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Fraud analysis of the micro finance

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Abstract

Islamic microfinance institutions are financial institutions that carry out operational activities based on sharia principles. One of them is the Baitul Maal wa Tamwil (BMT), this institution serves savings and funding to the middle and lower communities by picking up the ball. With this system, it will be an opportunity for human resources (SDI) who are less loyal and responsible with their institutions to commit fraud or irregularities. Therefore, this study aims to find out how triangle fraud affects the occurrence of fraud in BMT. The research method uses independent path analysis with a sample of 84 respondents from the marketing department, supervisors, and financing managers. The results of this study are that Rationalization and pressure have a positive and significant effect on the occurrence of fraud, while the opportunity does not have an influence on the occurrence of fraud.

Abstrak

Lembaga keuangan mikro syariah merupakan lembaga keuangan yang melakukan kegiatan operasionalnnya berdasarkan prisnsip syariah. Salah satunya adalah Baitul Maal wa Tamwil (BMT), lembaga ini melayani tabungan dan pembiyaan masyarakat menengah kebawah dengan menjemput bola. Dengan sistem yang demikian akan menjadi peluang bagi sumber daya insani (SDI) yang kurang loyal dan bertanggungjawab dengan lembaganya untuk melakukan kecurangan atau penyimpangan. Oleh karena itu penelitian ini bertujuan untuk mengetahui bagiamana triangel fraud berpengaruh terhadap terjadinya fraud di BMT. Metode penelitian menggunakan analisis jalur independen dengan sampel karyawan bagian marketing, supervisor, manajer pembiayaan sebanyak 84 responden. Hasil penelitian ini adalah rasionalitas dan tekanan berpengaruh positif dan signifikan terhadap terjadinya kecurangan atau fraud. Sedangkan kesempatan tidak memiliki pengaruh terhadap terjadinya fraud.

Introduction

The progress of the Islamic financial services in Indonesia is fascinatingwith the subsequent increasing of the Islamic banking services of 1,223 in 2009 to 2,881 in 2015 (Indoneisan Bank's, 2015). It is not followed by the support of the Islamic society's organization including the most accomplished human resources in the business of the microfinance and small business, and it needs an effort to improve the sustainable development of human resources and to work with the Islamic microfinance at the service of the community. One of the forms of the Islamic finance institutions is the baitul maal wat tamwil (BMT).

The BMT has a dual role in its operational, first is to assemble a fund from a people who have a financial and second surplus is to channel funds for those in need of financial addition. But in the event the BMT is still facing the high performance of non-performing financing (NPF), this is based on the statements of some BMT that their NPF tend to be highbecause of a problem for borrower to return the loan. Microfinance services have challenges from external and internal. The performance of the society is very affected by the internal factors that require immediate attention and countermeasures (Abozaid, 2016). The problem with the operational of the financial institutions is due to not maximum surveillance (Duggan, 2016). It will result in an opportunity of fraud or perversion. Cheating is possible due to lack of internal surveillance, nor can it be attributed to the insani resources (SDI) that have a disproportionate personality to existing rules. In addition, a factor in cheating may also be due to the need and life-style of a high degree of high luxury as well as gangly Ganges. A person's Rationalization may also influence one's behavior in the actions of a wayward course. Especially in the service of the financing, some dislocated cases like a fictional finance, reporting not on the date, the distribution of office privileges, double job, etc. It is often the case, therefore researchers attempt to find outthe instruments of fraud of the Sharia financial institution which serves the central microsociety in the financing of the BMT.

Islamic financial services are based on a challenge in order to maintain the trust and loyalty of customers (Falikhatun and Assegaf, 2012). As the Islamic financial services is known to carry out his business practices

based on Islamic principles that come from the Qu'an, the hadith of the scholars who later applied to running the operations of the company (Maradita, 2014). So will the questions of the Islamic implementation guarantee an agency no corruption?

Fraud can be done on any level of organization, ranging from lower level management, middle, or even to the owner (Anugerah,2014). Therefore, the Islamic financial institutions that have a special character, have a high risk in their management, so it requires the application of the precautionary principle of the operating system as an attempt to prevent possible risk of fraud (Sula, 2014).

Questions from frequently there are questions of obedience and compatibility to the application of the sharia principle. The doubt of the questions of the candidates for the implementation of the sharia principles can cause the cessation of the services of the Islamic financial institutions. So this indicates that the Islamic financial institutions have been lacking in the application of sharia principles that can be one of the things that influence the public's reputation and beliefs on the Islamic financial institutions. In addition, if obedience to the implementation of the sharia principle would provide an opportunity for a fraud (El junusi, 2012).

Cressey (1953) found a theory of fraud which is the fraud triangle (pressure, opportunity, and rationalization). Pressure is an impulse that can be financial need or even greed. Opportunity are opportunity that may lack the internal control of an organization, lack of supervision, or even abuse of authority. Rationalization isthe justification of people for their actions. This justification can be the happy wish of family and the people around it. The length of the work or devotion to the company makes the killer feel the right to get something more or can take part of the company because it feels to be involved in producing.

An urgent financial need will provide pressure so that it can fill his personal needs as well as health, the family's hope of success is largely economic, and a lifestyle shift that has become more luxurious (Rustendi, 2009). Pressure may also come because of the company's understated performance, representing the condition of the company that could not maximize the resources owned (Skousen et al., 2009).

In addition to the pressure that leads to cheating can be the existence of greed, life-style changes, lack of ability in personal financial management. The trigger is the low compensation or the actual compensation has been made, but the change of lifestyle can't fulfill for the needs (Albrecht et al., 2010)

The pressure has a strong and significant impact on cheating, which increases the pressure of cheating. Effective surveillance or monitoring will minimize the possibility of corruption. Whereas Rationalization has no effect on cheating (Tiffani and Marfuah, 2015). However, there is a different result in the research of the fraud triangle where the pressure and the opportunity existing in the company have no effect on the cause of cheating. Whereas rationalization variables have a significant impact on corruption (Sukirman and Sari, 2013).

Internal surveillance or internal control will lead to the opportunity of corruption. It is necessary for the governance of the society that has good quality in order to reduce the defraud (Smaili & Labelle, 2009 dan Jaswadi *et al*., 2012).

It is one way to minimise the fraud with the correct oversight of the monitoring mechanism. Amplifying the good observation mechanisms can be with an increase in audit committees. With an increased reinforcement of the audit committee, it would reduce the fraud event (Skousen et al, 2009). Therefore, a watch for oversight will be able to increase the chances of cheating, when opportunity are minimized then the occurrence of corruption will become smaller. But the majority of act of deception are not due to economic pressure but the belief that such actions are common and not illegal (Dahlia et al, 2013)

Rationalization that happens because of the kind of attitude and character that seeks to justify the true ethical value of being or considered to be the right ethical value. Low integrity will lead to a person who commits fraud himself to be doing the right thing (Rustendi, 2009). Defrauders have the notion that they are making the law because it feels only to take a little or only to borrow a temporary corporate asset so that it does not harm the company. So that they do not use their conscience while doing fraudulent and only rationalizing for their own logic. It requires corporate attention to enhance the human resources of one with a sustainable development and training (Kurniawan, 2013).

Methods

This type of research is quantitative decryption using primary data. This research population is the employee of the financing part that includes the marketing, the financing manager, supervisor at BMT are currently registered to the IndonesiaBMT congregation (PBMTI). Therefore, the sample used is the sole beneficiary of one employee of financing, the marketing, the financing manager, the supervisor of BMT with the total of 84 respondents. The data collection by using the questionnaire is compiled in three parts: the first part is the identity of the people; the second part is the cause of fraud; and the third part isthe theory related to fraud. Each of the variables may have a positive effect on fraud.

The variable used in this study is an instrument of the triangle fraud, a theory set forth by Cressey (1953) which includes pressure, rationalization, and opportunity. Each variable has an indicator, the definition of pressure has indicators: financial conditions, life-styles, targets from institutions, work environment, a bonus from the institutions. For the Rationalization variable, the indicator is the cheating without feeling guilty due to the circumstances. For the opportunity variable, it can be seen through the application of process and procedure. Indications of cheating either with embezzlement, misuse of funds, contract violations, theft of money, misappropriation of cash, a loan given to fictitious documents and incorrect interpretation of documents and auditors also find. A working relationship between another division or other staff involved in the fraud committed, as well as the policies that were not followed or abused (Vishwakarma, 2015). Other than that chance can be seen from routine management monitoring, fraud incentives, the pressure of a job target.

Data Analysis Technique

The analysis in this study is quantitative analysis that uses math or statistical and statistical, and economic models. Using an independent line analysis model, to describe the three different independent laten (opportunity, Rationalization, pressure) to predict a single fraud.

$$Y_i = a_0 + a_1 x_1 + a_2 x_2 + a_3 x_3 + e_i$$

Of the above function Y_i suggests that fraud, $a_1 x_1$ an efficient coefficient of opportunity, $a_2 x_2$ is the coefficient of rationalisation, $a_3 x_3$ a coefficient coefficient of pressure, while it e_i measures the equations of the equation.
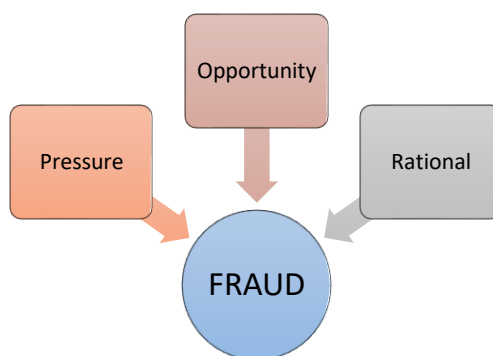

Figure 1. Estimate Models

The results of analysis were produced in a description, a data processing by verification of verification analysis to test the hypotheses using the partial least squares (PLS). Formal laten variable in the model is a linear agregate from its indivisible index. To acquire the estimate with some of the following steps:

1. Form a diagram of the kausality relationship between construction.
   a. The inner model is the specs for the relationship between the latent variable,
   b. The outer model is the relationship specifications between the latent variable with the indicator or the variable manifest (measurement model).
2. Testing uniformity.
   The versatility of uniformity can be seen from the value of convergent validation, an indicator of reliability when it is considerably greater than 0.7. And the loading factor 0.5 to 0.6 is still retained for models that are still in development. Based on these criteria, indiscriminus-indicators have less than 0.5 removed from analysis.
3. Testing the outer model, with some criteria among others.
   a) Convergent validity, gauge reflective measurements assessed based on corelation between score/ komponen/komponen score with construct score. Reflexive measures are said to be high if correlation is more than 0.7 with a construction that wants to be measured. Yet such a loading point 0.5 to 0.6 is considered enough.
   b) Discriminat validity, the measurement with an indicator of an indicator is rated based on a cross charge of construction with construction. If the construction of the construction with an item of measurements is greater than the construction of the other construction, then it suggests that laten's construction predicts the size of their block better than the size of the other block. Or by comparing the square root of average variance, dials (ave) any construction with construction between the constructions of the other construction. If the value of the roots of each of which is greater than a correlation between the

construction and the construction of other construction in the model, then it is said to have a good, valiant value (Fornell and Larckel, 1981). Ave can be calculated by formula:

$$AVE = \frac{\Sigma \lambda \iota^2}{\Sigma \lambda \iota^2 + \Sigma \iota Var(c\iota)}$$

Where are the components $\lambda \iota$ to the indicators and Var (ci) = 1- $\lambda \iota^2$. The value of AVE has to be larger than 0.5.

c) Composite reliability, a recombinant block that is a building construct can be a number of two sizes in the size of the internal inconsistency and cronbach alpha. With the output produced by the PLS then the encompasses perkomposit can be used with the formula:

$$pc = \frac{(\Sigma \lambda \iota^2)}{(\Sigma \lambda \iota^2) + \Sigma \iota Var(ci)}$$

Where are the components $\lambda \iota$ to the indicators and Var (ci) = 1- $\lambda \iota^2$. This test is met if value composite reliability >0,7.

d) Read inner model (hypothetical)

The inner model or could be called a structural model to be evaluated by using the r-square for the construction of the dependen, the stone-geisser q-square test for the predictive relevancy and uji-t and the significance of the coefficient of structural parameters. R-square changes can be used to judge a particular independent variable in the laten variables to have a subtantive influence.

Whereas seeing q-square can measure how well the values of the observations results are produced by the model and also estimate its parameters. Q-square scores are bigger than 0 (zero) indicating that models have a predictive predictive rate, whereas the value of q-square is less than 0 (zero) points out that the model is less predictive.

Result and Discussion

The result of the data collection is 73 questionnaires made up of the staffs of the BMT which consist of the Marketing Department, the financing manager, and the supervisor. A male responder of 66% and women at 34%. The age of a respondent under 25 years of 0.8%, 25-30 years of 26%, 31-35 year at 23%, 36-40 year at 21%, over 40 per year at 22%. With less than 2 years of work of six people, a total of 19, as many as 19 people, the age of 29, 11-15 years of nine, 15 years on the top of 10. The last education in a junior high school of 0.1 percent, high school by 37%, d3 is 0.5%, undergraduates at 56%. The monthly salary of employees is less than 1.5 million by 0.1 percent, 1,5-2.5 million by 32%, over 2.5 million by 67%. The average employee has been following law training, billing management, billing strategy, marketing management.

Table 1. Result of *Loadings Factor*

	Fraud	Opportunity	Rationalization	Pressure
F01	0,83			
F02	0,85			
F05	0,81			
F06	0,85			
F07	0,78			
F08	0,80			
F09	0,71			
KS01		0,77		
KS02		0,85		
KS03		0,81		
KS05		0,76		
KS06		0,73		
KS07		0,77		
RS01			0,73	
RS02			0,84	
RS05			0,77	
TK01				0,85
TK02				0,95

The results of the validity data with the questionnaires are said to be valid if the statements on the questionnaire were able to reveal something the questionnaire would be measuring out by using the size:1) Convergent validity; by seeing a sharp reflexive assessed out of correlation between the item score with total score. If the value of loading factor is more than 0,7; 2) Discriminant validity; and 3) Composite.

From the maximum Convergent of the validation of the maximum model of components is assessed based on the correlation between an item scoretowith total score. Reflexive size is said to have a high correlation if the value of the loading factor is more than 0,7 for a research that is confirmed, and 0,6 to 0,7 to study in research. Computational results suggest that each of the model made the model had a greater loading value than 0,7 so that the construction is said to be valid for model.

The maximum with the validation of seeing the value of the Average Variance Extracted (AVE)can be seen from the table below. The value of all constructions of 0,5, so that the convergent test can be accepted that the evaporates (manifest) any of the higher constructs, except the work of of the stimulator.

Table 2. Result of *Average Variance Extracted* (AVE)

	Average Variance Extracted (AVE)
Fraud	0,65
Opportunity	0,61
Rationalization	0,61
Pressure	0,81

While the previews valiant of the maximum model with a reflexive rate based on loading cross should be greater than 0,7; every construct or with a square root of the square from AVE to any construct, with the value of cross-linked correlation in the model. The predominant value is shown from the square root AVE to each larger construction of the intercity of inter-constructions in the model (Ghozali, 2015).

Table 3. Result of *Cross Loadings Factor*

	Fraud	Opportunity	Rationalization	Pressure
F01	**0,83**	0,17	0,44	-0,34
F02	**0,85**	0,20	0,50	-0,31
F05	**0,81**	0,30	0,38	-0,34
F06	**0,85**	0,21	0,39	-0,35
F07	**0,78**	0,14	0,19	-0,26
F08	**0,80**	0,29	0,43	-0,12
F09	**0,71**	0,19	0,29	-0,16
KS01	0,17	**0,77**	0,49	-0,04
KS02	0,26	**0,85**	0,55	-0,04
KS03	0,14	**0,81**	0,44	0,03
KS05	0,08	**0,76**	0,44	-0,16
KS06	0,14	**0,73**	0,53	-0,12
KS07	0,29	**0,77**	0,49	-0,15
RS01	0,26	0,55	**0,73**	-0,06
RS02	0,46	0,50	**0,84**	-0,08
RS05	0,36	0,46	**0,77**	-0,11
TK01	-0,23	-0,03	0,08	**0,85**
TK02	-0,37	-0,13	-0,20	**0,95**

The results of cross loadings factor show that the entire construction is shown to indicate the rate of correlation the indicators of the construction is greater in comparison with the value correlation of indicators with other structures. To the results of reliability, it was used to test the development of a construction. This test is met if the content of the content of the content is greater than 0.7 (Ghozali, 2015). Based on the calculation, the entire construction has a value of more than 0.7. This means that the entire construction in this research is inaccessible.

Table 4. Result of *Composite Reliability*

	Composite Reliability
Fraud	0,93
Opportunity	0,90
Rationalization	0,82
Pressure	0,90

Based on a validity test and a reliability, it can be sure that all the construction (work satisfaction, trade intention, productivity, excellence of competition) is valid and reliever.

Structural Results

The results of the data processing using the three-dimensional analyses of the smartpls are a result of the lack of influence, Rationalization and pressure of fraud at the BMT. The following chart is a result of the PLS algorithm and the result of the bootstrapping model bootleg.
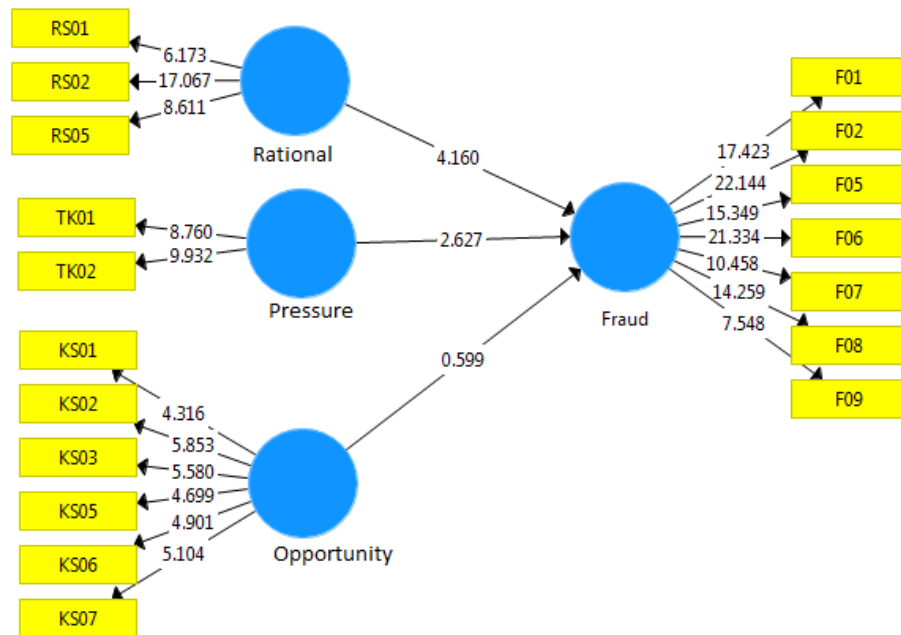
Figure 2. Result of *Bootstrapping*

This research hypothesis research is based on the results of the data processing by wearing the smartpls 3.0 by looking at the results of the path of path coefficients, comparing the t-statistics with the t-tabel and seeing how much effect on the endogen variable. Hypothetically research will be accepted if the p-value value is less than a rate of 95% or sig < 0.05.

Table 5. Result of *Path Coefficients*

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Opportunity -> Fraud	-0,09	0,60	0,55
Rationalization -> Fraud	0,51	4,16	0,00
Pressure -> Fraud	-0,30	2,63	0,01

Impact of Opportunity Toward Fraud

The result of a p-value data from an opportunity for fraud by 0.55 more than a degree of significance of 0.05 means a hypothesis that states a chance to have a positive effect on fraud - not accepted, or it may translate that opportunity has a negative relation to fraud although based on the outcome of this test variable chance has no effect on fraud.

BMT's employees do not commit a fraud though they have a wide chance. Every employee of the BMT is in a position to be good as marketing, supervisor or manager, all of which have a chance to do the wrong thing. However, they did not have a deviation because every BMT's employee had a high commitment to keep the rest of the family's work in accordance with the prescribed rules. It is amplified by the results of interviews done that each BMT has a different strategy in improving the commitment of the employee. There is a BMT that maintains a system of collateral or collateral, for each new employee has to deliver a guarantee of a land certificate with a

minimum of predetermined length. When a later employee has proved to be a perversion, then the guarantee automatically becomes the BMT.

Then the employee will reconsider when he has the intention of making a miscarriage, even as a chance of his own. Another strategy used by the BMT to strengthen the employee's commitments by means of regular spiritual activities, so that the degree of faith in the employees will always increase. When the level of faith is higher or more, it is to make an employee believe that all of his actions are seen and observed by the seer, so that when it is open to the appearance of the appearance, the employee does not use it because it is certain that someone is watching.

Impact of Rationalization Toward Fraud

The valuation of the valuation of the duality for for fraud is proportionately smaller than 0.05 points of significance 0.05, and the value of the original sample 0.51 means a hypothesis that states Rationalization has a positive effect on fraud accepted. The outcome can be interpreted as the higher the Rationalization and it will rise to fraud. Rationalization can be described asa person's opinion that he deserves to do the fraud because the person's position has a high degree or has taken a stand for the organization. When an employee has a higher rationalization, then fraud rate will get higher. Act of violations possible by BMT's employees especially in such a marketing position: taking advantage of the company's assets without right, making fictitious, withholding or not reporting a member, making illegal collections of members, asking for retribution to members who should not be. The results of this study are consistent with the research done by Rustendi (2009), Sukirman and Sari (2013) and the Kurniawan (2013) that one who commits a correct wrong thing will promote cheating. Rationalization is happening because of the lack of integrity it has and feels right when it takes only a fraction of the company's assets.

Impact of Pressure Toward Fraud

The value of the p-value data from the pressure on fraud by 0.01 to a fraction of the significance of 0.05 and the original -0.30 original value which is a hypothesis which states the pressure to affect fraud is not accepted. It can be interpreted as the pressure on BMT's employees, which does not appear to be fraudulent. The pressure referred to in this study is internal pressure to meet the needs and well-being of life. The internal pressure that an economic need does not make an employee is compelled to do a cheating job. The result of this study is consistent with the study carried out by Dahlia et al. (2013), who claimed that pressure has no bearing on violations. The majority of act of deception are not due to economic pressure but the belief that such actions are common and not illegal. The causes of fraud are not dominated by pressure (Dellaportas, 2013). However, it does not agree with the findings of the Restendi research (2009), Skousen et al. (2009), Albrecht et al. (2010), and Tiffani and Marfuah (2015), who suggested that pressure has a strong impact on corruption.

Conclusion

In this study has a goal to analyze the impact of the triangle fraud against fraud. The triangle of fraud in this thing is the pressure, opportunity and Rationalization. The result is a Rationalization and pressure of a positive and significant influence on corruption or fraud. Whereas the opportunity has no influence on the fraud. Therefore the BMT society needs to do its own binitations and training for its resources in order to increase the quality and integrity of it, thereby minimizing the Rationalization that resulted in fraud. The society also needs to pay attention to the development of individual individuals and pressure, which need to be chaperone and increase in ability to do personal management so that it is not a misstep. Additionally, internal oversight needs to be protected and improved its qualities and intensity. The limitations of this study are a sample used to be expanded not only employees on the financing part so that the results will be more thorough about fraud in the financial institutions. The time of study only in one range of time and the questionnaires are not directly controlled by researchers.

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