to prevent them from changing their answers and make them less anxious (Podsakoff et al., 2003, p.880). The results of this study show that all VIF values are between 1.225 and 2.532 (< 3.3), indicating that the standard method bias did not influence the participants' responses (Table 2).

6. Empirical Results and Discussion

The results of the descriptive statistics (Table 2) indicate that the mean of 2.95 out of 5 reflects that most of the respondents generally agree that zakāh distributions help and improve their economic well-being. The standard deviations are relatively close to each other, suggesting that the data are normally distributed and that the concepts were evenly distributed. The results in Table 2 show that Cronbach's Alpha (CA) (0.81 to 0.97) and Composite Reliability (CR) (0.82 to 0.94) exceeded the minimum requirement of 0.7, confirming the reliability and internal consistency of all constructs. The tolerance values were in the range of 0.395 to 0.816, which was well above the critical tolerance value (0.1) as suggested by Julie Pallant (2013, p.120). Therefore, it can be concluded that there was no serious multicollinearity between the variables used in this predictive model.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
<th>VIF</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>288</td>
<td>2.96</td>
<td>1.591</td>
<td>0.837</td>
<td>0.876</td>
<td>0.567</td>
<td>1.225</td>
<td>0.816</td>
</tr>
<tr>
<td>Family Size</td>
<td>288</td>
<td>2.84</td>
<td>1.685</td>
<td>0.967</td>
<td>0.941</td>
<td>0.695</td>
<td>2.532</td>
<td>0.395</td>
</tr>
<tr>
<td>Region</td>
<td>288</td>
<td>2.67</td>
<td>1.021</td>
<td>0.939</td>
<td>0.938</td>
<td>0.683</td>
<td>2.112</td>
<td>0.473</td>
</tr>
<tr>
<td>Marital Status</td>
<td>288</td>
<td>2.72</td>
<td>1.318</td>
<td>0.916</td>
<td>0.910</td>
<td>0.594</td>
<td>2.014</td>
<td>0.497</td>
</tr>
<tr>
<td>Gender</td>
<td>288</td>
<td>2.53</td>
<td>1.541</td>
<td>0.872</td>
<td>0.903</td>
<td>0.557</td>
<td>1.771</td>
<td>0.565</td>
</tr>
<tr>
<td>Income</td>
<td>288</td>
<td>2.66</td>
<td>1.398</td>
<td>0.742</td>
<td>0.813</td>
<td>0.517</td>
<td>Endogenous</td>
<td>-</td>
</tr>
<tr>
<td>Expenditure</td>
<td>288</td>
<td>3.43</td>
<td>1.267</td>
<td>0.808</td>
<td>0.826</td>
<td>0.543</td>
<td>Endogenous</td>
<td>-</td>
</tr>
<tr>
<td>Zakāh Distribution</td>
<td>288</td>
<td>2.95</td>
<td>1.205</td>
<td>0.959</td>
<td>0.939</td>
<td>0.584</td>
<td>1.921</td>
<td>0.521</td>
</tr>
</tbody>
</table>

Note: Sample (N); CA (Cronbach's alpha); CR (composite reliability); AVE (average variance extracted); VIF (variance inflation factor).

The results of the initial output metrics that measure the external model measure between constructs and metrics (Figure 4) show that all metrics exceed the threshold of 0.7 (Sarstedt et al., 2014, p.156; Pallant. J, 2013, p.120; Field, A, 2013, p.706). This shows that all measurement items contribute critically to their individual constructs and that there is no confounding effect between the independent and dependent variables.
Heterotrait-monotrait ratio (HTMT) is used to test the discriminant validity in this study. The HTMT result (Table 3) shows that all constructs are less than one (< 1.0). All the constructs show a range of 0.621 to 0.849 (< 1.0). Thus, the result shows that all constructs are clearly independent of each other, and the criterion of discriminant validity has been met.
The structural model in this study is measured based on empirical thresholds of statistical significance, effect sizes and $R^2$ values (Figure 5). The coefficient of determination ($R^2$) in this study shows that a large degree of variance is explained in the economic well-being of the poor (0.716). Figure 5 also shows that zakāh ($R^2 = 0.781$) and region ($R^2 = 0.775$) have the highest degree of variance, while family size ($R^2 = 0.636$) has a moderate degree of variance and age ($R^2 = 0.473$), status ($R^2 = 0.327$) and gender ($R^2 = 0.432$) reflect a low degree of variance. Although there is some moderate and low degree of variance between constructs, the $R^2$ value indicates that it is statistically significant (t-statistic, 3.832; $p \leq 0.01$), suggesting that the six (6) exogenous constructs have a significant explanation for the variance in economic well-being (Hair et al., 2014, p. 113).

Figure (5). Structural Model and PLS-SEM Estimates.

The results in Figure 5 show that zakāh has the most significant positive impact and predictive ability on economic well-being, followed by region, family size, household age, gender and marital status of the household head. This corroborates the initial predictions of H1, H2, H3, H4 and H5 at $p \leq 0.05$ and $p \leq 0.01$, respectively. Zakāh has the highest significant positive effect on economic well-being. This had confirmed the initial postulation of H11 at $p \leq 0.01$.

CFA was conducted to measure the relationship between the observed variables and the underlying latent variables (Table 4). From Table 4, the CFA fit indices in this study show that all results exceeded the minimum cut-off value and meet the requirements of the acceptable level ($P$-value = 0.000, GFI = 0.884, CFI = 0.925, TLI = 0.889, RMSEA = 0.095). Thus, the CFA validity of this study indicates that it met the requirements of the acceptable level.

Table (4). CFA Adjustment Index Results.

<table>
<thead>
<tr>
<th>P-value</th>
<th>GFI</th>
<th>FCI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>ChiSq/df</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.000</td>
<td>0.884</td>
<td>0.925</td>
<td>0.889</td>
<td>0.095</td>
<td>1.621</td>
</tr>
</tbody>
</table>

Source: Research Question.
The results of the significance levels of the path coefficients (Table 5) show that age, family size and gender have significant positive effects on the economic well-being of the poor. This supports the initial predictions of H1, H2, H5 and H6 at p≤0.05 and p≤0.01, respectively. Furthermore, Table 5 also shows that zakāh assistance has a significant, positive and medium level moderating effect on the poor's economic well-being, which supports H11. Moreover, H3 and H4 are not supported since it is not statistically significant (p> 0.05) (p> 0.01).

### Table (5). Structural Model Path Analysis.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Constructs in the Structural Model</th>
<th>Effect Size (f²)</th>
<th>T-Statistics</th>
<th>P-Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. Age of the household head affects the economic well-being of the poor.</td>
<td>Age &lt;- Economic well-being</td>
<td>0.182</td>
<td>1.325</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2. Family size affects the economic well-being of the poor.</td>
<td>Size &lt;- Economic well-being</td>
<td>0.050</td>
<td>0.132</td>
<td>0.053</td>
<td>Supported</td>
</tr>
<tr>
<td>H3. Region affects the economic well-being of the poor.</td>
<td>Region &lt;- Economic well-being</td>
<td>0.072</td>
<td>0.212</td>
<td>0.726</td>
<td>Not supported</td>
</tr>
<tr>
<td>H4. Marital status affects the economic well-being of the poor.</td>
<td>Marital status &lt;- Economic well-being</td>
<td>0.021</td>
<td>0.174</td>
<td>0.882</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5. Gender affects the economic well-being of the poor.</td>
<td>Gender &lt;- Economic well-being</td>
<td>0.198</td>
<td>2.531</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H11. Zakāh affects the economic well-being of the poor.</td>
<td>Zakāh &lt;- Economic well-being</td>
<td>0.091</td>
<td>0.331</td>
<td>0.021</td>
<td>Supported</td>
</tr>
</tbody>
</table>

**Source:** Research Question

The moderating role of zakāh on the economic well-being of the poor in Kelantan indicates that the age of the household head has both a significant (indirect effect) and an insignificant (direct effect) effect on the economic well-being. The result shows that the indirect effects of age on economic well-being are fully mediated by zakāh (Table 6). The results corroborate that zakāh distribution did influence the economic well-being of zakāh recipients, which also supports the initial postulation of H6 at p≤0.01. This conclusion was supported by the fact that the bootstrap interval (0.072; 0.136) of the indirect effect of age (0.109) on economic well-being through perceived zakāh did not contain the number zero. Moreover, the direct effect of the age of household head on economic well-being became insignificant (P=0.001) when associated with zakāh. According to this study, any effort to improve the economic well-being of the poor will be ineffective without considering the zakāh assistance.

Zakāh partially mediated family size with a bootstrap interval of (0.084; 0.173), showing the indirect effect of family size (0.110) on economic well-being through zakāh. Moreover, the direct effect of family size on economic well-being was still significant (P<0.001) when associated with zakāh. Thus, we can conclude that family size can still have a direct influence on the economic well-being even if it is not a recipient of zakāh. However, this effect (0.064) would be more significant when the family size of the poor is associated with zakāh (0.174). The effects of the region on economic well-being are partially mediated by zakāh, which means that the geographical condition of the family did affect its economic well-being. This was confirmed by a bootstrap interval (0.055; 0.091) of the indirect effect of region (0.107) on economic well-being through zakāh. Moreover, the direct effect of region on economic well-being is always significant (P<0.001) when associated with the zakāh assistance. Therefore, it can be concluded that region could still have a direct influence on economic well-being without the zakāh assistance; however, this effect (0.085) would be smaller compared to when the region is associated with zakāh (0.107).

The marital status of the household head was fully mediated by zakāh with a bootstrap interval of (0.093; 0.182), showing a significant indirect effect
of the marital status of the household head (0.092) on economic well-being through zakāh. Moreover, the direct effect of marital status on economic well-being becomes statistically insignificant (P=0.416) when combined with zakāh. Meanwhile, a similar result occurs on the gender of the household head, where it was also fully mediated by zakāh with a bootstrap interval of (0.096; 0.187), which shows a significant indirect effect of the gender of the household head (0.112) on economic well-being through zakāh. Furthermore, the direct effect of gender on economic well-being becomes statistically insignificant (P=0.351) when combined with zakāh. In other words, the effect of the gender of the household head on his/her economic well-being did not occur directly, but had an impact on zakāh, which in turn affected his/her or their economic well-being.

Table (6). Moderator Effect Analysis.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Indirect effect</th>
<th>Direct effect</th>
<th>Bootstrap interval of the indirect effect</th>
<th>Total effects</th>
<th>Type of mediation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₆: Zakāh mediates the effect of age on economic well-being.</td>
<td>0.109 &lt;0.001 (significant)</td>
<td>0.041</td>
<td>0.535 (not significant)</td>
<td>(0.072 ; 0.136)</td>
<td>0.150 Total</td>
</tr>
<tr>
<td>H₇: Zakāh mediates the effect of family size on economic well-being.</td>
<td>0.110 &lt;0.001 (significant)</td>
<td>0.064</td>
<td>&lt;0.001 (significant)</td>
<td>(0.084 ; 0.173)</td>
<td>0.174 Partial</td>
</tr>
<tr>
<td>H₈: Zakāh mediates the effect of the region on economic well-being.</td>
<td>0.107 0.014 (significant)</td>
<td>0.085</td>
<td>&lt;0.001 (significant)</td>
<td>(0.055 ; 0.091)</td>
<td>0.192 Partial</td>
</tr>
<tr>
<td>H₉: Zakāh mediates the effect of marital status on economic well-being.</td>
<td>0.092 0.021 (significant)</td>
<td>0.041</td>
<td>0.416 (not significant)</td>
<td>(0.093 ; 0.182)</td>
<td>0.133 Total</td>
</tr>
<tr>
<td>H₁₀: Zakāh mediates the effect of gender on economic well-being.</td>
<td>0.112 0.017 (significant)</td>
<td>0.054</td>
<td>0.351 (not significant)</td>
<td>(0.096 ; 0.187)</td>
<td>0.166 Total</td>
</tr>
</tbody>
</table>

Source: Research Question

7. Summary and Conclusion

7.1. Summary of results

The results of this study indicate some important findings that can improve zakāh distribution in Kelantan. Zakāh distribution shows that it has a partial effect (direct and indirect) on the well-being of the poor if it can be channelled through short and long term programs. The direct effect means that short-term programs such as monthly distribution of zakāh according to family size and region are effective and positively impact family welfare. The current method of zakāh distribution in Kelantan based on family size and region is found to have a positive effect. The total effect (indirect effect) results show that zakāh distribution has a positive effect on long-term programs, because zakāh distribution is not directly channelled to the poor, but through the programs. For example, long-term programs such as vocational training programs organized by MAIK can improve the well-being of the poor by increasing their livelihoods, as they are able to work or start a business with their skills and knowledge. However, short-term zakāh assistance, such as monthly assistance, is not significant in improving their well-being because short-term zakāh assistance does not consider the age, marital status and gender of the recipient who has different economic well-being. Differences in needs and abilities according to age, marital status and gender of short-term recipients, which are not considered by direct distribution, make zakāh distribution less effective. Older people may receive a higher amount of zakāh than those of
productive age, while widows (female heads of household) and women may need to spend more than men because they have higher dependence from the children, especially after losing their partners.

This study shows that two likely causes contribute to the positive moderating effects of zakāh. First, the Kelantan Islamic Religious Council (MAIK), the body responsible for the management (collection and distribution) of zakāh in Kelantan, has made considerable efforts to manage zakāh, which can be verified by the impressive growth in zakāh collection and distribution from time to time. From 2014 to 2019, zakāh collection in Kelantan has increased from MYR 133 million (2014) to MYR 183 million (2018), while zakāh distribution also shows the impressive effort of MAIK where it has increased from MYR 151 million in 2014 to MYR 181 million in 2018 (JAWHAR, 2019, p. 12). Second, the implementation of the zakāh poverty line (ZPL), had kifayah, in identifying the category of the poor and needy based on a minimum basic need, which takes into account all the basic needs of a family had made the zakāh distribution becomes more effective (Ali, A.F.M., 2014, p. 292). In contrast to the government poverty line income (PLI), the ZPL is more detailed in assessing the needs of the poor and needy as it is based on individual needs (i.e., age, gender and household size) while the former puts more emphasis on the total household poverty line. Thus, the implementation of ZPL can enable MAIK to determine the individual needs of the poor and needy in Kelantan (Fahme, 2015, p. 364).

Zakāh assistance based on the household head's age, marital status, and gender has an insignificant direct effect on economic well-being and has been totally mediated by zakāh. This shows that zakāh distribution is only effective when it is relayed by other factors such as poverty reduction programs and skills enhancement courses that can produce a sustainable community support system in achieving human welfare. For example, the elderly may need zakāh assistance for their medicines, which can be provided by zakāh assistance. Widows or single parents and women heads of households may need zakāh assistance for skill enhancement programs that can ensure sustainable livelihoods. According to Ragayah (2007, p. 25), individuals have different food and non-food needs depending on their age and gender. She stresses that any poverty assessment should take into account the needs of individuals. In order to maintain the same nutritional standard, children need less food than adults, while women need less food than men, but at the same time, they may need to spend more on clothing. She suggested that a person with higher needs should have a higher poverty line than those with lower needs.

It is suggested that the method of direct distribution of zakāh should consider the age and gender of the household head and its members. If age, marital status and gender are not taken into account, the amount of zakāh given will be insufficient and will affect their economic well-being and, in the long run, also the process of livelihood acquisition, resulting in poverty being passed on to their generations. Furthermore, less effective distribution of zakāh may cause the public, mainly zakāh payers, to question the purpose and role of the zakāh institution in developing the Ummah's economy. If they have less faith and trust in the institution of zakāh to achieve positive results through its effective distribution, they may not pay their zakāh through zakāh payers, to question the purpose and role of the zakāh institution in developing the Ummah's economy. If they have less faith and trust in the institution of zakāh may cause the public, mainly zakāh payers, to question the purpose and role of the zakāh institution in developing the Ummah's economy. If they have less faith and trust in the institution of zakāh to achieve positive results through its effective distribution, they may not pay their zakāh through zakāh institutions, which may slow down the process of developing the economic well-being of the Ummah due to the decrease in zakāh collection and poverty alleviation programs that can have a significant impact. Given the negative impact of marital status on the economic well-being, as shown in the findings of Pamela J. Smock et al. (1999, p. 800), it might be quite difficult for zakāh centers to directly channel the zakāh assistance and subsequently promote their economic well-being, while some degree of zakāh assistance is needed to get the single mother to work indepen-dently, which could then help her generate higher economic well-being. Although the different needs by age and gender suggest a different type of poverty line between these groups, there are significant direct effects based on region and family size, which result from a sufficient number of short and long term zakāh distributions. The importance of zakāh distribution can be seen as a higher positive moderating effect of zakāh that can improve economic well-being across all aspects of the family structure.

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References


Field, A. (2013). Discovering statistics with IBM SPSS Statistics. SAGE.


Iqbal, Munawar (1986). Distributive Justice and Need Satisfaction in an Islamic Economy. Leicester: The Islamic Foundation.


Paswan, A. (2009). *Confirmatory Factor Analysis and Structural Equations Modeling, An Introduction, Department of Marketing and Logistics, COB, University of North Texas, USA.*


The Moderating Effect of zakāh Distribution on the Economic Well-being of the Poor: an analysis in Kelantan, Malaysia


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The Moderating Effect of zakāh Distribution on the Economic Well-being of the Poor: an analysis in Kelantan, Malaysia

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Abstract. This paper aims to study the moderating effect of zakāh distribution on the economic well-being of the poor in Kelantan, Malaysia. Kelantan was chosen for the survey due to its higher levels of poverty compared to other states in Malaysia. The analysis was based on structural equation modeling (SEM) technique, and the data and descriptive statistics were extracted and analyzed using SPSS. The research results show that the dimensions of zakāh distribution and family structure have a positive and significant effect on the economic well-being of the poor. The results also indicate that older age and social condition, as well as gender, are not significant in poverty because they cannot fulfill the basic economic welfare. The study also shows that the indirect effect of family structure and the role of zakāh in covering the economic well-being of the poor.

Keywords: Structural equation modeling (SEM), poverty and misery, zakāh distribution, Kelantan, Malaysia.

JEL Classification: D13, D31, I32

KAUJIE Classification: E12, E15, N4