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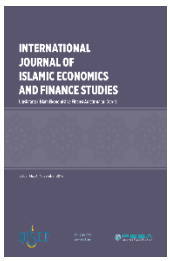

Determinants of Poverty amongst *Zakah* Recipients in Indonesia: A Household Level Analysis

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ABSTRACT

Strategies aimed to increase the impacts of zakah in alleviating poverty need to identify factors that are strongly associated with poverty and subsequently amenable to zakah interventions. However, existing empirical studies related to zakah rarely highlight this issue. This study, therefore, examine the determinants of poverty amongst zakah recipients in Indonesia in order to enhance effectiveness of zakah targeting in alleviating poverty in the world's largest Muslim country. To achieve the objective, the study collected primary data of the households receiving zakah assistance in Greater Jakarta Indonesia and utilized a logistic regression model to analyse the determinants of poverty amongst the recipients. The main result suggests that lower age, lower education, less formal occupation, smaller households size and non-economic zakah assistance were related to a higher probability of being poor. The results suggest that these groups of people should be the main target of zakah interventions in Indonesia. The findings should be taken into account by zakah organizations, government and other relevant institutions to enhance the impacts of zakah in alleviating poverty not only in Indonesia but also in other Muslim countries.

Keywords: *zakah institution, impact of zakah, poverty alleviation in Indonesia*

JEL Classification number: *I32, I38, Z12*

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1. Introduction

Poverty reduction is a main goal of development policies around the globe (UN, 2009). It is also a major objective of Islamic economics and institutions, particularly *zakah* institution (Ahmed, 2004). To achieve the objective, a satisfactory explanation of why some people or nations are poor is essential if effective poverty alleviation strategies are to be designed and implemented (Ravallion 2009). This perspective is also applies to *zakah* institution, since Muslims generally believed that *zakah* is a genuine Islamic institution to fight poverty problems (Ahmad 1991; Salih 1999; Al Qardawi 2000; Chapra 2000; Sirageldin 2000).

However, existing empirical studies related to *zakah* rarely highlights this issue. Most studies related to *zakah* are related to *fiqh* aspects of *zakah* such as issues related to definition of *zakah,* 'new' types of zakatable assets, using *zakah* funds for investment or infrastructure development as well as various aspects of regulations related to zakah. (see, for instance, Kahf 1989, 1999 and Al Qardawi 2000, Shehata 2005, Mahmud and Haneef 2015). More recently, a number of studies started to analyse economics impacts of *zakah* in certain communities or Islamic countries (see, among others, Jehle 1984, Ibrahim 2006, Abdu 2009, PEBS-FEUI and IMZ 2010, Beik 2010, Piliyanti 2013 and Kasri and Ahmed 2015). While these issues are important, they are not directly related to strategies in improving effectiveness of *zakah* targeting and interventions since their focus are the religious and implementation aspects of *zakah* management.

In view of the above, this study examines the determinants of poverty amongst *zakah* recipients in Indonesia in order to enhance effectiveness of *zakah* targeting in alleviating poverty in the world's largest Muslim country. To achieve the objective, the study collected primary data from around 700 households receiving *zakah* assistance in Greater Jakarta Indonesia. The data obtained were analysed by using descriptive statistics and logistic regression model. The methods are commonly used in the studies regarding determinants of poverty (see, among others, Jalan and Ravallion 1998; Davis and Baulch 2011; Selim 2016)

Following this introduction, the study is organized as follow. Section two describes literature related to *zakah* and determinants of poverty, meanwhile section three presents the research methods used in the study. Section four explains and analyse the findings. Finally, the last section provides conclusion of the study.

2. Literature Review

2.1. Concepts and Implementation of *Zakah*

Literally, *zakah* means 'growth', 'increase', or 'purity' of wealth (Al Qardawi 2000). Furthermore, in the *fiqh* (Islamic legal) perspective, the word *zakah* specifically refers to the predetermined share of wealth to be distributed among the deserving categories prescribed by God (Al-Qardawi 2000). Specifically, according to *Fiqh* encyclopaedia, *zakah* could be understood as a due right on specific items of assets/properties, in specific percentages, with consideration of the passage of a year and satisfaction of the condition of *nisab* (in Ahmed 2004). Meanwhile, in terms of its objectives, Muslims generally agreed that the main objective of *zakah* institution is to eradicate poverty and ensure social justice (Ahmad 1991; Salih 1999; Al Qardawi 2000; Chapra 2000; Sirageldin 2000).

Following this definition, *fiqh* of *zakah* specifies various important aspects related to *zakah* implementation such as the *zakah* payers (*muzakki*), the requirement of *zakah* (including the types of *zakatable* assets, rates of *zakah*, time to pay the *zakah* obligations, the minimum requirement to pay *zakah* or nishab of *zakah*, etc.) and the *zakah* recipients (*mustahiq*).[1] Indeed, Qur'an specifically mentioned that "*The charities (zakah) are for the poor, needy, those employed to administer the funds, those whose hearts have reconciled to the truth, freeing slaves, those indebted, in the cause of God, and the wayfarer in need...*" (Qur'an 9:60). This verse implies that there are only eight groups of people, as mentioned in the verse and known as *ashnaf*, who are eligible to receive *zakah.*

[1] For more discussion about the fiqh aspects of *zakah*, see Qardhawi (2000).

The formal implementation of *zakah* has been recorded from the time of the Prophet SAW until now. In contemporary Muslim societies, *zakah* administration has been performed not only by government but also by non-government organizations. Most Muslim countries nowadays also have specific regulation for *zakah* management (Kahf 2000). Not only that, some Muslim minorities countries such as South Africa (Ahmed 2004) and Thailand (Pereire 2007) have also implemented regulations related to charities which are also collecting donations in forms of *zakah.*

In Indonesia, current *zakah* administration is based on the *Zakah* Management Law No. 23/2011, which replaced the Law No. 38/1999. With supportive legal and institutional supports, development of zakat institution in the country is very promising. As of 2010, there was one national *zakah* organization (BAZNAS), 33 provincial *zakah* organizations (BAZDAs) and 240 district/regency level BAZDAs from around 502 districts existing in Indonesia. Moreover, there were more than 300 non-government *zakah* agencies, 18 of which have been approved to operate nationwide by the government (Beik 2010).

Following the increase in the number of *zakah* organizations, the amount of *zakah* collected has also increased over time. It is reported that the amount of *zakah* collected have increased significantly from 4.98 million USD in 2002 to around 269.29 million USD by the end of 2015. This reflects an average annual growth of *zakah* funds of around 22% in the last five years. Meanwhile, in terms of *zakah* distribution, it is reported that the disbursement amount reached 2.25 trillion rupiah or around 170 million USD (BAZNAS 2017).

More recently, *zakah* studies started to pay more attention regarding the impacts of *zakah* on poverty and welfare of the poor. In the context of Indonesia, Beik (2010) analyzed around 1,195 poor households receiving *zakah* assistance from two large *zakah* organizations in Jakarta and found that the monthly incomes of the households have increased by around 8.94%. The incidence, depth and severity of poverty from 2007 to 2008 have also decreased by 16.79%, 13.9% and 36.7% respectively. Relatively similar study and results also found by other studies (Nurzaman 2011; Yumna and Clarke 2011; Piliyanti, Toro et al. 2013). However, such studies did not address determinants of poverty amongst *zakah* recipients which might provide important insight to enhance effectiveness of *zakah* targeting in alleviating poverty in Indonesia.

2.2. Determinants of Poverty

Broadly speaking, most empirical studies regarding determinants of poverty suggest that socio-economic factors associated with a higher probability of being poor are demographic characteristics of the head of the household including older age, female-headed household (gender), low education and informal occupation (see, among others, Coulombe and McKay 1996; Jalan and Ravallion 1998; Deininger and Okidi 2003; Mukherjee and Benson 2003; Mango, Cheng'ole et al. 2004; Baiyegunhi and Fraser 2010; Davis and Baulch 2011; van Edig and Schwarze 2012; Dartanto and Nurkholis 2013; Rahman 2013; Selim 2016). Other literature linked household poverty status with characteristics of the household such as large size and lack of assets such as capital, land and house (Jalan and Ravallion 1998; McCulloch and Baulch 2000; Arif 2006; Lawson, McKay et al. 2006).

Study of Baiyengunhi and Fraser (2010) which involved 150 rural households in the Amathole District Municipality of the Eastern Cape Province (South Africa) found that age is statistically significant in explaining a households' vulnerability to poverty. More specifically, a household led by someone older has a higher likelihood to be poor due to the fact many elder people have to fend for themselves and in most cases do not have others on whom to rely for support. The study also revealed that poverty status is also related to gender, in which female-head household face higher probabilities of being poor that male-headed households. Similar conclusion is shared by Rahman (2013) and Selim (2016) for the case of Bangladesh and Turkey respectively. Furthermore, studies by Davish and Baulch (2011) and Dartanto and Nurkholis (2013) suggested that marital status decreases probability of being poor primarily due higher income generated when there is more than one earner in a household.

Poverty is positively related to education level. Studies found that lack of educational attainment of household's head increases the probability of being poor in China (Jalan and Ravallion 1998), Kenya (Mango, Cheng'ole et al. 2004), Malawi (Mukherjee and Benson 2003), Mauritania (Coulombe and McKay 1996) and Turkey (Selim 2016). However, educational attainment is not enough to decrease

household poverty in Tanzania (Wedgwood 2007). In relation to occupation, it is found that self-employed farming households are more likely to be poor in Uganda (Deininger and Okidi 2003) and Mauritania (Coulombe and McKay 1996). Meanwhile, study by Coulombe and McKay (1996) suggest that in general households led by unemployed people tend to be poor households in Mauritania. These results are very intuitive considering that higher education and more formal occupations would enable poor people to earn more income and enjoy higher welfare.

Household size and assets have also been suggested to be negatively related to poverty. Larger household size has a positive relationship with improved household welfare, as found in Pakistan (McCulloch and Baulch 2000; Arif 2006; Rahman 2013), Uganda (Lawson et al., 2006) and Kenya (Mango, Cheng'ole et al. 2004). However, it was also found that household health problems due to illness/disability of family members is positively related to higher poverty level (Emmett 2006) particularly in Kenya and Pakistan (Kristjanson, Mango et al. 2010; Rahman 2013). Meanwhile, lack of physical assets (land, livestock, house, etc.) has a positive correlation with being poor in China and Pakistan (Jalan and Ravallion 1998; McCulloch and Baulch 2000).

To summarize, literature generally suggest that socio-economic factors associated with a higher probability of being poor are characteristics of the household's head such as older age, female-headed household (gender), low education and informal occupation. Characteristics of the household such as large size and lack of assets (such as capital, land and house) are also found to be determinants of poverty. These factors will be reference for the present study.

3. Research Methods

Since *zakah* is not considered as a part of the poverty reduction strategies in Indonesia, there is no official data regarding socio-demographic characteristics (age, gender, marital status, education, occupation, etc.) and incomes of households receiving *zakah* assistance. Therefore, this study uses primary data to analyze determinants of poverty amongst *zakah* recipients in Greater Jakarta Indonesia. The data was collected through a survey-based questionnaire and managed to collect data from 685 households receiving *zakah* assistance from seven largest *zakah* organizations in Greater Jakarta Indonesia.

In analysing the data, the study uses descriptive statistics and logistic regression analysis. The descriptive statistics are utilized to describe the characteristics of respondents, while the logistic regression is employed to examine the determinant of poverty amongst the poor households. The methods are commonly used in studies related to determinants of poverty (see, among others, Coulombe and McKay 1996; Jalan and Ravallion 1998; Alisjahbana and Yusuf 2003; Achia and Wangombe 2010; Kristjanson, Mango et al. 2010; van Edig and Schwarze 2012; Dartanto and Nurkholis 2013; Selim 2016).

In a standard logistic regression model, the measure predicted is the *probability* of Y (dependent variable) occurring given known values of X_s (independent variables), which is indicated by the *beta* (coefficient values) and odds ratio (or *exp (b)*, which shows the ratio between the probability that an event has occurred and the probability that it has not occurred) of the model. An odds ratio greater than 1 indicates that the odds of the outcome occurring increase as the predictor increases (i.e. the event is more likely to occur), while a value of less than 1 suggests that the odds of the outcome occurring decrease as the predictor increases.[2]

In the context of this study, the dependent variable is the household's poverty status (i.e. not poor and poor), meanwhile the independent variables are the characteristics associated with the likelihood of being poor. More specifically, the logistic regression model used is as follow:

$$y_i = c + \beta_1 HHP_i^n + \beta_2 HC_i^n + \beta_3 Z_i^n + \beta_4 GOV_i^n + e_i \quad (1)$$

in which y_i is the binary variable for the household's poverty status (i.e. not poor and poor),[3] *HHP* is a vector of head of household's profiles (i.e. age, gender, marital status, education and occupation), *HC* is

[2] For more discussion about technical aspects of logistic regression, see econometric textbooks such as Gujarati (2005), Field (2009) and Trivadi and Cameron (2009).

[3] The poor and not-poor status is defined in relation to poverty line and poverty status after receiving zakat assistance. The estimated households' poverty line in Greater Jakarta was Rp 1,556,291 on a monthly basis. Thus, the poor are those whose

a vector of household characteristics (i.e. location, sizes, members with health problems and assets), Z is a vector of *zakah* assistance-related factors (i.e. types of *zakah* agencies contributing to the household, [4] types of assistance received[5] and participation in *zakah* assistance-related activities[6]), GOV is a vector of government support (i.e. existence of government transfer) and i is the number/identity of the households (i=1....n).

4. Results and Discussions

Table 1 summarizes the socio-demographic profiles and characteristics of the households receiving *zakah* assistance in Greater Jakarta Indonesia. It is revealed that most of the households are led by someone who is in productive age (i.e. age between 15-45 years), female, married, relatively uneducated (i.e. education level up to junior high school) and not working. Further results also showed that the household size is relatively large with an average number of household members of 5.1 persons. Typically, the household has two children and two earners (person working to earn income) in the family. Additionally, one household member with disabilities is found that for every five households surveyed.

Table 1: Socio-Demographic Profiles of Respondents

Socio-Demographic Characteristics		Frequency	Percentage
Age	15 to 45	433	63.21%
	46 to 64	226	32.99%
	65 to 95	26	3.80%
	Total	**685**	**100%**
Gender	Male	186	27.15%
	Female	499	72.85%
	Total	**685**	**100%**
Marital Status	Married	428	62.48%
	Single parents	257	37.52%
	Total	**685**	**100%**
Education	Not going to school	97	14.16%
	Elementary School	199	29.05%
	Junior High School	158	23.07%
	Senior High School	213	31.09%
	College/University	18	2.63%
	Total	**685**	**100%**
Occupation	Not working	328	47.88%
	Trader/Small-Businessman	194	28.32%
	Informal Sector Labor	91	13.28%
	Employee	60	8.76%
	Others	12	1.75%
	Total	**685**	**100%**

Although the results above are quite specific to the recipients of *zakah* in Greater Jakarta, the socio-demographic characteristics found are generally consistent with the descriptive profiles of poor households in Indonesia documented by other studies (Alisjahbana and Yusuf 2003; World Bank 2006;

income were still below poverty line (i.e. wellbeing did *not* improve) after receiving *zakah* assistance, while the non-poor are those whose income were above poverty line (i.e. wellbeing did improve) after receiving *zakah* assistance.

[4] There are three types of *zakah* agencies in Indonesia, namely government-based *zakah* agency, corporate-based *zakah* agency and non-profi *zakah* agency. types of assistance received and participation in *zakah* assistance-related activities

[5] Based on previous studies in Indonesia, there are four types of *zakah* assistance received namely economic, education, healthcare and social *zakah* assistance

[6] Based on interview with the management of the *zakah* organizations surveyed, there are a number of activities commonly included as part of *zakah* assistance-related activities, including Islamic/Qur'anic study, health advocacy, skill/business training and regular meeting (with/without supervisor).

Dartanto and Nurkholis 2013). Additionally, in the context of evaluating the effectiveness of *zakah* institution as a poverty alleviation tool, it appears that *zakah* targeting has been relatively successful since the profile of the *mustahiq* groups (productive age, female, married, relatively uneducated and not working) could be considered as the most disadvantaged people in the society who are eligible and deserve to receive supports from *zakah* institution. These type of *mustahiq* are also found in the study of Arif (2006) regarding effectiveness of *zakah* targeting in Pakistan.

In relation to income, the study found that the mean income of the households prior to receiving *zakah* assistance was Rp 1,641,808 on a monthly basis. With *zakah* transfer, the mean income increased to Rp 1,914,131. Thus, the *zakah* interventions have enable an increase in the monthly income by an average of Rp 272,323. The *zakah* supports have also contributed to a decrease in the proportions of the poor households from 61.6% to 53.3%, or a decrease of around 8.32%. These findings suggest that *zakah* interventions have contributed positively in increasing income and reducing poverty of the households receiving *zakah* assistance in Greater Jakarta Indonesia. Similar poverty reduction impacts due to *zakah* have been documented in other similar studies in other regions (see, for instance, Jehle 1984, Ibrahim 2006, and Beik 2010) albeit with different magnitude.

Results of the logistic regression and its associated marginal effect (post-estimation) models are shown in Table 2 and Table 3. The socio-demographic variables found to be significantly influence the poverty of the *zakah* recipients are the head of the household's age, education, occupation and the household size. In all cases, the odds ratios of the variables are less than one. Moreover, types of *zakah* assistance and participation in the skill/business training and non-supervisory meeting are significant in the model. However, the odds ratio for the social *zakah* assistance is above one, indicating a *higher* likelihood of being poor compared to the recipients of economic assistance (i.e. the benchmark). These results imply that higher age, higher education, more formal occupation, larger households' size, economic assistance as well as participation in skill/business training and non-supervisory meeting were all related to a *lower* probability of being poor. In other words, lower age, lower education, less formal occupation, smaller households' size, non-economic *zakah* assistance and non-participation in the mentioned activities were associated with a higher likelihood of being poor.

Table 2: Results of Logistic Regression Model

Variable	Logistic Regression			
	Odds Ratio	Std. Error	z	P> |z|
Demographic Characteristics of Head of Household				
Age	0.972	0.008	-3.49	0.000
Gender (0 = female, 1 = male)	0.843	0.183	-0.79	0.432
Marital status (0 = not married, 1 = married)	0.941	0.182	-0.32	0.751
Education				
1 - Elementary school	0.618	0.185	-1.61	0.107
2 - Junior high school	0.397	0.127	-2.88	0.004
3 - Senior high school	0.374	0.123	-3.00	0.003
4 - College/University	0.162	0.109	-2.70	0.007
Occupation				
1 - Informal labour	1.001	0.284	0.00	0.999
2 - Small trader	0.452	0.097	-3.69	0.000
3 – Employee	0.426	0.143	-2.55	0.011
4 – Others	2.230	1.649	1.08	0.278
Socio-Economic Characteristics of Household				
Household size	0.792	0.038	-4.82	0.000
HH member disabilities	1.362	0.319	1.32	0.186
House ownership (0 = No, 1 = Yes)	1.116	0.214	0.57	0.568
Possession of water source (0 = No, 1 = Yes)	1.063	0.200	0.32	0.746

Location (0 = Outside Jakarta, 1 = Jakarta)	1.133	0.238	0.59	0.553
Zakah Assistance and Other Supports				
Types of *zakah* organization				
1 – Corporate	1.064	0.300	0.22	0.826
2 – Non-profit	1.298	0.332	1.02	0.306
Types of *zakah* assistance				
1 – Education	1.578	0.394	1.83	0.067
2 – Healthcare	1.702	0.647	1.40	0.161
3 – Social	3.721	1.052	4.65	0.000
Participation in *zakah* assistance-related activities				
Islamic/Qur'anic study (0=No, 1=Yes)	0.806	0.178	-0.97	0.330
Health advocacy (0=No, 1=Yes)	1.280	0.352	0.90	0.368
Skill/business training (0=No, 1=Yes)	0.450	0.139	-2.58	0.010
Supervisory meeting (0=No, 1=Yes)	0.729	0.198	-1.16	0.245
Non-supervisory meeting (0=No, 1=Yes)	0.486	0.152	-2.31	0.021
Other related activities (0=No, 1=Yes)	1.943	0.976	1.32	0.186
Receive government support (0 = No, 1 = Yes)	0.917	0.176	-0.45	0.651
Constant	21.873	14.437	4.67	0.000
Number of observations	680			
LR Chi2	151.330			
Prob > Chi2	0.000			
Pseudo R2	0.161			

Table 3: Results of Marginal Effect (Post-Estimation) Model

Variable	Marginal Effect			
	dy/dx	Std. Error	z	P> |z|
Demographic Characteristics of Head of Household				
Age	-0.006	0.002	-3.61	0.000
Gender (0 = female, 1 = male)	-0.034	0.043	-0.79	0.432
Marital status (0 = not married, 1 = married)	-0.012	0.038	-0.32	0.751
Education				
1 - Elementary school	-0.092	0.055	-1.65	0.098
2 - Junior high school	-0.181	0.060	-3.00	0.003
3 - Senior high school	-0.193	0.061	-3.14	0.002
4 - College/University	-0.357	0.121	-2.94	0.003
Occupation				
1 - Informal labour	0.000	0.057	0.00	0.999
2 - Small trader	-0.163	0.044	-3.71	0.000
3 – Employee	-0.175	0.068	-2.59	0.010
4 – Others	0.148	0.121	1.22	0.224
Socio-Economic Characteristics of Household				
Household size	-0.046	0.009	-5.13	0.000
HH member disabilities	0.061	0.046	1.33	0.185
House ownership (0 = No, 1 = Yes)	0.022	0.038	0.57	0.567
Possession of water source (0 = No, 1 = Yes)	0.012	0.037	0.32	0.746
Location (0 = Outside Jakarta, 1 = Jakarta)	0.025	0.042	0.59	0.553
Zakah Assistance and Other Supports				

Types of *zakah* organization				
1 – Corporate	0.012	0.056	0.22	0.826
2 – Non-profit	0.051	0.050	1.03	0.304
Types of *zakah* assistance				
1 – Education	0.096	0.052	1.83	0.067
2 – Healthcare	0.112	0.080	1.40	0.162
3 – Social	0.266	0.055	4.82	0.000
Participation in *zakah* assistance-related activities				
Islamic/Qur'anic study (0=No, 1=Yes)	-0.043	0.044	-0.97	0.333
Health advocacy (0=No, 1=Yes)	0.048	0.053	0.91	0.361
Skill/business training (0=No, 1=Yes)	-0.161	0.061	-2.63	0.009
Supervisory meeting (0=No, 1=Yes)	-0.064	0.056	-1.15	0.251
Non-supervisory meeting (0=No, 1=Yes)	-0.145	0.062	-2.33	0.020
Other related activities (0=No, 1=Yes)	0.127	0.091	1.40	0.162
Receive government support (0 = No, 1 = Yes)	-0.017	0.038	-0.45	0.651

Note: dy/dx for factor levels is the discrete change from the base level.

The finding that older age decreases the likelihood of being poor is quite surprising because most studies suggest that older age tends to correlate with a higher probability of being poor (Baiyegunhi and Fraser 2010; van Edig and Schwarze 2012; Rahman 2013). Nevertheless, the finding could perhaps be explained by the tendency of older people to have more skills, experience and, eventually, the opportunity to secure a good job and income. It may also be related to the fact that, due to their poor condition, they are usually prioritized by the government as beneficiaries of social assistance schemes (Suryahadi, Yumna et al. 2010).

The positive relationship found between a higher level of education and household's welfare was hardly surprising, since higher education is commonly associated with better knowledge for working and thereby greater opportunity to secure high-paying jobs. The result corroborates the earlier findings on the importance of education as a determinant of poverty/wellbeing in Indonesia (Alisjahbana and Yusuf 2003; Sumarto et al., 2008) and other developing countries such as China, Kenya, Malawi, Mauritania and Turkey (Coulombe and McKay 1996; Jalan and Ravallion 1998; Mango et al., 2004; Mukherjee and Benson 2003; Selim 2016). Similarly, with respect to occupation, the estimated result suggesting that the households led by persons working in more formal occupations were less likely to be poor is also intuitive considering that the more formal jobs generally provide a relatively reasonable and stable income for the household. This finding is consistent with the other studies suggesting that not working and/or working in relatively informal sectors were positively related to poverty and vulnerability in Indonesia (Sumarto, Widyanti et al. 2008) and Mauritania (Coulombe and McKay 1996).

It was also revealed that larger household size is positively and significantly related with lower probability of being poor. In the context of the developing world, the result could be justified since larger households tend to have more economic resources (i.e. labour, time) to earn higher incomes than the smaller ones. This would in turn contribute to reduced poverty and increased welfare of the households. This result is in line with the findings of most poverty studies in Indonesia and developing countries in general (McCulloch and Baulch 2000; Sumarto, Widyanti et al. 2008; van Edig and Schwarze 2012; Dartanto and Nurkholis 2013; Lawson et al., 2006).

With regard to the relationship between the *zakah* institutions and the *zakah* recipients, the study found that acceptance of economic assistance as well as participation in skill/business training and non-supervisory meeting were all related to a *lower* probability of being poor. These results are very intuitive considering that they have direct relationships with the economic improvement of the *zakah* recipients. Economic *zakah* assistance, particularly in form of capital/working capital supports, and non-supervisory meeting (which is an important aspect of the productive economic programs) have made the households able to improve their business and earned higher income. Higher skills have also enabled them to find

better and/or higher income job which contributed to increased household welfare. These results are consistent with the findings of some other *zakah* related studies such as the study of Ibrahim (2006) in Malaysia and the study of Beik (2010) in Indonesia.

5. Conclusions and Recommendations

Strategies aimed to increase the impacts of *zakah* in alleviating poverty need to identify factors that are strongly associated with poverty and amenable to *zakah* interventions. However, existing empirical studies related to *zakah* rarely highlight this issue. Most studies related to *zakah* tend to focus on the *fiqh* aspects of *zakah* and, more recently, on the economic impacts of *zakah* interventions. This study, therefore, attempt to examine the determinants of poverty amongst *zakah* recipients in Greater Jakarta Indonesia. The results are expected to contribute in better identification of the poor deserved to receive *zakah* assistance and subsequently in enhancing effectiveness of *zakah* targeting and interventions in alleviating poverty in the world's largest Muslim country.

To achieve the objective, the study conducted a survey to collect relevant primary data of the households receiving *zakah* assistance in Greater Jakarta Indonesia. The data obtained were analysed by using descriptive statistics and logistic regression model. The main result suggests that lower age, lower education, less formal occupation, smaller households size and non-economic *zakah* assistance were all related to a higher probability of being poor. The results suggest that these groups of people should be the main target of *zakah* interventions in Indonesia since targeting *zakah* supports to the group of people could significantly increase their welfare. These findings should be taken into account by *zakah* organizations, government and other relevant institutions to enhance the impacts of *zakah* in alleviating poverty not only in Indonesia but also in other Muslim countries.

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