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## *Zakat Microfinance: A Tool for Poverty Reduction? Evidence from BAZNAS Beneficiaries in the Selected Regions (Bantul, Sukabumi, Aceh, Gorontalo and Kutai Timur)*

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**BAZNAS**  
Badan Amil Zakat Nasional

# **Zakat Microfinance: A Tool for Poverty Reduction? Evidence from BAZNAS Beneficiaries in the Selected Regions (Bantul, Sukabumi, Aceh, Gorontalo and Kutai Timur)**

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## ***Abstract***

*This paper aims at examining the impact of microfinance zakat program distributed by BAZNAS to the beneficiaries in the selection regions of Indonesia; i.e. Sukabumi (West Java), East Kutai (East Kalimantan), Aceh, Bantul (Yogyakarta) and Gorontalo. This has been done through designing the microfinance zakat program that will assist beneficiaries in establishing a business, or upgrading the scale for their existing business. By using the Poverty Index framework (sen index, FGT index), this research provides an actual data on how far the achievement of the zakat microfinance program in improving the welfare of beneficiaries. The data achieved by direct survey to the beneficiaries in those areas was conducted between October and November 2016. Our results show that the microfinance based zakat distribution managed by BAZNAS is positively correlated to the alleviation of poverty and thus improves the welfare.*

**Keywords:** zakat, microfinance, economics development, zakat disbursement, sen index, FGT index

**JEL Classification:** H23; K22; P34; P51; Z18

## **1. Introduction**

Zakat is one of the primary sector of economic in the Muslim countries. As the third pillar of Islam, payment of zakat is an obligation for an eligible Muslim to purify his wealth by distributing it to the *mustahiq* (beneficiaries) based on the specific criteria. Zakat has a huge potential to be economically developed. In the last decade, zakat experienced a rapid growth

marked by the increase of total zakat collection fund. However, this zakat growth still has a significant gap compared to its potential. According to Kahf, total potential of zakat in OIC member countries ranged from 1.8 to 4.34 percent of total GDP. If zakat is multiplied by the GDP at current prices in 2010 from the OIC member countries, the global potential zakat reached USD 600 billion (Beik, 2015).

In the context of poverty alleviation in Indonesia, zakat has the huge potential. Since Indonesia has the biggest Muslim population<sup>1</sup> in the world which is 85 percent of total population in Indonesia or 216.66 million population.<sup>1</sup> It can also be portrayed from the increasing of zakat collection fund since 2002 until 2015 (Table 1.1).

Table-1  
Time Series of Zakat Collected in Indonesia

| Year | Billion Rupiah | Million USD | Annual Growth (%) | GDP Growth (%) |
|------|----------------|-------------|-------------------|----------------|
| 2002 | 68.39          | 4.98        | -                 | 3.7            |
| 2003 | 85.28          | 6.21        | 24.70             | 4.1            |
| 2004 | 150.09         | 10.92       | 76.00             | 5.1            |
| 2005 | 295.52         | 21.51       | 96.90             | 5.7            |
| 2006 | 373.17         | 27.16       | 26.28             | 5.5            |
| 2007 | 740            | 53.86       | 98.30             | 6.3            |
| 2008 | 920            | 66.96       | 24.32             | 6.2            |
| 2009 | 1200           | 87.34       | 30.43             | 4.9            |
| 2010 | 1500           | 109.17      | 25.00             | 6.1            |
| 2011 | 1729           | 125.84      | 15.30             | 6.5            |
| 2012 | 2200           | 160.12      | 27.24             | 6.23           |
| 2013 | 2700           | 196.51      | 22.73             | 5.78           |
| 2014 | 3300           | 240.17      | 22.22             | 5.02           |
| 2015 | 3700           | 269.29      | 21.21             | 4.79           |

*Note: 1 USD = Rp13.740,00, Source: National Board of Zakat (BAZNAS)*

Table -1 shows that the zakat collection fund had increased 5310.15 percent since year 2002 until 2015. In year 2005 and 2007, it also increased significantly (almost 100 percent) which was predicted as the implication of tsunami in Aceh and earthquake in Yogyakarta. Both of these tragedies were stated as the national disaster in Indonesia. Table -1 also shows the increasing of ZIS collection fund since year 2002 until 2015 as 39.28 percent in average. This data indicated that the public awareness to pay zakat through the certified zakat institutions (Lembaga Amil Zakat or LAZ) has been increased. The positive trend of this zakat collection also implied the increase of public trust to the zakat institution's performance in managing zakat fund. The annual growth of zakat collection fund was also higher than the GDP growth year to year. In year 2009, the GDP growth decreased 1.3 percent as a consequence of global financial crisis. On the contrary, zakat growth increased 6.11 percent. The average of zakat growth in 2002 to 2015 (39.28 percent) also showed a higher number than the average of GDP growth which only 5.42 percent. Generally speaking, the zakat growth is not much affected by the global crisis. Therefore, zakat has a huge potential to contribute to the national development.

The zakat increased significantly when the Zakat Act No. 38/1999 was launched. Based on this act, zakat can be managed by the zakat institutions created by the government (*Badan Amil Zakat*) and also privately created by the public (LAZ). However, a major change in the regulatory framework occurred on the replacement of Zakat Act No. 38/1999 with the Zakat Act No. 23/2011 which brought all major private collectors under the supervision of National Zakat Board (BAZNAS). The Act No. 23/2011 aims to "improve the effectiveness

<sup>1</sup><sub>1</sub> BAZNAS. Zakat Outlook 2017. Center of Strategic Studies <http://www.puskasbaznas.com/publications/books/293-outlook-zakat-indonesia-2017-english>

and efficiency of the management of zakat services, and optimise the benefits of zakat for public welfare and poverty alleviation” (Art.3).

Based on this Act, the National Board of Zakat (BAZNAS) as an independent government agency responsible to the President of the republic of Indonesia. It had been given two main obligations: (1) to regulate entire zakat system including planning, implementation, controlling the process, audit, transparencies, collections, and distributions and (2) to coordinate all of the zakat institutions in the country cross-bodies, cross-provinces and cross-regencies.

## 2. Literature Review

### 2.1 Zakat Potential

Shaikh (2016) estimates potential *zakat* collectible in 17 member countries of Organization of Islamic Cooperation (OIC). He finds that *Zakat* to GDP ratio exceeds Poverty Gap Index to GDP (PGI-GDP) ratio except in 3 countries with poverty line defined at \$1.25 a day. He shows that the aggregate resources pooled together from the potential *Zakat* collection in 17 OIC countries will be enough to fund resources for poverty alleviation in all 17 OIC countries combined<sup>2</sup>. Azam et al. (2014) and M. Akram & Afzal (2014) in an empirical study for Pakistan argue that *Zakat* disbursement among the poor, needy, destitute, orphans and widows has played a significant role in poverty alleviation.

Using aggregate data for Malaysia, Suprayitno et al. (2013) find that *Zakat* distribution has a positive, but small impact on aggregate consumption<sup>3</sup>. Abdelmawla (2014) argue based on empirical evidence using aggregated data for Sudan that *Zakat* along with educational attainment significantly reduced poverty in Sudan<sup>4</sup>. Hassan & Jauanyed (2007) estimate that *Zakat* funds can replace the government budgetary expenditures ranging from 21% of Annual Development Plan (ADP) in 1983-84 to 43% of ADP in 2004-2005<sup>5</sup>. For Malaysia, Sadeq (1996) finds that about 73% of the estimated potential *Zakat* collection will be needed annually to change the status of hard-core poor households to a status of non-poor households in Malaysia. Ibrahim (2006) contends in an empirical study for Malaysia that *Zakat* distribution reduces income inequality. His analysis reveals that *Zakat* distribution reduces poverty incidence, reduces the extent of poverty and lessens the severity of poverty<sup>6</sup>. Firdaus et al. (2012) estimate the potential of *Zakat* in Indonesia by surveying 345 households. Their results show that *Zakat* collection could reach 3.4% of Indonesia's GDP, which can help in reducing poverty to a large extent.

### 2.2 Microfinance

Weber (2006) microfinance supported these informal microenterprises through microcredit. The microcredit approach to poverty reduction is “the provision of small loans to individuals, usually within groups, as capital investment to enable income generation through self-

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<sup>2</sup> Shaikh, S. (2016). *Zakat Collectible in OIC Countries for Poverty Alleviation: A Primer on Empirical Estimation*. *INTERNATIONAL JOURNAL OF ZAKAT*, 1(1), 17-35. Retrieved from <http://www.puskasbaznas.com/ijaz/index.php/journal/article/view/3>

<sup>3</sup> Suprayitno, E., Kader, R. A., & Harun, A. (2013). “The Impact of *Zakat* on Aggregate Consumption in Malaysia”, *Journal of Islamic Economics, Banking and Finance*, 9(1), 39 – 62.

<sup>4</sup> Abdelmawla, M. A. (2014). “The Impacts of Zakat and Knowledge on Poverty Alleviation in Sudan: An Empirical Investigation (1990-2009)”, *Journal of Economic Cooperation and Development*, 35(4), 61 – 84.

<sup>5</sup> Hassan, M. K. & Jauanyed, M. K. (2007). “Zakat, External Debt and Poverty Reduction Strategy in Bangladesh”, *Journal of Economic Cooperation*, 28(4), 1 – 38.

<sup>6</sup> Sadeq, A. H. M. (1996). “Ethico-Economic Institution of Zakat: An Instrument of Self Reliance and Sustainable Grassroots Development”, *IJUM Journal of Economics and Management*, 12(2), 47 – 69.

employment” (Weber, 2006, pp.50). Revealed by Green et al (2006) the informal microenterprises due to market imperfections, asymmetric information and the high fixed costs of small-scale lending, limit the access of the poor to formal finance, thus pushing the poor to the informal financial sector or to the extreme case of financial exclusion. In addition, it is argued that improving the access of the poor to financial services enables these agents to build up productive assets and enhance their productivity and potential for sustainable livelihoods. (Green, Kirkpatrick, & Murinde, 2006)

Microfinance would correct the market failure, providing access to credit to the poor. Credit would create economic power that would generate into social power, lifting the poor out of poverty (Yunus, 1999, p. 150). In 2008 it was estimated that there were 2,420 microfinance institutions (MFIs), representing 99 million borrowers in 117 countries (Gonzalez, 2008). Many of these programs did not require collateral, reported loan repayment rates above 95 percent, and reached poor individuals who had formerly been difficult to reach. For this, microfinance appeared as a fresh solution to an old problem. It appeared to be a “win-win” situation, where both financial institutions and poor clients profit. The “win-win” appearance of microfinance created unparalleled excitement in the world of economic development.

### 2.3 Measurement Tools

To bring the evidence whether zakat can give such high impact to the poverty alleviation as mentioned in the several studies, the right tools are needed. However, scholars again diverge in defining the level of poverty. Handbook on Poverty and Inequality of Haughton and Khandker<sup>7</sup> explained several index models used to measure the poverty as summarized in Table 2.

Table -2  
Poverty Measurement Indicator World Bank Version

| Measurement Model             | Description                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Headcount Index</i>        | i.e the percentage of poor people under the poverty line. Headcount Index simply measures the proportion identified as poor. This model is used to calculate the number of poor people, it is easily understood and measured, although not clearly indicate how poor the poor are.                                                                                                     |
| <i>Poverty Gap Index</i>      | That is the average size of each expenditure gap of the poor to the poverty line. This index can measure the extent to which a person falls below the poverty line (the poverty gap). The number of those gaps may show minimal cost to reduce poverty if the alteration is targeted perfectly. Unfortunately, these measurements do not reflect changes in inequality among the poor. |
| <i>Poverty Severity Index</i> | The index that provides information about the picture spread of expenditure among the poor. The average squared relative poverty                                                                                                                                                                                                                                                       |

<sup>7</sup> Haughton, J., & Khandker, S. R. (2009) Handbook on Poverty and Inequality, The International Bank for Reconstruction and Development/The World Bank, Washington DC.

gap to the poverty line. The index is one of the FGT (Foster-Greer-Thorbecke) class on the measurement of poverty that allows a person to distinguish the number that puts the level of income (or expenditure) of the poorest society members. FGT Measurement poverty can be broken down into additional materials. This measurement also allows the change separation in the measurement of FGT into components resulting from the increase in average income, and components derived from changes in income distribution.

Source: Haughton, J., & Khandker, S. R. (2009)

### 3. BAZNAS Microfinance Study Case

Based on 2014 data, only 36 percent of Indonesians have access to financial services. BAZNAS microfinance is a community development program to integrate economic aspects in a comprehensive manner funding primarily sourced from charity, donation, and alms to realize a prosperous society and independent. This program in addition to open access to capital to the recipients of zakat also to increase the level of financial inclusion in Indonesia through zakat funds.

#### 3.1 Statistical Data

This sample consists of hundreds of families who have obtained the microfinance program of BAZNAS i.e *Sukabumi (West Java)*: 250 household; *East Kutai (East Kalimantan)* : 206 household; *Aceh*: 400 household; *Bantul (Yogyakarta)* : 104 household; and *Gorontalo* : 50 household. They run the business in kind of livestock groups, farmer groups, making daily products, souvenirs, and the other businesses. In addition, there has also been established “smart house” as an effort to facilitate local people to learn, teaching and learning activities especially for the underprivileged community.

Table-2  
Income and Expenditure

|                      | Average Income | Average Expenditure |
|----------------------|----------------|---------------------|
| Sukabumi (West Java) | 4.898.088      | 2.412.370           |
| East Kutai           | 4.143.330      | 2.972.524           |
| Aceh                 | 10.450.450     | 2.486.680           |
| Bantul (Yogyakarta)  | 2.319.308      | 1.699.433           |
| Gorontalo            | 3.856.720      | 4.735.487           |

| Range of Income              | Sukabumi<br>(West Java) | East Kutai | Aceh   | Bantul<br>(Yogyakarta) | Gorontalo |
|------------------------------|-------------------------|------------|--------|------------------------|-----------|
| < Rp 2.000.000               | 19.20%                  | 34.95%     | 2.00%  | 56.73%                 | 15.89%    |
| Rp 2.000.001 – Rp 5.000.000  | 63.20%                  | 55.83%     | 39.75% | 38.46%                 | 38.41%    |
| Rp 5.000.001 – Rp 10.000.000 | 12.80%                  | 7.28%      | 27.50% | 4.81%                  | 34.44%    |
| > Rp 10.000.000              | 4.80%                   | 1.94%      | 30.75% | 0.00%                  | 11.26%    |

| Range of Expenditure        | Sukabumi<br>(West Java) | East Kutai | Aceh   | Bantul<br>(Yogyakarta) | Gorontalo |
|-----------------------------|-------------------------|------------|--------|------------------------|-----------|
| Rp 0 - Rp 1.000.000         | 10.40%                  | 5.34%      | 3.75%  | 30.77%                 | 46.36%    |
| Rp 1.000.001 – Rp 2.000.000 | 32.00%                  | 27.67%     | 35.75% | 53.85%                 | 28.48%    |
| Rp 2.000.001 – Rp 3.000.000 | 32.80%                  | 29.61%     | 35.50% | 7.69%                  | 17.22%    |
| Rp 3.000.001 – Rp 4.000.000 | 17.60%                  | 20.87%     | 17.00% | 3.85%                  | 7.28%     |
| > Rp 4.000.000              | 7.20%                   | 16.50%     | 8.00%  | 3.85%                  | 0.66%     |

Source: Primer Data 2016

### 3.2 Data Analysis

In this case, we put the headcount index is used to find out the proportion of microfinance zakat beneficiaries, means the total beneficiaries who are poor categorized (in the sense of the local poverty line) of the total beneficiaries population. The score describe how many poor based on BPS standard, among the productive zakat beneficiaries in Bantul. The headcount index often denoted by H, the formula as follows:

$$H = \frac{q}{n}$$

H = Headcount Index

q = The number of poor people

Table-2  
Headcount Before and After Program

| H      | Sukabumi<br>(West Java) | East Kutai | Aceh  | Bantul<br>(Yogyakarta) | Gorontalo |
|--------|-------------------------|------------|-------|------------------------|-----------|
| Before | 0.081                   | 0.392      | 0.075 | 0.171                  | 0.303     |
| After  | 0.027                   | 0.250      | 0.045 | 0.118                  | 0.289     |

Source: Primer Data 2016

The poverty gap index is an improvement over the poverty measure headcount ratio which simply counts all the people below a poverty line, in a given population, and considers them equally poor. The poverty gap also described the average shortfall of the total population from the poverty line.

$$P = \sum_{i=1}^q g_i v_i(z, y)$$

P1 = Poverty gap

gi = z – yi (The difference between the income of the i-poor and the poverty line / income shortfall)

vi(z,y) = The weight given to the income shortfall of the i-poor population

Table-3  
Poverty Gap Before and After Program

| P1     | Sukabumi<br>(West Java) | East Kutai | Aceh   | Bantul<br>(Yogyakarta) | Gorontalo |
|--------|-------------------------|------------|--------|------------------------|-----------|
| Before | 56,283                  | 212,717    | 80,980 | 63,763                 | 98,761    |
| After  | 64,779                  | 184,403    | 83,159 | 56,992                 | 102,673   |

Source: Primer Data 2016

Income Gap Ratio (I). The income gap ratio is a relative gap between the poverty line and the average income of the poor (Chakravarty, 2009).

$$I = \sum_{i \in S(z)} \frac{g_i}{qz}$$

P1 = Poverty gap  
 $g_i = z - y_i$  (The difference between the income of the i-poor and the poverty line / income shortfall)  
 $v_i(z,y)$  = The weight given to the income shortfall of the i-poor population

Table-4  
Income Gap Ratio Before and After Program

| I      | Sukabumi<br>(West Java) | East Kutai | Aceh  | Bantul<br>(Yogyakarta) | Gorontalo |
|--------|-------------------------|------------|-------|------------------------|-----------|
| Before | 0.176                   | 0.446      | 0.193 | 0.197                  | 0.360     |
| After  | 0.196                   | 0.362      | 0.187 | 0.169                  | 0.358     |

Source: Primer Data 2016

The Sen index sought to show how the headcount and income gap ratio, along with the Gini index of the income distribution of the poor, can give an adequate picture of poverty. Because of this poverty, the Sen index is said to include the three I's of poverty: Incidence, Intensity and Inequality (Bellu & Liberati, 2005).

$$P_s = P_0 G^q + P_1 (1 - G^q)$$

$g_i = z - y_i$  (income short-fall of i- poor people)  
 $z$  = Poverty line  
 $q$  = Total people whose income is below the poverty line

Table-5  
Sen Index Before and After Program

| P2     | Sukabumi<br>(West Java) | East Kutai | Aceh  | Bantul<br>(Yogyakarta) | Gorontalo |
|--------|-------------------------|------------|-------|------------------------|-----------|
| Before | 0.043                   | 0.269      | 0.041 | 0.093                  | 0.193     |
| After  | 0.015                   | 0.159      | 0.024 | 0.062                  | 0.183     |

Source: Primer Data 2016

Foster, Greer and Thorbecke (FGT) Index (1984). The general formula for this index depends on a parameter  $\alpha$  which takes a value of zero for the headcount, one for the poverty gap, and two for the squared poverty gap. Quite generally, as

$$P_{\alpha}(y, z) = \frac{1}{n} \sum_{i=1}^q \left( \frac{g_i}{z} \right)^{\alpha}$$

$g_i = z - y_i$  (income short-fall of i-poor people  
 $z$  = Poverty line  
 $q$  = Total people whose income is below the poverty line

Table-6  
FGT Index Before and After Program

| P3     | Sukabumi<br>(West Java) | East Kutai | Aceh  | Bantul<br>(Yogyakarta) | Gorontalo |
|--------|-------------------------|------------|-------|------------------------|-----------|
| Before | 0.005                   | 0.102      | 0.005 | 0.010                  | 0.039     |
| After  | 0.002                   | 0.056      | 0.003 | 0.004                  | 0.037     |

Source: Primer Data 2016

#### 4. Results and Discussion

The table show headcount index in all regions before and after the program are decreased, based on poverty line standard in Indonesia, which means the program has succeeded in reducing the number of poor. This assuming, the index when getting close to 1 means more number of the poors, while when getting closer to 0 means the poors number are decreased. Thus, a good program is when the H index values after the program are less than the H index before the program.

The table show the poverty gap (P1) among the beneficiaries di sebagian wilayah turun tapi di sebagian yang lain tidak turun. Meaning that the average distance of the poors income to the poverty line (per capita/Rp. 360,169), before the program (n Rp) and after the program (n Rp). In some areas it is successful, but some other areas poverty gap there needs to be an evaluation. But the result would not describe the failure of the program, but must be viewed from consistency to the Sen and FGT index. Actually, that assumed the smaller and closer to 0 in rupiah, the smaller poverty gap has been generated. Thus, a good program is when the P1 index after the program are less than the P1 index before the program.

The table show the income gap (I) in average are declined. Assuming, when the index getting close to 0 means the value of income gap is smaller and the poorer the better. Thus, a good empowerment program is when the I index after the program are less than the I index before the program.

The table show the poverty severity index among the beneficiaries seen by Sen Index (P2) in all regions are decreased. When tested by Foster-Greer-Thorbecke Index (P3), again the poverty severity in all regions are decreased. Sen Index (P2) assuming, when the index getting close to 0 means the poverty severity was decreased. Thus, a good empowerment program is when the Sen index after the program are less than the Sen index before the program. As well as in the FGT Index (P3) assuming, when the index getting close to 0 means the poverty severity was decreased. Thus, a good empowerment program is when the FGT index after the program are less than the FGT index before the program.

## **5. Conclusion**

Based on the above empirical test, can be concluded that zakat distribution by microfinance schema is possible for reducing inequality and alleviate the poverty. We can conclude that the program is effective for reducing the poverty, also can increase of the material welfare level among the beneficiaries.

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