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Joint Liability Based Financing To Prevent Non-Performing Financing In Bank Wakaf Mikro

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Abstract

The Indonesian government has made various efforts to reduce it, one of which is establishing a Micro Waqf Bank. The focus of the establishment of the Bank Wakaf Mikro is to empower the poor by providing assistance and providing microfinance for productive activities. Interesting to assess is the financing mechanism applied, namely joint liability. The purpose of this study is to examine whether joint liability-based financing can prevent non-performing financing. Data were collected from 215 respondents from Micro Waqf Bank customers in Magelang Regency. Data analysis was carried out statistically by using Structural Equation Model (SEM) Partial Least Square. The results show that joint liability-based financing has a significant effect on preventing non-performing financing. This means that joint liability based on Bank Wakaf Mikro can prevent defaults or non-performing financing. This means that joint liability based on the distribution of fund financing by Bank Wakaf Mikro can prevent defaults or non-performing financing. Problem financing in joint liability-based financing can be prevented because of the necessity of forming a group when applying for financing, so prospective customers will choose group members who have integrity and can be trusted.

Keywords:

Joint Liability; Non-Performing Financing; Micro Waqf Bank

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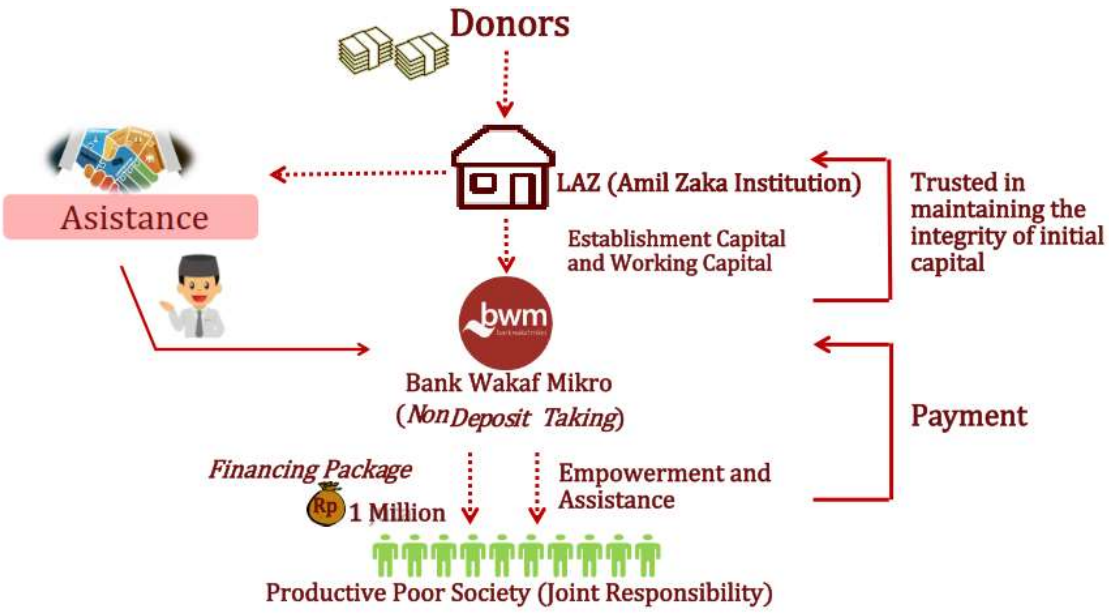
JEL: L31, G23, G41

1. Introduction

The Indonesian government has made various efforts to reduce poverty; the most recent is establishing a Bank Wakaf Mikro hereinafter abbreviated as BWM (OJK, 2018). The establishment of BWM is to empower the poor by providing assistance and providing microfinance for productive activities. The source of financing from BMW is profit sharing from sharia deposits, profit sharing from financing, and other income (OJK, 2018). In its implementation, BWM cooperates with Islamic boarding schools as the frontline.

The Financial Services Authority cooperates with Islamic boarding schools in implementing the BWM program because of the great potential of Islamic boarding schools in community empowerment. This potential can be seen from the number of Islamic boarding schools that have reached 28.194 (OJK, 2018). Apart from the large number, the function of Islamic boarding schools is not only to carry out education but also to have the function of community empowerment (UU No. 18 Tahun 2019). This empowerment function is a manifestation of Islamic teachings, especially in helping each other in goodness (Muhtifah et al., 2015). In order to realize this function, the *Pesantren* also offers non-religious lessons, such as agricultural skills, vehicle repair, and other activities (Tan, 2014).

As of September 2019, BMW in Indonesia reached 53 units, and 12 of them were in Central Java Province (OJK, 2019b) including in Magelang Regency. In order to support its business processes, BWM received an allocation of Rp.4,000,000,000. The funds are then divided into two, with a composition of Rp.1,000,000,000 distributed to the community and Rp3,000,000,000 into endowments deposited in Islamic banks. In general, the business scheme of BWM can be seen in Figure 1:



Source: Financial Services Authority (2018)

Figure 1. Scheme of Bank Wakaf Mikro

The presence of BWM is expected to overcome poverty so that it can realize community welfare, especially for small communities. BWM was established to provide access to finance for small communities that have had difficulty accessing capital in the formal sector (OJK, 2019a). With this access to capital, it is hoped that the presence of BWM can at least reduce poverty and improve people's welfare. Study conducted by Zayanie et al.,

(2019) proves that the presence of BWM is beneficial for the community in accessing micro-scale financing. The presence of BWM also has a positive impact on increasing people's income (Yeubun et al., 2021).

Compared to other microfinance institutions, BWM is unique in providing its financing. The uniqueness is that the distribution of financing is *tanggung renteng* (Rozalinda & Nurhasnah, 2020) which in this study is called joint liability. Joint liability is basically one of the many ways to avoid problems that arise in the distribution of financing. Small communities, in general, do not have access to financing because they do not have collateral and do not have adequate financial records (Ghatak & Guinnane, 1999). By means of joint liability, even people who do not have collateral can obtain financing.

The distribution of joint liability financing has two advantages when compared to the distribution of individual financing. The first advantage is that group members may know more about other members (i.e., each other's types, actions, and status) than other people. The second sanctions given to members who are unable to pay are the responsibility of fellow group members (Ghatak & Guinnane, 1999).

Joint liability is the highest embodiment of trust and a sense of loyalty among members of the group. The benefits of the joint responsibility system are to strengthen group cohesiveness and trust from outsiders to members. The implementation of joint liability models requires strong social control; therefore, this system will work effectively if applied in a group with a unifying bond and strong ties of interest (Saripudin, 2013). The research results conducted by Srivastava and Samanta (2015) prove that the application of joint liability financing can increase trust and solidarity. Furthermore Kumar (2012) states that joint liability has its own uniqueness and is different from others.

BWM has provided assistance to the community's economic empowerment through the provision of training for prospective customers. In practice, the financing of financing by BWM begins with the formation of groups, and this is the main condition for obtaining financing (Rozalinda & Nurhasnah, 2020). Prospective customers must create a group called *Kelompok Usaha Masyarakat* in the vicinity of the Islamic boarding schools hereinafter referred to as KUMPI before applying for financing. The minimum number in one KUMPI is 5 people. It doesn't stop there; every KUMPI is required to hold a weekly meeting called *Halaqoh Mingguan* hereinafter referred to as HALMI. HALMI activities are in the form of weekly installment payments and also the delivery of materials such as religious studies, business development, and others (OJK, 2018).

The joint liability financing model is a group financing distribution system in which all group members are responsible if one of the group members is unable to pay (Attanasio et al., 2015). This mechanism basically benefits financiers because of the low risk of non-performing financing. This is because if one member is unable to pay, the other members are also responsible for making payments. Thus, joint liability can avoid problematic financing because the selection stage for group members is carried out strictly so that each group will get credible and trustworthy members. The results of research conducted by Ghatak & Guinnane (1999) show that joint liability models allow for better repayment rates than individual loans. Likewise, the research conducted by Bayer & Shatragom (2013) which states that the shared responsibility model can increase payback. This is because the shared responsibility model in financing will increase trust and solidarity (Srivastava & Samanta, 2015).

Research related to joint liability-based financing to prevent non-performing financing in micro waqf banks is important to do because research with this theme is still little done.

The majority of studies on BWM are related to the impact of BWM on the economy, as research conducted by Zayanie et al., (2019) Yeubun et al., (2021), Dewanti et al., (2021) and Apriliawan et al., (2021). Thus, research on the extent to which the application of joint liability-based financing in preventing the occurrence of non-performing financing is important to do.

2. Method

The research approach used in this study is quantitative. Quantitative research is quantitative research which is in the process of analyzing data using numbers and analyzed using statistical methods (Apuke, 2017). Meanwhile, Williams (2007) provides an understanding that quantitative research involves collecting data so that information can be quantified and analyzed using statistics to support or refute alternative hypotheses. In quantitative research, research activities begin with a statement of the problem, determine hypotheses or research questions, review related literature, and conduct analysis.

The method used in this research is a survey method. Survey research uses a scientific sampling method with a questionnaire designed to measure the characteristics of a particular population through the use of statistical methods (Sukamolson, 2007). Basically, survey research is used to describe quantitatively the population and then study the relationship. In the survey research method, data is obtained from the research sample which is part of the population. From the sample, it is then used to generalize the entire population (Apuke, 2017).

The population in this study were all members of KUMPI at BWM in Magelang Regency, amounting to 219. Due to the small size of this population, in this study, all sampel numbers were used as research samples. In the Structural Equation Modelling (SEM) analysis, the number of samples required is relatively large (Santoso, 2011). Conceptually, SEM analysis requires at least 100-200 samples (Kusnendi, 2005); thus, the number of samples of 219 is considered adequate.

Joint liability variables in this study were measured using indicators compiled by Kritikos & Vigenina (2005) which consists of 1) group quality, 3) informasi, 4) *monitoring*, 5) *peer control*, 6) *Peer Pressure* dan 7) *Peer Support*. Meanwhile, non-performing financing in this study was measured by the indicators presented by Angaine & Waari (2014) which consists of *1) Complete non repayment. 2) Late payment. 3) Payament after intervension measures* The research questionnaire was prepared according to the indicators mentioned in the operational definition of the variables. The research questionnaire will be measured using a Likert scale with five answer options, namely "Strongly Agree" with a value of 1, Agree with a value of "2", Neutral with a value of "3", Disagree with a value of " 4" Strongly Disagree with a value of "5".

Data analysis in this study used Structural Equation Modelling (SEM). SEM is a statistical model used to perform multivariate data analysis and involves complex variables (Hoyle, 1995). SEM has advantages compared to traditional regression models because it can test hypotheses about the relationship between observed variables (Carvalho & Chimma, 2014). To analyse the research data, the PLS structural equation model (SEM) analysis was used with the help of Smart PLS 3 software. Using PLS-SEM in this study was that it was easy to use and could overcome abnormal research data (Henseler et al., 2009).

Before testing the hypothesis using SEM PLS analysis, it is necessary to test the quality of the research data. The quality of research data must meet the criteria of validity and reliability. In SEM PLS, there are two data validity tests, namely convergent validity and

discriminant validity tests (Hair et al., 2011; Purwanto, 2021). An indicator can meet the criteria for convergent validity if it has a composite reliability value and a factor loading value greater than 0.7 and has an AVE average variance extract value greater than 0.5 (Hair et al., 2011). Meanwhile, the test results of the discriminant validity criteria can be seen from the cross-loading value and the Fornell-Larcker criteria. Fornell-Larcker must be a correlation between variables with the square of AVE. The correlation of each variable with AVE must be more than the correlation of other variables (Chawla & Joshi, 2018). The cross-loading criteria can be met if each indicator has a higher value when compared to indicators on other variables. Meanwhile, the validity test was carried out by looking at the Cronbach value. Data is said to be reliable if it has Cronbach greater than 0.7 (Lin & Huang, 2008).

3. Result and Discussion

Profile of Respondents

The planned sample in this study was 219, but up to the data collection limit, only 215 data were collected. Detailed information concerning the profile of respondents is shown in Table 1.

Table 1. Profile of Respondents

Variables	Category	N	Percent
Sex	Male	0	0
	Female	215	100
Status in family	Head of family	0	0
	Housewife	215	100
	Family members	0	0
Age	< 20 years	0	0
	20-30 years old	2	0.93
	30-40 years old	43	20.00
	40-50 years old	135	62.79
	50-60 years old	35	16.28
	> 60 years	0	0
The last Education level	Elementary school	98	45.58
	Junior High School	90	41.86
	Senior High School	12	5.58
	Other	15	6.98
Business fields	Farmer	65	30.23
	Services	30	13.95
	Culinary	115	53.49
	Other	5	2.33
Income Range	<IDR 500,000	35	16.28
	IDR 500,000-IDR 1,000,000	30	13.95
	IDR 1,000,000 to IDR 1,500,000	125	58.14
	IDR 1,500,000 to IDR 2,000,000	10	4.65
	more than IDR 2,0000,000	15	6.98

Estimation of Measurement And Structural Model

Before conducting the test, the validity and reliability were tested first. The validity test in

this study was seen by conducting a convergent validity test and a discriminant validity test. Convergent validity in this study is determined by the value of composite reliability and average variance extract (AVE). An indicator can meet convergent validity if it has composite reliability and a loading factor greater than 0.7 and an AVE of 0.5. (Hair et al., 2011). The test results, as can be seen in table 2 can be seen that the JL7 indicator has a loading factor of less than 0.7 so that the indicator must be removed. After the JL7 indicator is removed, the results show that the composite reliability, and average variance extract (AVE) values all exceed the specified threshold. Thus, all indicators in this study have met the criteria of convergent validity. Meanwhile, the discriminant validity test results show that the cross-loading value has a higher value than the indicators on other variables (shown in Table 4). Meanwhile, the results of testing the discriminant validity of the Fornell-Larcker Criteria also found that the correlation between variables with AVE squared was higher than other variables (Chawla & Joshi, 2018), so that the discriminant validity Fornell-Larcker criterion in the study has been fulfilled the requirements (shown in Table 3).

The results of the reliability test using show that all variables have Cronbach α values greater than 0.7 (shown in Table 2). Cronbach α values which is greater than 0.7 indicates that the indicators in the study are declared reliable (Lin & Huang, 2008). Thus, it can be said that the research model has valid and reliable indicators.

Table 1. The Measurement Model

Construct	Item	Item Deleted	Loading	CR	AVE	Cronbach's Alpha
Joint liability	JL1		0.803	0.918	0.652	0.893
	JL2		0.881			
	JL3		0.843			
	JL4		0.838			
	JL5		0.737			
	JL6		0.732			
		JL7	0.671			
Non-Performing Financing	NPF1		0.799	0.896	0.741	0.827
	NPF2		0.895			
	NPF3		0.886			

Table 2 shows that the research has met the rules of thumb in the reflective measurement models. According Hair et al (2011) rules of thumb for reflective measurement models consist of internal consistency reliability which can be seen from Composite reliability should be higher than 0.70. Indicator reliability can be seen from indicator loadings should be higher than 0.70. Convergent validity which can be seen from the average variance extracted (AVE) should be higher than 0.50. Discriminant validity which can be seen from the AVE value of each latent construct should higher than the construct's highest squared correlation with any other latent construct (Fornell–Larcker criterion) (shown in Table 3). An indicator's loadings should be higher than all of its cross loadings (shown in Table 4).

Table 3. Fornell-Larcker criterion

Construct	JL	NPF
Joint liability	**0.808**	
Non-Performing Financing	0.458	**0.861**

Source: Research data that is processed (2021)

Notes: Diagonal values are squared roots of AVE; off-diagonal values are the estimates of the inter-correlation between the latent constructs. JL=Joint Liability, NPF= non-performing financing

Table 4. Measurement Model Cross Loadings

Construct	JL	NPF
JL1	**0.803**	0.343
JL2	**0.881**	0.332
JL3	**0.843**	0.349
JL4	**0.838**	0.297
JL5	**0.737**	0.413
JL6	**0.732**	0.431
PNPL1	0.305	**0.799**
PNPL2	0.419	**0.895**
PNPL3	0.440	**0.886**

Table 4 provides information that the research indicators have met the criteria for discriminant validity by looking at the cross-loading value. The results of the discriminant validity test show that the cross-loading value has a higher value than the indicators in other variables (show numbers in bold).

Assessment of the Significance of the Structural Model

Based on the results of the analysis obtained, the study results are shown in Table 3.

Table 5. *Structural Relationship*

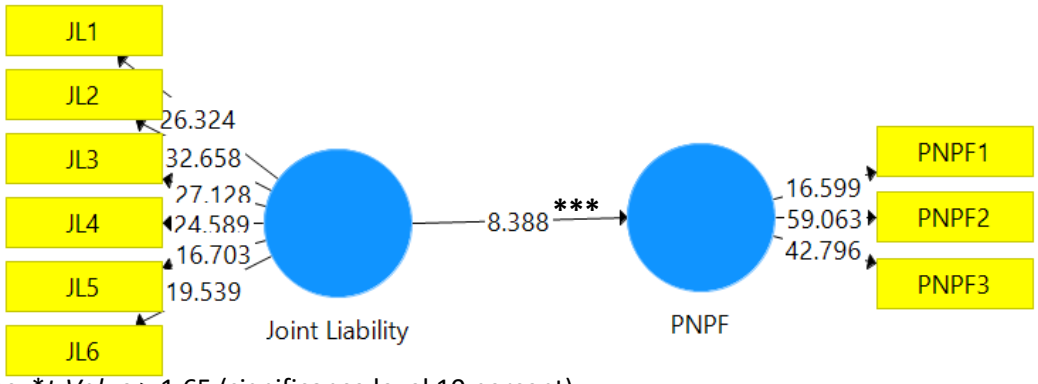
Hypothesis	Std Dev	Beta	T Stat	P Value	Results
JL -> NPF	0.055	0.458	8.338**(> 2.58)	0.000	Accepted

Notes: **t-Value* > 1.65 (significance level 10 percent)

** *t-Value* > 1.96 (significance level 5 percent)

****t-Value > 2.58* (significance level 1 percent)

Used bootstrapping to assess the path coefficients' significance. The minimum number of bootstrap samples is 5,000, and the number of cases should be equal to the number of observations in the original sample. The critical t-value for the two-tailed test obtained a result of 8.338 which means it is greater than 2.58. Thus, it can be concluded that the research hypothesis states that joint liability-based financing has a significant effect on the prevention of funding non-performing. This result is confirmed by the results of hypothesis testing as shown in table 5 where joint liability-based financing (JL) has a significant positive effect on the prevention of non-performing financing (PNPL) (β = 0.458, t = 8.100 (> 2.58), supporting the hypothesis. The final result of this research is described, as shown in Figure 2.



Notes: **t-Value* > 1.65 (significance level 10 percent)

** *t-Value* > 1.96 (significance level 5 percent)

****t-Value > 2.58* (significance level 1 percent)

Figure 2. Final Structural Model

The results of the study prove that joint liability-based financing has a significant effect on preventing non-performing financing. This means that joint liability based in the distribution of fund financing by BWM can prevent defaults or non-performing financing. The results of this study are certainly in line with research conducted by Ghatak & Guinnane (1999), this shows that the joint liability model is more likely to allow better repayment rates than individual loans. This study also supports the results of research from Bayer & Shatragom (2013) which states that the shared responsibility model can increase the payback. This research is also in line with the study conducted by Chen et al. (2016); Zainab et al. (2020) Azizah & Islamiyah (2021), which prove that non-performing financing has a real impact on the emergence of financing. Furthermore, this research is also in line with the study conducted by Che (2002), which also proves that the features of joint obligations related to credit can reduce the risk of default.

The results of this study have reaffirmed that joint liability-based financing is one of the best ways to deal with non-performing financing. Many financial institutions prevent problem financing by implementing a guarantee system, but low-income people do not own guarantees. Therefore, the joint liability-based financing implemented by the Bank Wakaf Mikro in Magelang Regency is empirically able to prevent the occurrence of non-performing financing.

Joint liability models in financing distribution are basically an attempt by financial institutions to select prospective customers (Kumar, 2012). Joint liability models require prospective customers to form groups so that in the selection of group members, prospective customers will choose prospective group members who have integrity. Therefore, joint liability models basically make it easier for financial institutions to mitigate the problem of selecting prospective customers who are less credible, so that the risk of problematic financing can be avoided. With the strength of social relations, each group member will automatically choose prospective members who have integrity and can be trusted.

Joint liability models in the distribution of financing in Magelang Regency run effectively according to the target because they are in groups that support each other and have a sense of kinship and cohesiveness for strong interests. In practice, in distributing Micro Waqf Bank financing, each group has explained that all group members will be

affected if one of them defaults. Like, I will not get a chance to become a customer again. With this application, all group members automatically supervise all group members. It is not uncommon for group members to help each other settle payments if one of the group members has difficulty paying installments one day. Implementing the joint liability models method in the distribution of financing to Bank Wakaf Mikro can prevent the risk of default because there are good and strong social controls in the joint liability models.

4. Conclusion

The results of the study prove that joint liability-based financing has a significant effect on preventing non-performing financing. This means that joint liability based in the distribution of fund financing by Bank Wakaf Mikro can prevent defaults or non-performing financing. Problem financing in joint liability-based financing can be prevented because of the necessity of forming a group when applying for financing, so that prospective customers will choose group members who have integrity and can be trusted.

Based on the results of this study, it can be said that joint liability based on the distribution of financing funds by Bank Wakaf Mikro is the best way to distribute financing, because it can prevent the emergence of non-performing financing. The joint liability based applied by the Bank Wakaf Mikro in Magelang Regency can be a model in the distribution of funds sourced from zakat, cash waqf and other social funds.

This research contributes to overcoming problematic financing caused by information asymmetry. Information asymmetry in financing distribution arises because the customer has more information than the financier. The customer has an interest so that the proposed financing can be approved so that the customer is encouraged to provide inaccurate information. In this context, research results that have contributed to financing prevention are problematic because of information asymmetry. In short, financing with a joint responsibility system is one way to overcome the problem of information asymmetry in the distribution of financing.

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