The Impact of Zakat on Income Inequality and Poverty in Malaysia: A Panel Data Analysis

Abstract

Zakat is an Islamic social security system as well as an Islamic socio-economic system that aims to reduce and minimize the gap between the poorer and the richer in Islamic societies. There are numerous theoretical works that examined and analyzed the role of Zakat on poverty eradication and people’s well-being. Dispute the theoretical works, the empirical knowledge on the subject matter is remained shadow. This study takes one step forward and employed the Generalized Method of Moments (GMM) panel analysis for the period 2001-2012 of 14 Malaysian states to examine the impact of Zakat expenditure on income inequality and poverty in Malaysia. The results indicated, while Zakat has no significant effect on income inequality, Zakat significantly reduce both poverty incidence and hardcore poverty. The study suggested Zakat institutions funds to employ Had-Kifayah Zakat distribution model.

Keywords: Zakat, Income Inequality, Poverty, GMM, Malaysia.

2. Introduction

Researchers, around the world, have largely engaged in a work concerning poverty eradication, economic inequality and equitable distribution of income. Many studies have attempted forwarded solutions and recommendations to solve these issues. Islamic economists argued that these issues could be resolved by putting Islamic principles in the fundamental operation and the implementation of Zakat and other basic Islamic principles such as Waqf and Qard Hasan (interest-free loan), which solely guided by the Quran and Sunnah. The underlying aspiration of Zakat, which has been moderately mentioned in the Al-Quran, is to lessen the burden of the poor and needy by providing financial support as to help them to improve their economic well-being and ultimately reduce poverty. Therefore, the main objective of this paper is to explore how Zakat as a mean of Islamic taxation, plays its vital role and a complementary effort (aside from the conventional fiscal policy implemented by the
government) in improving the welfare of the society and eventually to alleviate poverty. This paper begins with a brief discussion on Zakat as the social safety net and the impact on household welfare, household economic status, and inequality followed by the methodology and findings in the final section.

2.1. Zakat as a Social Safety Net

Zakat is a compulsory alms as well as the third pillar of Islam, which entails giving out to eight disadvantage groups in the society as mentioned in the Qur’an such as the poor (Faqir), the needy (Miskeen), the debtors (Gharimin), the slaves (Riqab) and the travelers in need (Ibnu Sabil), the administrator of Zakat (Amil), those whose hearts are made inclined to Islam (Mu’allaf) and in the way of Allah (Fi sabi ‘Lillah) which are meant to eradicate poverty (Hassan, 2010). “Alms are for the poor and the needy and those employed to administer the (funds) and those whose hearts have been recently reconciled (to truth); for those in bondage and in debt; in the cause of God and for the wayfarer. (This it is) ordained by God, and God is full of knowledge and wisdom” (The Holy Qur’an 9:60, n.d.). Some jurists imply different standpoint of the first two term mainly Fuqara and Masakin to determine the difference in the degree of poverty comparatively one is greater than the other (Ahmed, 1981).

Zakat also serves as a form of security to the poor and needy in relieving their hardship by fulfilling their basic human needs such as food, shelter, safe drinking water, proper sanitation, education, quality health services and etc... to meet the absolute minimum resources of human basic needs. Hence, distributions of wealth to the beneficiaries of Zakat serves a purpose of assets purifying and personal spiritual enlightenment and eventually depicts the purpose of eradicating poverty or at least lessen the burden of the poor and needy. This situation can be best described, as narrated in the Qur’an: “Take Saddakah (alms) from their wealth in order to purify them and sanctify them with it, and invoke Allah for them. Verily, your invocations are a source of security for them; and Allah is All-Hearer, All-Knower” (Qur’an 9:103, n.d.). Furthermore, (Maududi, 1984) describes Zakat as “a cooperative society, an insurance company, a provident fund the assistance of the unemployed. It is a means of livelihood for the disabled, the sick, the orphans, the widows and the jobless. It is a guarantee that no one shall lack necessaries of life in the Muslim Community.”

2.2. Role of Zakat in Alleviating Poverty

Descriptive as well as existing empirical studies have showed that Zakat has played a significant role in alleviation of poverty. (Raimi, et al., 2014) developed a faith-based model (FBM) by using a qualitative research method by integrating corporate social responsibility (CSR), Waqf and Zakat system in the poverty reduction model. The funds collected can be used as a welfare support for deserving people especially the poor, marginalized groups and economically disadvantaged, a model, which is believed to have a plausible acceptance among the Muslim Majority Nations (MMNs). Furthermore, (Akram & Afzal, 2014) adopted ARDL approach of co-integration to evaluate the short and long...
run impact of Zakat disbursement on poverty. The result has indicated that there is an inverse relationship between poverty and Zakat disbursement both in the short and long run. As Zakat is guided by its own rules and regulations, it is beneficial for a fiscal policy maker when deciding on a tax scheme, and used as a tool to alleviate poverty (Adebayo, 2011). As well as to address issues related to socio-economic by utilizing its distributive scheme as an institutional approach in poverty alleviation (Akram & Afzal, 2014).

(Kahf, 1989) modified model of the estimation of potential Zakat is used to estimate resource shortfall and potential Zakat collection for poverty elimination in 38 OIC member countries. (Shirazi & Bin Amin, 2009) has employed the poverty gap index based on international poverty lines US $1.25 for hard core poor and US $2.00 for the poor as reported in the World Bank Indicators 2009 for measuring resource shortfall in 38 OIC member countries, the result shows that Malaysia only requires 0.02 percent of GDP to eliminate poverty among the lowest out of 38 OIC member countries and some other countries’ percentage are quite high ranging from 17.26 percent for Guinea-Bissau to 29.81 percent for Mozambique. Another similar methodology has been established to determine the percentage of GDP required for poverty alleviation in 24 IDB member countries (15 countries are from the low income group and 9 countries are in the lower middle income group). A cross-country analysis is utilized using the global poverty line as the poverty measure and divided into two groups, Group 1 ($1/day) and Group 2 ($2/day). Thus, the result indicates, Tunisia requires the less percentage of GDP among the 24 countries which is 0.3 percent of GDP in group 1 and 1.4 percent of GDP in group 2, moreover Niger requires the most percentage of GDP, 107.7 percent of GDP in group 1 and 149.6 percent of GDP in group 2, as to alleviate the poor above the poverty lines (Ahmed, 2004).

The impact of Zakat on poverty alleviation is further seen in (Malik, et al., 1994) study who analyzed Household Income and Expenditure Survey (HIES) 1987-1988 data consist of 18,144 households, covering four provinces in Pakistan both rural and urban areas. Using various poverty measures the impact of Infaq (income transferred to the poor) on poverty alleviation is assessed before and after subtracting Infaq receipts from the households’ income. As expected the poverty has increased after the deduction of Infaq and its incidence turned out to be higher. Under the impact of Infaq the percentage of poverty has decline in the four provinces. Furthermore, (Possumah & Ismail, 2011) have developed a theoretical model of Zakat-based Islamic Microfinance Institutions (MFIs) as an alternative approach to reduce poverty. Charity-based Islamic MFIs is based on the theoretical foundation of brotherhoods. The theory has three main concepts. First, the theory is joint liability contract that is able to decrease transaction cost. Second, the decentralization policy is employed in this theory in order to guarantee that Zakat transfer continuously flows for the welfare of the poor. Third, the contribution of Zakat Based-MFIs is to offer capital to the poor and needy that helps them in enhancing their own businesses as well as...
2.3. Equitable Distribution of Income and Wealth

(Akram & Afzal, 2014) claimed that Islam advocates humanity, justice and kindness among society, encourages giving and forbids bad conduct and oppression to the handicap. Thus encourage circulation of wealth among all sections of society and discourage concentration of wealth with a common responsibility to look after one and another, relatives, neighbors, locality and society at large including the poor and destitute. These undertaking is believed to have an important economic and social implication as it narrows the gap between rich and poor and attain ‘Falah’ (happiness) and well-being of mankind. It realizes the aim and objective of Islamic economic system which is to achieve equitable distribution of resources as narrated in the following verse: “Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded” (Qur’an 16:90, n.d.).

(Riwajanti, 2013) (Possumah & Ismail, 2011) and (Obaidullah, 2008) acknowledged Islamic microfinance is an essential tool to fight poverty as it promotes social justice for all through a more human oriented financing. It emphasizes community responsibility and it has a moral and value aspect to abate poverty. In addition, (Hassan, 2010) developed three set of anti-poverty measures to eradicate poverty, which includes positive measures, preventive measures and corrective measures. The distribution of wealth is enforced through compulsory transfers (Zakat), recommended transfer (Charity) and state responsibility (enforcement and basic needs). Some wealth of the rich is transferred to the poor through compulsory transfer (Zakat) as well as through charity. Islam encourages an act of benevolence and ultimately the state responsibility to enhance the institutions of Zakat and by providing equal opportunities for all.

As discussed above, the subject of poverty and its alleviation has been given much attention in literature, however much work remains to be done. This particular research is distinguished by its methodology used in examining the impact of Zakat on poverty eradication and income inequality. Employing the generalized method of moments (GMM) panel data analysis that comprises of 14 states in Malaysia using Zakat collection, and distribution from the 2001 to 2011 will contribute to present knowledge in similar research area. This study is driven by the insufficient amount of quantitative study in the role of Zakat in poverty eradication and income inequality in Malaysia. Although there are some empirical studies which investigated the role of Zakat in poverty eradication in different countries, the role of Zakat in poverty eradication in Malaysia specifically is not well investigated. Therefore this study will provide a platform to contribute and balance shortcomings in the previous and future research.
3. Methodology

The purpose of this study is to investigate the impact of Zakat on poverty and income inequality in fourteen Malaysian states. GDP per capita and Zakat are two variables that employed in Poverty and income inequality equation as below:

\[ Y_{it} = f(LZakat_{it}, LGDPP_{it}) \]

Equation 1

Where, \( Y \) denotes to:
1. GINI coefficient and it is used to measure income inequality (Index)
2. PI is poverty incidence in percentage
3. HP is hardcore poverty in percentage

LZakat denotes:
1. LZD is natural logarithm of zakat distribution (as in Ringgit Malaysia)
2. LZC is natural logarithm of zakat collection (as in Ringgit Malaysia)

and LGDPP is the natural logarithm of Gross Domestic Product per Capita.

This study employs the generalized method of moments (GMM) for the period 2001-2012 of 14 Malaysian states (Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Pulau Pinang, Perak, Perlis, Selangor, Terengganu, Sarawak, Sabah and W.P. Kuala Lumpur) to examine the impact of Zakat on income inequality and poverty in Malaysia.

\[ Y_{it} = f(LGDPP_{it}, LZakat_{it}) \]

Equation 2

Due to the persistent nature of poverty, we introduced the lagged dependent variable in our model which can be specified as below.

\[ Y_{it} = \alpha Y_{it-1} + \beta_1 LGDPP_{it} + \beta_2 LZakat_{it} + v_{it-1} + \epsilon_{it} \]

Equation 3

\( v \) is the unobserved country-specific effects and \( \epsilon \) is the idiosyncratic error term. If we let \( y_{i,t} \) be the poverty in a country \( i \) at a time \( t \), \( x_{i,t} \) be a vector of exogenous explanatory variables, while \( y \) and \( \beta \) be parameters to be estimated. We can then simplify the equation (3) as follows:

\[ y_{i,t} = \gamma y_{i,t-1} + x_{i,t} \beta + u_{i,t} \]

where \( u_{i,t} = v_{i} + \epsilon_{i,t} \)

Equation 4

However, due to \( y_{i,t} \) is correlated with \( y_{i,t-1} \) by construction, then, \( u_{i,t} \) is also correlated with the disturbance in Equation (4). Therefore, estimation the Equation (4) using OLS for \( y_{i,t} \) and will be biased and inconsistent. To eliminate the problem, we transforming the equation by first-difference to remove the individual-specific effects and gives:

\[ y_{i,t} - y_{i,t-1} = \gamma (y_{i,t-1} - y_{i,t-2}) + (x_{i,t} - x_{i,t-1}) \beta + u_{i,t} - u_{i,t-1} \]

Equation 5

which can be rewritten as:

\[ \Delta y_{i,t} = \gamma \Delta y_{i,t-1} + \Delta x_{i,t-1} \beta + \Delta u_{i,t} \]

Equation 6

where presents the difference operator. However, these transformations produce a different kind of correlation since \( y_{i,t-1} \) in \( \Delta y_{i,t} \) is, by construction, correlated \( u_{i,t-1} \) with in and causes neither the Random Effect estimator nor the Fixed Effect estimator will produce consistent estimates (Baltagi, 2005) Therefore, we employed the system generalized methods of moments (GMM) estimator, proposed by (Arellano & Bover, 1995) and developed by (Blundell & Bond, 1998) Due to this estimator uses more moment conditions and the consistency of the
estimator will depend on whether lagged values of the explanatory variables are valid instruments for the regression, we applied two specifications tests. The first test is the Sargan test of over-identifying restrictions which tests the validity of the instruments, and the second test is to examine whether the first-differenced error term is second-order serially correlated.

Data for GDP per capita is obtained from Economic Planning Unit (EPU) of Malaysia. Data for Zakat collection and Zakat distribution is obtained from Pusat Pungutan Zakat, Majlis Agama Islam Wilayah Persekutuan (Zakat Collection Centre, Islamic Religious Council of Federal Territory). Based on the previous discussion in section 2, the following hypotheses are developed in order to investigate the impact of Zakat on income inequality and poverty:

H1: GDP per capita is negatively related to income inequality
H2: Zakat Collection in negatively related to income inequality
H3: Zakat Distribution is negatively related to income inequality
H4: GDP per capita in negatively related to poverty incidence
H5: Zakat Collection in negatively related to poverty incidence
H6: Zakat Distribution is negatively related to poverty incidence
H7: GDP per capita in negatively related to hardcore poverty
H8: Zakat Collection in negatively related to hardcore poverty
H9: Zakat Distribution is negatively related to hardcore poverty

4. Results

Table 1 illustrates the results of the impact of Zakat (distribution and collection) on income inequality and poverty eradication in 14 Malaysian states using GMM methods. The results indicated that both Zakat collection and Zakat contribution are not statistically significant in model 1 and model 2. i.e. they did not support the proposed hypotheses that claimed that Zakat is negatively related to income inequality. Indeed, the results showed that GDP per capita is statistically significant at 1% in both models 1 and 2. The results indicated that 1 percent increase in GDP per capita leads Gini coefficient to decrease by 0.0181 and 0.0092 in model 1 and model 2 respectively. This is could be explained by the fact that money collected and distributed from Zakat is mainly given to those who are deprived and live in poverty. Those groups of people who have very low income and hardly had they safeguarded their daily livelihood. So Zakat distributed to them is to minimize their financial hardship. Zakat must be channeled to poor and disadvantaged people following the Shariah law. As there are many people who are in need of Zakat money, the portion distributed for each household is not enough to make an impact on income inequality between the poor and the rich as we have to take in consideration that other groups who are better off also have the ability to increase their income overtime. This is due to the fact that income inequality in Malaysia is a result of differences in socio-economic aspects within ethnic groups rather than differences across groups (The World Bank IBRD-IDA, 2010). This result is not consis-
tent with (Ibrahim, 2006) findings who found that Zakat distribution increases income inequality, increases income loss, and reduces social welfare in Selangor state of Malaysia. Others like (Malik, et al., 1994) and (Abdelbaki, 2013) confirmed that Zakat significantly reduce income inequality in Pakistan and Bahrain respectively. Nevertheless, when we look at GDP per capita, the effect is significant and has the right sign. This is true, as the Malaysian government emphasizing and implementing strategies that designed to de-
duce income inequality among the Malaysian citizens. Some of those strategies are 1) Raising economy-wide opportunities by strengthening the investment climate and revitalizing labor markets; 2) Promoting investment in human capital by strengthening education and vocational skills training; and 3) Providing well-targeted social protection to help those that cannot help themselves (The World Bank IBRD-IDB, 2010). Also as the income inequality is result of differences in socio-economic aspects within ethnic groups, strategies were designed to raise the income of the poorest group (Bumiputra) at a faster rate than for the rest of the other groups (Chinese) and thus led to reduce the interethnic income inequality (Hashim, 1998).

In addition, the results indicated that Zakat collection and Zakat distribution are both statistically significant in model 3, 4, 5 and 6 respectively. The results revealed that 1 percent increase of Zakat collection and zakat distribution in model 3 and 4 lead to decrease poverty incidence by 0.43 and 0.58 percent respectively. Also 1 percent increase in Zakat collection and Zakat distribution in model 5 and model 6 lead to decrease hardcore poverty by 0.50 and 0.51 respectively. Zakat may not contribute to poverty eradication unless if an effective and an efficient Zakat management system is employed. As the findings showed that zakat distribution is significantly led to decreasing poverty incidence in Malaysia. Thus we can conclude that, authorities that distribute Zakat in Ma-

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
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<tr>
<td>LGDPP</td>
<td>-0.0181***</td>
<td>-0.0092**</td>
<td>-0.7037***</td>
<td>-0.7812***</td>
<td>-0.1893**</td>
<td>-0.2172**</td>
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<td></td>
<td>(0.0000)</td>
<td>(0.0295)</td>
<td>(0.0055)</td>
<td>(0.0025)</td>
<td>(0.0296)</td>
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<tr>
<td>LZC</td>
<td>0.0043</td>
<td>-0.43027**</td>
<td>-0.5158***</td>
<td></td>
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<td></td>
<td>(0.1688)</td>
<td>(0.0314)</td>
<td>(0.0010)</td>
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<tr>
<td>LZD</td>
<td>0.002342</td>
<td>-0.5848**</td>
<td>-0.5074***</td>
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<td></td>
<td>(0.4053)</td>
<td>(0.0500)</td>
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laysia employing an efficient and an effective Zakat management system. These results are consistent with (Akram & Afzal, 2014) findings that confirmed the existence of an inverse relationship between poverty and Zakat disbursement both in the short run and long run in Pakistan. However, other researchers claimed that Zakat distribution and collection is not efficient in Malaysia and thus did not effectively contribute to poverty eradication. They argued that the process of Zakat distribution is predetermined with bureaucracy problems that resulted in slowing down the process of poverty eradication.

Furthermore, the results indicated that Zakat significantly reduced hardcore poverty incidence in Malaysia. Priority in distributing Zakat money should be given to hardcore poor people as these groups are marginalized and they don’t have even access to basic needs for their normal livelihoods such as food. (Hassan, 2010) argued that the first priority in the use of Zakat funds should be given to poverty eradication through financial support to the poor and the neediest people. Therefore Zakat should be given only to those who really cannot afford to safeguard their living. Zakat should not be given to people who are able to make a living but they do not do any efforts. In this perspective, Prophet (Peace be Upon Him) said “Allah has hated three things for you: Vain talks (useless talk) that you speak too much or unveil others’ flaws; the squandering of wealth (by extravagance); and asking too many questions (in controversial religious matters) or asking others for something (except in great need)"¹. (Abdelhak & Sulaiman, 2015) investigated the impact of Islamic values on poverty eradication in Penang state of Malaysia and found that poor people who are able to make a living and just relied on Zakat and Saddakah (Charity) had higher probability of being poorer than those who seldom seek for Zakat and Saddakah. This is because relying on Zakat and Sadakah made them over dependence on aids and supports, which lead them to miss opportunities of gaining their own living. Individuals and households who are capable to make a living will not be a pauper. They are responsible for their family’s needs. The Prophet (Peace be upon Him) narrated: “Each of you is a shepherd and each of you is responsible for his flock. The ruler is a shepherd and responsible for his flock. A man is the shepherd of his household and responsible for his flock. A woman is the shepherd of her husband’s house and children and responsible for her flock. The slave is the shepherd of his master’s wealth and responsible for it. Each of you is a shepherd and each of you is responsible for his flock”².

From this discussion, it is clear that Zakat has a significant impact of poverty eradication. However, in order to achieve high level of poverty eradication, Zakat needs:

- To be channelled and distributed to the right people, as per the Shari’ah guidance and the socio-economic characteristics of the country.
- Zakat management funds need to consider the capabilities and abilities

¹Sahih Al-Bukhari No. 591
²Sahih Al-Bukhari No 89; and Muslim No 1829
of the recipients.

- Zakat should be given based on the physical capabilities as well as the economic condition of each individual.
- Furthermore, Had-Kifayah Zakat distribution model could be one of the most operative tools that could guarantee the effectiveness and efficiency in utilization of scarce Zakat resources. Households with monthly income less than Had-Kifayah will be considered as Masakin, whereas those with income less than half of Had-Kifayah are considered Fuqara.

The concept of Had-Kifayah Zakat distribution will guarantee the efficiency of scarce Zakat resources through two channels. First, Had-Kifayah Zakat distribution system guarantees the basic daily needs for a needy households, therefore they will be able to be productive as they will have the capacities and energy to be involved in productive activities. Second, Had-Kifayah Zakat distribution system also guarantees that Zakat scarce resources are utilized adequately and therefore there should be no wastage of these resources. Every household will get the Zakat amount that guarantees his/her daily needs. Further research is needed to calculate the Had-Kifayah amount for each country based on each household characteristic (such as age, household size, gender, and disability), Financial capital (working / not working, has income), social capital (has access to financial resources from relatives and friends), human capital (education, skills, health condition), natural capital (own land, natural resources), physical capital (own house, rent, own cattle/animals).

5. Conclusion

This study employs the generalized method of moments (GMM) for the period 2001-2012 of 14 Malaysian states (Johor, Kedah, Kelantan, Melaka, Negeri Sembilan, Pahang, Pulau Pinang, Perak, Perlis, Selangor, Terengganu, Sarawak, Sabah and W.P. Kuala Lumpur) and examined the impact of Zakat on income inequality and poverty in Malaysia. The results indicated that while Zakat has no significant impact on income inequality, Zakat significantly reduce both poverty incidence and hardcore poverty. Therefore, Zakat institutions funds in Malaysia need to apply more effective ways and methods in order to increase Zakat collection as the actual figures are not statistically significant to narrow the gap between the rich and the poor. In term of Zakat distribution, the study revealed that Zakat institutions fund are doing well as the results indicated that the zakat distributed played an important role in poverty eradication. But in order to guarantee that zakat scarce resources are utilized effectively and efficiently contributes to poverty eradication, the study suggested Zakat institutions funds to employ Had-Kifayah Zakat distribution model.
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