

Islamic Microfinance Institutions: The Determinants of Performance in Indonesia

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Abstract: *After that, we are particularly interested in the impact of a set of factors related to portfolio quality, financial structure, non-performing financing, and certain characteristics specific to the 11 IMFIs on their financial performance, on the one hand, and on their social performance, on the other. We used panel data from a sample of 11 Indonesian Islamic rural IMFIs over a five-year quarterly period, 2011-2015. Furthermore, the estimation of the different regressions shows that the factors that have a positive impact on the financial performance of IMFIs are the total assets, the zakat, FDR as well as personal expenses while the factor that has a negative impact on this performance is non-performing financing. Next, the factors that have a positive impact on the scope of the scope are the total assets, the zakat, FDR as well as the personal expenses. This performance is negatively affected by non-performing financing. Finally, the degree of reach is positively affected by the active total of IMFIs.*

Keywords: Microfinance Institutions, Islamic finance, Poverty, financial performance, social performance, zakat, Indonesia

JEL Classification: D21, G21, I32, L25

1. Introduction

The success of microfinance institutions (Mfis) in the fight against poverty has supported the development of microfinance institutions including Islamic Mfis. This mode of MFI provides interest-free financial services that comply with sharia law or Islamic law. These institutions also include Islamic social welfare funds such as zakat, waqf and their sources of funding.

This allows Islamic Mfis to distribute funds to the poor community (Obaidullah, 2008; Ahmed, 2002). Based on the distinctive characteristics of Islamic Mfis, Ahmed (2002) maintains that Islamic Mfis can perform better than traditional Mfis. In addition, social capital based on Islamic values and principles positively influences the employees of Islamic Mfis, giving them the additional motivation to fight poverty and improve the lives of the poor. As a result, the improved profitability and viability of the Islamic Mfis are assured. In other words, Islamic social capital increases employee productivity (thereby reducing costs) (Ahmed, 2002).

Despite these claims, to date, there are only a few (baseline) studies that assess financial and social performance and its determinants. In addition, to the extent of the researchers' knowledge, it is almost rare to find studies that prove the specificities of Islamic microfinance able to provide the additional impact on the objectives of microfinance, (particularly on poverty reduction). In view of this abundant literature on Islamic microfinance and Mfis and the achievements of the Indonesian microfinance sector, it is interesting to carry out a work on the financial and social performance of the Indonesian Mfis and on the identification of factors of this performance.

Finally, the performance of IMFI and its determinants have been the subject of several studies which have covered either

samples of Mfis from several countries or samples of Mfis from one country. However, we note that the case of Indonesian Imfis is absent from this kind of work, hence the interest of our study. Through this article, we seek to identify the factors that influence the financial and social performance of Indonesian Imfis.

1.1 Hypotheses

The question that serves as a framework for our research is, by what mechanisms and under what conditions, Islamic microfinance contributes to the creation of employment activities in Indonesia? It is subdivided into two specific questions: 1- How do Islamic microfinance institutions respond to the financial and non-financial needs of economically active populations? 2- What is the organizational and institutional profile that best underpins the economic performance and social utility of an Islamic microfinance institution in Indonesia?

Answering these questions allows us to appreciate the social mechanisms by which Mfis seek to be effective and relevant. Therefore, the goal of our research is towards knowledge and understanding, useful for the resolution and/or mitigation of the problem of financing the activities of poor people. Indeed, the diversity of microfinance experiences prevents any generalisation of its practices and a single examination on a case-by-case basis allows one to comment on the effectiveness of one or other experience.

The analysis of the modes of intervention and the evaluation of their economic and social performance make it possible to assess, for each institution, its ability to contribute to financial sustainability. The objective is to identify, over each institutional trajectory, the social mechanisms that facilitate economic and social sustainability and to see what bases their relevance in responding to people's demands. This dual function requires a balance between economic and social imperatives in the approach, but also in the results. In

relation to our research objectives, we developed exploratory working hypotheses that we formulated as follows:

1.1.1 Staff costs

Hypothesis 1: Staff salaries represent the largest and most strategic expenditure item in microfinance. Indeed, the selection, training of customers and reimbursement monitoring requires the involvement of qualified and versatile staff, for a MFI, competent agents are necessary both to ensure social performance (contact with the most distant or excluded customers), ensure portfolio quality, in order to anticipate the risks of non-repayment (role of the pivot played by portfolio quality) and collect information to meet customer needs. Intuitively, there should be a positive relationship between staff burden and depth of scope and a negative relationship between staff burden and financial performance (possibly an indirect positive effect via portfolio risk)

1.1.2 Non-performing financing (NPF)

The main sources of Imfis are derivatives of the financing provided, thus allowing the largest finance to provide an excellent opportunity to obtain greater profits. On the other hand, the increasing amount of financing risk also raises potential losses due to risk financing problems. The management of Imfis is expected to provide the precautionary principle funding risk to control the funding risk. The higher NPF has shown more financing problems and the larger reserve should be provided for debt elimination, which could potentially further reduce the level of profit. The study on Islamic finance in Pakistan found a significant effect of the NPF and financial performance (Akhtar et al., 2011). Similarly, Syafri (2012) studying Islamic finance in the Gulf countries also found a significant effect. Ruslim (2012) found a significant and negative influence between the FNP and the performance of the Islamic Imfis in Indonesia.

Hypothesis 2: NPF negatively affects PF and PS

The size of the company

The size of the firm indicated by the number of assets also affects the MFIs at profit. IMFI's greater ability to provide risky financing because they have more funds to provide funding risks (Akhtar et al., 2011). Some researchers use enterprise size as control variables still affect profitability (Zeïtoun, 2012); (Idris et al., 2011) and Sraïri (2009). The following hypothesis is:

H3: Company size has a positive influence on IMFI performance

FDR the ability to repay bank withdrawals by clients (Total funding / total deposits)

Bank liquidity is a key element in managing the assets of the MFI (Mohammad et al., 2013). Liquidity management is one of the highest priorities of the financial institution. Good liquidity management will be able to meet funding needs for clients who intend to take their funds at any time and provide funds to meet its financial commitments. As regulated in the Indonesian MFI Regulation No. 13/23 / PBI / 2011 on the Application of Risk Management for IMFI and Islamic Business Units, Bank Liquidity is Measured by the Minimum Reserve Requirement and the Report total funding versus total deposits (FDR). The minimum reserve

requirement is intended to maintain daily liquidity, while FDR is granted financing over public funds. Meanwhile, when the FDR is increased shows a larger amount lent, but a greater liquidity risk because of the funds lent can not be withdrawn at any time

There is a significant relationship between loan and total assets and profitability (Ani et al., 2012) while (Sraïri, 2009) found no difference in liquidity between IMFI and IMFC. The researcher studying in the Islamic banking sector in Indonesia found the influence of FDR and financial performance (Arianti and Harjum, 2012). Thus, a positive relationship between FDR and social performance is estimated because of clients' ability to repay bank withdrawals

H4: (FDR) has a positive influence on IMFI's social and financial performance

Operating expenses

The size of the operational effectiveness of the Islamic MFI can use the ratio between operating expenses and operating profit (Mohammad et al., 2013). Corporate profits are derived less costs, so if the cost can be reduced, it is expected to increase profits. The OEOI (operating expense to operating income) with a high rate, shows the inefficiency of the Islamic banking system in operation; thus the rate of profit. In Indonesia, there is a significant and negative effect between OEOI and financial performance (Ariyani, 2010).

H5: OEOI Negatively Affects Financial Performance and Positively on IMFI's Social Performance

Zakat

The various redistributive economic policies pursued by means of conventional taxation have aspired to obtain a minimum of social inequalities and a maximum of economic stability; several studies and global statistics have shown that, to date, they have failed or at least failed to achieve the expected results. The historical study of zakat applied in an Islamic state, shows that when this application is carried out according to the strict rules dictated by the revelation, it had in the past made it possible to solve the problems of inequality. A mathematical formalism taken directly from the Qur'anic verses related to the distribution of zakat, shows that one can develop an economy based on zakat as a constant tax applicable to all goods from a threshold (the Nissab) and a redistribution of this same zakat collected according to the priorities fixed by the order of the verse. The implementation of this zakat solidarity economy is a powerful means not only to fight against poverty and social inequalities, but also a factor of economic growth through the decline of this same poverty.

Aimatul Yumna (2011) considers how Islamic religious beliefs through social inequalities can provide a constitutive force for poverty reduction. Specifically, it considers how Islamic funding principles and charitable obligations (including zakat) can be integrated into the activities of a microfinance institution in order to improve the financial viability of the organization, but especially to improve the results of the fight against poverty achieved by the organization. By integrating Islamic financial principles and microfinance activities with Islamic charity, Aimatul Yumna showed that it is possible to pursue the twin goals of raising

awareness and strengthening sustainability and attempting to resolve the debate between institutionalist and welfarist view at the initiative of microfinance.

H6: Zakat positively affects the financial and social performance of IMFI

2. Description of Data and Methodology

The selected sample consists of 11 MFIs I that specialize in the microfinance sector and have integrated the zakat distribution. The data needed for our research are obtained from the database: The Indonesian Central Bank.

2.1 Description of the sample

This work aims to identify the factors that explain the financial and social performance of IMFI Indonesia. The availability and quality of the information prompt us to build our sample from the Indonesian IMFI listed by the MFI that regularly distributed zakat throughout the study period. To have a large number of observations, we focus our study on the period of 20 quarters between 20011 and 2015.

2.2 Model used and description of the variables

This section presents the model used as well as the variables, selected:

a) Econometric model

The data used is that of 11 IMFI Indonesian microcredit (5 IMFI of Province Java west, 3IMFI of Province Java tengah and 3 IMFI of Province Timur) for a period of 20 quarters of 2011 - 2015. We therefore use panel data, also called as longitudinal data. This type of data is characterized by their double dimension: an individual dimension and a temporal dimension. Panel data represents a combination of snapshot data and time series. They allow to observe several entities (in our case, IMFI) over a period of time (in our case, from 2011 to 2015). We speak of a balanced panel when the panel displays the same number of observations for all individuals.

On the other hand, we say unbalanced panel when some observations are missing for one or more individuals.

Gujarati (2003) cites a set of benefits related to the use of panel data over those that constitute a snapshot or time series, among these benefits we report:

- 1) The estimation techniques of panel data can explicitly take into account the heterogeneity of the units making up the sample;
- 2) The availability of panel data provides more informative data, more variability, more degree of freedom and more performance, less collinearity among variables.
- 3) Repetitive snapshot control allows panel data to be more capable of researching the dynamics of change;
- 4) Panel data can easily detect and measure effects that are not easily observable in time series or snapshot data.

In summary, social and financial performance as well as tradeoffs can be explained using the following model

$$y_{it} = a_{0i} + a'_{i}x_{it} + \epsilon_{it}$$

With:

i = 1, ..., 11 (Indonesian IMFIs);

t = 1, ..., 20 (the quarters from 2011 to 2015);

y_{it}: the performance of IMFI i observed at the date t;

x_{it}: vector of K exogenous variables (explanatory variables).

$$x_{it} = (x1_{it}, x2_{it}, \dots, xk_{it}) ;$$

a_{0i}: constant term (the constant) for IMFI i;

[A ']_i: vector of K coefficients of K explanatory variables.

$$a'_{i} = (a_{1i}, a_{2i}, \dots, a_{Ki}) ;$$

ϵ_{it} : the error term

$$Performance_{it}^{F/S} = \alpha + \beta_1 \text{chargpers}_{it} + \beta_2 \text{NPF(PAR90)}_{it} + \beta_3 \text{OEIE}_{it} + \beta_4 \text{FDR}_{it} + \beta_5 \text{taille}_{it} + \beta_6 \text{zakat}_{it} + \epsilon_{it}$$

The specification of this model takes into account the influence of several fixed characteristics over time on the performance of MFIs. As a result, the random effects method with heteroscedasticity (Kohler and kreuter 2009, Grenne 2011).The variables used are:

Table 1: Indicators of social and financial performance

Variables	Definitions
Indicateurs de performance financière	
ROA	Return On Assests
ROE	Return on equity
Social performance indicators	
Number of Staff	The number of people who are actively used by the MFI. This includes contract employees or advisors who spend the majority of their time on the MFI, even if they are not on the MFI list of employees
Amount of funding	Total financing
Amount of deposits	The reach of an MFI is a source of the number of clients served. They can be borrowers as well as depositaries
Financial variables	
Personalexpenditures	The sum of personal expenses
NPF (Non-performingfinancing)	(Total NPL / Total Funding): Measures the level of doubtful debt: the smallest means the best performance
FDR	To measure the depth of awareness from the ability of clients repaid their withdrawals uses FDR to determine the ability to repay the loan by the borrower.
OEOI(Operating cost /operating income)	The relationship between operating expenses and operating profits
Categorical variables	Total Assets (Size)

b) The dependent variables

In microfinance, performance is measured in terms of reach - social mission - and viability and profitability - financial performance - (Hartaska; 2005; Cull et al; 2007; Mersland and Strom; 2009)

Financial sustainability

The ROA measures the capacity of an MFI to generate profits from its assets while the return on equity ratio (ROE) measures the financial return on investments made in the institution which is particularly important for shareholders. However, these two indicators "overestimate" the financial performance of the MFI, they do not necessarily take into account donations, subsidies which should be incorporated into these ratios (Boyé et al., 2006 Hartaska., 2005)

Scope of IMFI

The task of IMFI is fundamentally social. This task is to help the economically vulnerable to integrate into economic life and improve their living conditions. Targeting microfinance institutions does not only concern the poor but also the excluded, including women, the illiterate, the rural, the non-self-employed, etc. (Iserte and Lapneu, 2003).

According to Yaron et al. (1997), reach is considered a mixed measure that assesses an institution's ability to reach its target customers and its level of satisfaction of its customers's needs for financial services. The scope indicators retained in the model are both qualitative and quantitative and can be used to measure the degree of scope and its extent.

The literature suggests a large number of agents for measuring these two dimensions of reach. However, it is very important to show that the scope is often assessed by the total number of clients served by an MFI and that the extent of the scope is more ambiguous. Generally the degree of reach is measured by the average size of loans or by the average size of deposits or the average size of loans as a percentage of GDP per capita. These measures are widely used, but sometimes they can be unreliable indicators. In fact, not all loans have the same duration and their use varies from one client to another. They cannot reflect the income level of the clientele (Ledgerwood, 1999).

Numerous articles have examined the factors that affect the reach of MFIs, notably Hartarska et al (2007) and Strøm (2009). Hartarska and Nadolnyak (2007) found that regulation of the microfinance sector does not directly affect the reach of MFIs. However, the results also show that MFIs that collect deposits from savers reach more clients. However, for an MFI to collect deposits, it must comply with a set of conditions defined by the legislator, this result can be considered as indirect proof of the impact of the regulation of MFIs on their scope.

The clients served by the MFI, whether borrowers or custodians, represent a benchmark of scope for an MFI. In the case of Indonesia, the IMFIs are authorized to collect deposits. The Indonesian IMFI protege therefore refers to the number of borrowers and therefore the deposit amounts. Generally when the number of clients of a microfinance institution increases, more MFIs can benefit from economies

of scale and cover their fixed costs and make a profit. Likewise, when the scope of services of an IMFI is important, social performance improves and financial results are good, and consequently IMFI will have additional resources which will allow it to increase both the degree of its scope and extent. Here, the totals of deposits and funding are used to resemble the breadth of awareness. Like the above studies, in our own study we use the following variables to measure the social performance of Indonesian IMFIs:

- The total balance of deposits (Dep.) And the amount of funding as proxy for the degree of scope of services of these IMFIs;
- The number of personnel (NobPers) to assess the extent of the scope of IMFI.

c) The Explanatory Variables

For the purposes of our research and given the particular case of IMFI, we have retained the variables which are most relevant in our case.

In what follows, we present the origins and measures of the various variables selected.

The specification of the models rests on a collection of indicators which have classified as if: financial variables, categorical variables.

Financial variables

For the financial variables, the ratio of personal expenses as an indicator of wages, the total of non-performing loan (NPL) which is the sum of the borrowed money for which the debtor has not made his regular payments for at least 90 days compared total funding, which measures the level of bad debt that needed to be reserved. The smaller this report, the better the performance of the MFI.

The ratio between operating expenses and operating profits (OEIO) is often called the efficiency ratio is used to measure the management capacity of MFIs in controlling operating expenses to operating profit (Dendawijaya ; 2003), the increase in the ratio reflects a lack of capacity of MFIs to reduce operating costs and increase operating profit, which can result in losses for the MFI is less efficient in managing their business .

The FDR is the ratio between total financing and total deposits that measures the ability to repay bank withdrawals by customers with relying on loans as a source of cash. Generally when the number of clients of a microfinance institution increases, more MFIs can benefit from economies of scale and cover their fixed costs and make a profit.

Categorical variables

Size (Total active)

Idris et al. (2011) carrying out research on Islamic MFIs in Malaysia. There has been a positive effect between firm size and performance (Ahmed et al., 2011); (Syafri, 2012). While Ani et al. (2012) and Akhtar et al. (2011) found no significant relationship between the size and performance of firms. We do not foresee the direction of the relation of this variable with performance

3. Descriptive Statistics

Before analyzing the regression results, we study the correlations between the variables

Autocorrelation table

. corrroa roe tail ch_persdépôts __zakat __oeienpffdrfinanpers

(obs=188)

| ROA ROE TailleCh-PersDépôts Zakat OEIE NPF FDR TOT FIN NbPers

ROA	1.0000										
ROE	0.1502	1.0000									
Taille	0.0671	0.1712	1.0000								
Ch-P	0.0483	0.0918	0.4679	1.0000							
Dép	0.0728	0.1865	0.9471	0.5336	1.0000						
Zakat	-0.0700	0.0502	-0.3876	-0.0717	-0.3217	1.0000					
OEIE	-0.0904	-0.2856	-0.2191	-0.1201	-0.2252	0.1618	1.0000				
NPF	-0.1351	-0.3873	-0.3813	-0.2113	-0.3879	0.2217	0.6031	1.0000			
FDR	0.2519	0.2657	0.0812	0.0242	0.1136	-0.0453	-0.0917	-0.1103	1.0000		
TOT FIN	0.1242	0.2651	0.7679	0.4444	0.8239	-0.1917	-0.1808	-0.3432	0.4551	1.0000	
NbPers	-0.0160	0.0442	0.4467	0.1621	0.3412	-0.3999	-0.1196	-0.3102	0.0701	0.2265	1.0000

The table above presents the matrix of correlations between the different variables discussed in our research study. The matrix shows that the two variables used to measure the financial performance of IMFI's (ROA and ROE) have a positive correlation equal to 15.02%. These two variables are also positively correlated with the FDR index. This indicator has a correlation equal to 0.2519 with ROA and 0.2657 with ROE.

Among the other highest correlations, we include those of total assets with total deposits with a correlation of 0.9471 and with the total funding of 0.7679 and between the latter two of 82.39%. In fact, the size of an IMFI can be measured by its total assets, or by its number of active clients.

Reading the correlation matrix shows us that ROA is negatively affected by NPF and OEIE and positively by FDR, size and personal load. The same remark is observed for the other measure of financial performance, ROE. Then, the extent of the scope (Nob Per) is positively influenced by personal load, deposits, FDR and total assets. Finally, the degree of scope, measured by the total amount of deposits and the total amount of funding is positively influenced by total assets and personal expense and FDR, and negatively by NPF and OEIE.

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Estimates of the determining factors of financial viability and social performance

a) The determining factors of financial viability

We are currently focusing on the factors that explain the financial performance of Indonesian IMFI's. To do this, we use quarterly panel data from eleven Indonesian microfinance MFIs over a period of five years (2011 - 2015). We are looking to find the impact of personal charges, FDR, NPF, scope, OEIO, quality of the FDR loan portfolio, size on the financial performance of Indonesian IMFI's.

Table 2: Financial and social performance

	Roa	Roe	deposits	Financement	Number of staff
size	0.664	0.000	0.000	0.000	0.000
Personal Expenses	0.427	0.084	0.021	0.007	0.480
Zakat	0.223	0.003	0.097	0.000	0.249
OEOI	0.934	0.414	0.199	0.134	0.732
NPF	0.479	0.000	0.001	0.009	0.610
FDR	0.000	0.017	0.351	0.000	0.790
Observations	188	188	188	188	188
IMFI numbers	11	11	11	11	11
R-sq : between	0.1510	0.6938	0.9687	0.9052	0.2723
Prob> chi2	0.0000	0.0000	0.0000	0.0000	0.0000

Source: author's work

• Non Productive Financing (NPF)

Among the six variables analyzed, one is significant at the 1% level for ROA and five are significant for ROE. This is the variable measuring dependence on non-performing financing which measures by the ratio between the nonperforming loan (NPL) and total financing. This variable has a negative sign, thus, the more an IMFI has a weak index more important is its financial performance measured by the ROA ratio and its ROE financial viability. We therefore note that the non-performing loan penalizes the financial variability of IMFIs. In fact, according to Table 2, a 10% deterioration in non-productive financing generates a 36.46% drop in profitability through the return on assets. This influence can be explained by the speed of contagion in the sector (chen et al 210); on the one hand, cautious, troubled IMFIs recruit less risk clients to preserve the quality of their portfolio (with staff more assigned to debt collection than to the start-up of new clients), on the other hand IMFI in difficulty, the poorest prefer to wait for better conditions to take out a loan. The higher FNP has shown more funding problems and the larger reserve should be provided for the elimination of debts, which could potentially further reduce the level of profit.

• FDR

The second variable which is very significant is the FDR variable which measures the capacity to reimburse bank withdrawals by customers by the ratio of total financing to total deposits. This variable has a significant positive sign on ROE and on ROA. A 10% increase in FDR results in a 17.15% increase in ROE (table n ° 2) and 18.10% in ROA (table n ° 28). So good cash management right from IMFI will be able to meet the financing needs for clients who intend to take their funds at any time and provide funds to honor their financial commitments.

• Size (TOT active)

The third variable is size, which measures the total assets to have a significant positive effect on ROE at 1%. In fact, according to Table 2, a 10% increase in total assets translates into a 147% increase in ROE. There is no significant sign of this factor on ROA.

• Personal burden

The fourth variable is personal expense, which has a very significant impact on financial performance of 0.084. According to Table 2, we see that a 10% increase in wages translates into a drop of 27.85274% in ROE. This effect is not surprising since salaries are the most important item of expenditure in microfinance. There is no significant effect of this factor on ROA.

• Zakat

According to Table 2, zakat has a significant effect on ROE from 0.003 to 1%. A 10% increase in the amount of zakat increases the financial performance by 34, 782%. Hassan

(2010) notes that the Islamic approach to poverty reduction ideally involves comprehensive approaches to PBRs, including increasing incomes with pro-poor programs, ensuring equitable income distribution and equal opportunities for all social segments.

b) The determining factors of social viability

The social performance of a microfinance institution includes two elements: the degree of reach (total funding and deposit amounts) and the extent of reach (number of employees)

The degree of the range

The regression shows that the variables influencing the total deposit the total financing are the personal burden, the zakat, the size (TOTACT) of an IMFI and MFN as well as FDR.

Personal burden

The poorest are generally excluded from the formal financial system for geographic, social or cultural reasons. The deepening of the scope therefore necessarily involves the intervention of qualified agents, pedagogues (financial education) and mobile. Indeed, the selection, training of clients and reimbursement follow-up requires the involvement of qualified and versatile staff, for an MFI, competent agents are necessary both to ensure social performance (contact with the most distant clients This is true for IMFIs which have a significant positive effect of wages on social performance. It's the extended sign. Indeed, a 10% increase in salaries increases 36.59% of total funding (table no. 3) and 26.99% of deposits (table no. 3). This may explain by greater physical and social barriers in this region (Armendariz and Azafars, 2011)

Size (TOT active)

Size (active TOT) has a significant and positive effect on total deposits and total financing. In fact, according to Table 3 and Table4, a 10% increase in total assets positively affects 9.7% of the total amount of deposits and 9.43% of total financing.

FDR

FDR affects positively on the total funding. This is explained by the ability of customers to reimburse bank withdrawals. According to Table 3, a 10% increase in FDR increases the total amount of funding by 8.925%.

These results show that the IMFIs which are large and which have a larger loan amount have a higher total deposit. Thus, these IMFIs mainly target customers who have the capacity to borrow larger sums. In this case the risk is to neglect the poorest segment of the population and to focus on the segment which is the most profitable, ie the clients who can borrow larger amounts. On the other hand, there is a risk of occurrence among customers who borrow amounts more than their repayment capacity

Table 3: Degree of range regression result

The dependent variable is total deposits. The independent variables are Tail: total active; personal expenses; zakat; OIEI (Operating cost / operating income) is The size of operational efficiency; NPF5 Total NPL / Total Financing); FDR (Total financing / total deposits)
 Xtglsdépôts tail ch_pers __zakat __oeienpffdr, panels(h)
 Cross-sectional time-series FGLS regression
 Coefficients: generalized least squares
 Panels: heteroskedastic
 Correlation: no autocorrelation
 Estimated covariances = 11 Number of obs = 188
 Estimated autocorrelations= 0 Number of groups = 11
 Estimated coefficients = 7 Obs per group: min = 14
 avg = 17.09091 max = 19
 Wald chi2(6) = 3580.16 Prob> chi2 = 0.0000

Dépôts	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Tail	.9784697	.021838	44.81	0.000	.935668 1.021271
ch_pers	.0269987	.0117373	2.30	0.021	.003994 .0500034
_zakat	.0140866	.0084942	1.66	0.097	-.0025618 .030735
oeie	.048768	.0379656	1.28	0.199	-.0256432 .1231792
npf	-.0043308	.0013564	-3.19	0.001	-.0069893 -.0016722
Fdr	.000256	.0002744	0.93	0.351	-.0002819 .0007938
_cons	-.5167143	.2182549	-2.37	0.018	-.9444861 -.0889425

• Non Productive Financing (NPF)

According to the two tables 3 and 4, Non-Productive Financing (NPF) has a significant and negative effect on

total deposits and total financing. Indeed, a 10% decrease in Non-Productive Financing negatively affects 0.433% of the total amount of deposits and 0.548% of total financing.

Table 4: Result of the extended range regression

The dependent variable pers is the numbers of staff. The independent variables are Tail : total actif ; charge personnels ; zakat ; OIEI (Operating cost / operating income) est La taille de l'efficacité opérationnelle ; NPF (Total NPL / Total Financement) ; FDR (Total des financements / total dépôts)
 Correlation: common AR(1) coefficient for all panels (0.7888)
 Estimated covariances = 11 Number of obs = 188
 Estimated autocorrelations= 1 Number of groups = 11
 Estimated coefficients = 7 Obs per group: min = 14
 Avg = 17.09091 max = 19
 Wald chi2(6) = 21.57 Prob> chi2 = 0.0014

Pers	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
Tail	.0654233	.0156186	4.19	0.000	.0348115 .0960352
ch_pers	-.0015876	.0022475	-0.71	0.480	-.0059927 .0028175
_zakat	-.0036964	.003204	-1.15	0.249	-.009976 .0025833
oeie	.0040951	.0119459	.34	0.732	-.0193184 .0275086
npf	-.0004449	.0008714	-0.51	0.610	-.0021528 .001263
Fdr	.0000171	.0000639	0.27	0.790	-.0001082 .0001423
_cons	1.085445	.1627648	6.67	0.000	.7664315 1.404458

4. Zakat

Another important advantage of this model for Islamic MFIs is the availability of various sources of funding. Islamic MFIs can use this fund as complementary funds to finance activities (such as investment) such as helping the poor in their basic needs, training actions to improve their competence in community development activities and the capacity of the 'borrower. In addition, these additional funds will reduce the possibility of using non-performing loans (Ahmed, 2002). As a result, the default rate can be minimized.

By the use of combined sources of funds, the institution could provide both business and social services. Commercial services offer various financial services such as savings products, financing plans and commission products for the economically active poor of the population. Meanwhile, social services are designed to improve the well-being of the extremely poor and to increase their capacities and skills in

carrying out productive activities. After having the required skills, it is expected that some of the extremely poor people can start a new microenterprise and scale up to the wealthier group of the poor. Those who can express, according to Tables 3 and 4, that a 10% increase in the amount of zakat affects positively an increase of 1.4% in the amount of deposits and 4.64% in funding (social services).

c- Implications for Indonesian IMFIs

The pooling of the results found, Table 30, shows that the factor that most influences the performance of Indonesian IMFIs, in all its forms, is FDR. The use of the increase in FDR allows IMFIs to reach a larger number of clients following an increase from its staff and thus have a very wide reach. Meanwhile, when the FDR is increased shows a larger amount loaned, which improves the financial situation of the establishment. These results confirm hypothesis 5 which predicts a positive relationship between FDR and both social and financial performance. The size or

the total assets is favorable to the extent and the social degree as well as the financial performance

Table 5: Summary table of regression results

Determinants	Financial performance		Social performance		
	ROA	ROE	Total deposit	Total funding	Number of employees
Total assets		+	+	+	+
Personal Expenses		+	+	+	
Zakat		+	+	+	
NPF	-	-	-	-	
FDR	+	+	+	+	
OIOE					

Positive and negative signs respectively indicate that the indicator has a positive or negative relationship with the performance concerned

5. Conclusion

Indonesia has enjoyed vigorous and stable growth in the 15 years since the Asian crisis. This performance was made possible, to a large extent, by the public policy reforms undertaken during this period, including the establishment of a solid macroeconomic framework. Growth was largely driven by domestic demand, with household consumption in particular providing a firm and solid foundation. Labor market conditions have improved and these advances, combined with the increased effectiveness of poverty reduction programs, have helped to strengthen household incomes and confidence.

This research considers how the products of Islamic finance through social inequalities can provide a building block for poverty reduction. More specifically, this document considers how Islamic fundraising principles and charitable obligations (including zakat) can be integrated into the activities of a microfinance institution in order to improve the financial sustainability of the organization, but above all to improve the results of the fight against poverty obtained by the organization.

In this context, achieving social balance is a requirement of the Islamic economy. Social redistribution is achieved at the microeconomic level, through direct assistance or expenditure to parents, orphans and the poor. The individual surpluses are distributed according to the family and neighborhood criteria. This translates into special management of poverty. The redistribution of Zakat's resources ensures overall social balance. The economic and social sectors link a complementary relationship: the economic sector feeds by its social sector surplus which, by its absorption capacity, constitutes an instrument for reviving economic activity and therefore a guarantee of the sustainability of production. This relationship is similar to that described by Al Suwailem (2011) between the profit sector and the non-profit sector.

Zakat is the backbone of Islamic finance which it structures, regulates and guarantees, in addition to its traditional social function.

By integrating Islamic financial principles and microfinance activities with Islamic charity, this document has shown that it is possible to pursue the twofold objective of increasing awareness and strengthening sustainability and to try to resolve the debate between institutionalist and welfarist view at the initiative of microfinance.

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