

Analysis Of The Bankometer Method In Predicting Financial Distress At PT. Bank Muamalat Indonesia

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Abstract

This study aims to determine the soundness level of Islamic bank at PT. Bank Muamalat Indonesian to use the Bankometer method in accordance with POJK No.8/POJK.03/2014 concerning Soundness level of sharia commercial banks and sharia business units. This study use a qualitative approach methode. The data studied is qualitative data sourced from secondary data, namely from the 2015-2020 financial report. Data collection techniques and instruments using literature studies and decomentation studies. Data analysis used to find out how soundness level of a bank in this study is descriptive analysis using Bankometermethode. The result of this research shows the soundness level of the bank at PT. Bank Muamalat Indonesian in 2015-2020 is in Composite Rating 2 (PK-2) in the “Healthy” category. This reflects significant bank conditions and changes in business conditions as well as other external factors and if weaknesses are found, in general these weaknesses are quality significant which if not handled properly by management can distrust the continuity of banks business including loss of public trust at the bank.

Keywords: Bank Soundness Level, BankometerMethode, Bank Muamalat Indonesian.

Introduction

2020 was not an easy year in trade in Indonesia, especially the banking industry which is currently in the public spotlight. The pandemic wave has disrupted the economy since the beginning of the year which has forced entrepreneurs to adapt so that they can always progress in running their business very well, one of which is PT. Bank Muamalat Indonesia, which is always as strong, as perfect as possible in carrying out its business and achieving the set target points.

A bank is a business chart that collects funds from the public in the form of savings and distributes them to the public in order to improve the standard of living of the common people. (“RI Law No. 7 of 1992,” n.d.). Meanwhile, Islamic banks are banks that carry out their commercial activities based on Islamic law and the types consist of Islamic Commercial Banks, Islamic Business Units, and Islamic People’s Financing Banks. (Soemitra, 2009). So it can be concluded that Islamic banks are not only concerned with relationships with fellow human beings and are treated with instructions for the piety of creatures to the Creator by carrying out all His rules.

The measurement of the soundness level of a bank is a point of view that must be known by the leadership. Based on Bank Indonesia regulation no. 13/1/PBI/2011 concerning healthy trading levels, the aim of which is to implement good corporate

governance that faces certain risks for shareholders. Valuation of a trade can be known through analysis of financial statements. Financial reports are a space for the availability of financial information as supervision in decision making by affected parties (Ahsan Putra Hafiz, 2018).

PT. Bank Muamalat Indonesia Tbk started on November 1, 1991 or 24 Rabi'usTsani 1412 H. In 2009, the bank obtained an agreement to open a branch office in a neighboring country, namely in Malaysia. Until now, bank muamalat has 325 service offices including 1 branch office in Malaysia. This activity is supported by an extensive service network, namely 710 Muamalat ATM units, 120,000 ATM networks and ATM Prima, as well as more than 11,000 ATM networks in Malaysia through Malaysia Electronic Payment (MEPS). Since 2015, Bank Muamalat Indonesia has changed in making better objects and capturing future growth. In dealing with business, Bank Muamalat Indonesia will always advance in paying attention to the vision of Becoming "The Best Islamic Bank and Top 10 Banks in Indonesia with a Strong Regional Presence ("Bank Muamalat, Bank Muamalat Profile," n.d.).

Decomposed from the types of performance, prizes and changes that were obtained and advanced by PT. Bank Muamalat Indonesia, but the reality on the ground that Bank Muamalat's monetary performance has fluctuated over the past 6 years. This change is said to be no better than the previous year and even the symptoms have decreased. This is a table of PT monetary ratios. Bank Muamalat Indonesia in the last 6 years.

Table 1. Value Of Financial Ratios

Tahun	CAR	ROA	ROE	NPF	BOPO	FDR
2015	12,00%	0,20%	2,78%	7,11%	97,36%	90,30%
2016	12,74%	0,22%	3,00%	3,83%	97,76%	95,13%
2017	13,62%	0,11%	0,87%	4,43%	97,68%	84,41%
2018	12,34%	0,08%	1,16%	3,87%	98,24%	73,18%
2019	12,42%	0,05%	0,45%	5,22%	99,50%	73,51%
2020	15,21%	0,03%	0,29%	4,81%	99,45%	69,84%

Sources : Laporan Keuangan PT. Bank Muamalat Indonesia 2015-2020

Based on the above data quoted through Bank Muamalat's monetary record information, it weakens the affected ratios such as BOPO, which is one of the ratios to calculate realistic measures in the banking world which results in disrupting profits, capital and operational activities at Bank Muamalat. So, based on the explanation above, the authors are encouraged to conduct research related to the problems above with the title "BANKOMETER METHOD ANALYSIS IN PREDICTING FINANCIAL DISTRESS AT PT. BANK MUAMALAT INDONESIA".

Definition of Islamic Banking

According to Law no. 10 of 1998 concerning banking. Bank is a business entity that collects funds from the public in the form of savings and distributes the funds to the public in the form of credit or other forms in the form of improving the standard of living of the people at large. Then, the bank acts as an intermediary between parties who have excess money and other parties who want money.

Islamic banks are banks that carry out their business activities based on sharia principles and in their activities provide services in payment traffic as referred to in

Law no. 21 of 2008 concerning sharia banking (Nonie, 2020). Banking functions according to Law no. 10 of 1998 namely raising funds, channeling funds and providing services by customers.

Principles of Rules in Arrangement of Sharia Banking

In the philosophy of forming Islamic commerce, it starts with the emergence of prohibiting usury in the Qur'an and As-Sunnah, namely:

Based on the Al-Qur'an Surah Ar-Rum: 39

وَمَا آتَيْتُمْ مِنْ رَبًّا لِيَرْبُوَ فِي أَمْوَالِ النَّاسِ فَلَا يَرْبُو عِنْدَ اللَّهِ ط وَمَا آتَيْتُمْ مِنْ زَكَاةٍ تُرِيدُونَ وَجْهَ اللَّهِ فَأُولَئِكَ هُمُ الْمُضْغِفُونَ

It means:

"And something extra that you give so that it multiplies in human property, then usury increases on the side of Allah and what you give in the form of zakat that you mean to achieve the pleasure of Allah, then (those who do so) it is the people who fold income (reward) (Ar-Rum:39, n.d.)

Interpretation Al-Mukhtashar/ Markaz Tafsir Riyadh, under the supervision of Shaykh Dr. Salih bin Abdullah bin Humaid (Imam of the Grand Mosque)

"The assets that you give as debts with the aim of getting usury multiplied in the form of that debt. Then, the treasure grew and became many. In fact with Allah it does not multiply unless Allah destroys it and cancels it out." Whereas what you give is in the form of zakat and alms for people who are entitled to receive it in order to seek Allah's blessing and reward from Him. That is what Allah received and added.

1. Employee Performance

a. Definition of Employee Performance

According to Mangkunegara, employee performance is the result of work that is superior and the value achieved by an employee in carrying out his obligations according to his responsibilities. (Prabu Anwar Mankunegara, 2011). So, employee performance is a condition where parties know what they are doing according to their responsibilities in achieving targets.

b. Performance assessment

Performance appraisal must be done well which is emphasized by the company, the goal is to increase achievement motivation and become an advantage for the company itself.

2. Bank Soundness Level

a. Definition of Bank's Soundness Rating

Law No. 7 of 1992 concerning commerce which has been overhauled by Law no. 10 of 1998 concerning commerce which must pay attention to the level of health. Bank health is a description of the state of the bank by supervising the bank (Bank Indonesia Regulation No.13/1/PBI/2011 dated 5 January Concerning the Health Assessment of Commercial Banks, n.d.). The soundness level of a bank is a result that has an impact on the condition of a bank (Bankers Association, 2016).

b. Bankimeter Method in Evaluating Bank Soundness Size

The Bankometer model in its work calculates the sensitivity and proves that this Bankometer model is superior to conventional models, for example

CAMEL. This Bankometer model was developed to obtain more precise results compared to CAMEL, which is usually done manually with weights.

This Bankometer model is a model for assessing the soundness of a bank. Bankometer model owned by Shar et.al (2010) recommended by the IMF (2000) regarding the assessment of bank soundness.

The formula for the Bankometer method is:

CA =Capital/(Total Assets)

EA =Equity/(Total assets)

CAR =(Tier1 capital+Tier2 capital)/(Risk weighted assets)

NPL =(Non-performing loans)/(total loans)

CIR = (Operating expense)/(operating income)

LA = Loans/(Total assets)

S = 1.5 X1+ 1.2 X2+ 3.5 X3+ 0.6 X4+ 0.3 X5+ 0.4 X6

Information:

X1 = Ratio of capital to assets

X2 = Ratio of equity to assets

X3 = Capital adequacy ratio

X4 = Non-performing loan ratio

X5 = Ratio of total costs to total revenue

X6 = Loans to total assets

S = S-Score Value

Information :

a. Capital to Asset Ratio (CA)

The Capital to Asset Ratio (CA) is used in calculating the adequacy of commercial capital to meet its asset needs. This ratio has a size above 4%, if it is below standard then the company can improve it by increasing the company's capital which can be done by releasing shares or adding deposits by the company owner.

b. Equity to Asset Ratio (EA)

The ratio of equity to assets (EA) is used in calculating how much the ratio of assets that are borne by individuals from the capital and profits held. This ratio has a size above 2%, if it is under the size, the bank can improve it by delaying the distribution of profits to shareholders so that the amount of retained earnings increases, or increases in sales, the amount of profits for the current year increases.

c. Capital Adequacy Ratio (CAR)

CAR is used to calculate capital adequacy to cover credit losses and securities trading activities. This ratio has a standard above 8%.

d. Non-Performing Loan Ratio (NPL)

The NPL ratio is used to measure the comparison between bad loans and total loans. This ratio has a standard below 5%.

e. Cost to Income Ratio (CIR)

CIR is used to calculate how practically dependents are issued in obtaining income. This ratio has a size below 40%

f. Loans to Asset Ratio (LA)

LA is used in calculating the ratio of capital financed through loans by banks. This ratio has a standard below 65%.

The standard of financial distress according to the bankometer method (S-score) is divided into 3 parts, namely:

1. The S-score value " $S \leq 50$ " is included in the "Distress" feature, meaning that the company encounters monetary difficulties that have large rewards for decline.
2. The S-score value " $50 < S \leq 70$ " is included in the "Grey Area" characteristic, meaning that the company is said to be healthy or not.

The S-score value " $S > 70$ " is included in the "Safe" characteristic, meaning the company is safe or does not find it in conditions of monetary difficulties (Herawaty T, 2017).

3. Monetary Information

a. Monetary Information Definition

According to KhoerulUmam, Monetary information stands for financial transactions, the purpose of which is to provide financial resources about the company to the authorities as a tool for improvement in making decisions. So, financial reports are a source of financial information that has a historical and comprehensive nature.

b. Monetary Information Purposes

The objective of Monetary Information according to the Indonesian Accounting Principles (PAI) consists of five namely:

1. To obtain financial sources regarding the assets and capital requirements of a company. The direction of monetary information is to get sources about assets and liabilities and funds owned in a trade.
2. To get sources that can be retrieved about changes in assets that are reduced by the necessity in commerce that arise in business activities that generate profits.
3. To find financial resources that assist in using the information in estimating the profitability of commerce.
4. To get sources about modifications in assets and requirements in commerce. Example: sources on investment activities.
5. To get linked sources of monetary information such as accounting policies.

Financial Accounting Standards explain the purpose of monetary information in terms of: "The purpose of financial reports is to present sources related to the financial position, performance and changes in financial position of a company that are beneficial to all users in making economic decisions".

Literature Review

Table 2. Previous Research

N u.	Study/ Year	Research Title	Research Variable	Analysis Tool	Research Result
1.	Dhefita Sari/2020	The Influence of Financial Ratios on Financial Distress	-FDR (X_1) -ROA (X_2) -LEVERAGE (X_3) -SIZE (X_4) -	Bankometer method	-The results of the study show that Islamic Commercial Banks in Indonesia are in a super sound state and have a very small risk of

		Risk of Sharia Banking in Indonesia with the Bankometer Approach	BANKOMETER S-SCORE (Y)		financial distress. The VECM test shows the results that long-term FDR, ROA, Leverage, and Size have a significant influence on financial distress risk as measured by the Bankometer S-Score. Meanwhile, in the short term, only the ROA and Leverage variables have a significant effect. From the results of the Impulse Response Function (IRF), only the leverage ratio is the fastest stable in providing a response to the S-Score for up to 50 periods, FDyR in the next few periods the effect will decrease. Based on the results of the Forecast Error Variance Decomposition (FEVD) for the next 50 periods, the variables that give the greatest response are Size, Leverage, FDR, and ROA. (Dhefita Sari, 2020)
2.	Laila, N. and Widihadnanto, F/ 2017	Financial Distress Predicting Using Bankometer Model on Islamic and Conventional Banks: Evidence from Indonesia	-Bank Syariah (X ₁) -Bank Konvensional (X ₂)	Bankometer Score	The results of the study show that there is no significant difference between Islamic banks and conventional banks. This is because Islamic banks have more or less resistance to financial difficulties than conventional banks. (Laila, 2017)
3.	Xenia I.S. Landjang and Johan	Financial Soundness Evaluation	-Bankometer (X) -keehatan	Model Bankometer	The results of this study say that all banks are healthy because

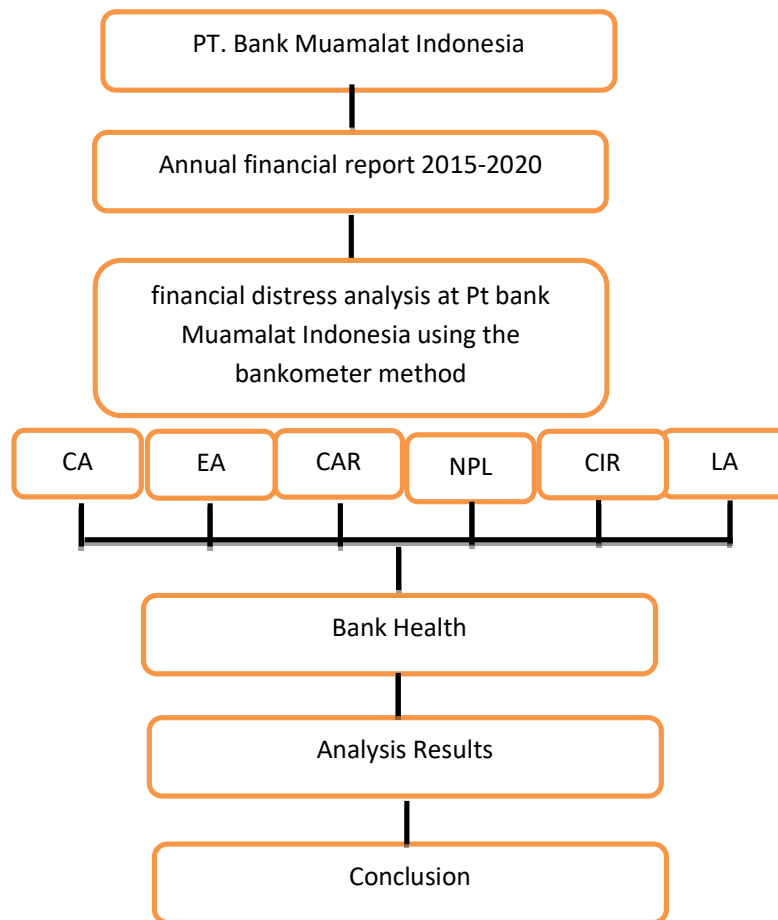
	Tumiwa/2017	Of Selected Commercial Banks In Indonesia :Anc Application of Bankometer Model	bank (X) -Bank swasta		they have a score above 70, meaning that the bank is not prone to financial distress. Xenia I.S. Landjang and Johan Tumiwa, Financial Soundness Evaluation Of Selected Commercial Banks In Indonesia: An Application of Bankometer Model.
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Theoretical Framework

According to Tan, a framework is an understanding obtained by writing and data relating to our own knowledge based on past thoughts about the problem under study. The theoretical framework which means that it is a reasoning framework that is divided from concepts or theories that become the research race.

The theoretical framework is the result of thinking that aims to answer a problem. The theoretical framework of this research is:

Table 3. Theoretical Framework



Research Method

a. Research Approach

The type of research that researchers use is a type of qualitative research. Qualitative research is an examination that is descriptive in nature and leads to analysis with an inductive approach. This study analyzes the level of soundness of a bank by using historical data derived from the bank's financial statements which were examined. Empirical research approach with a descriptive qualitative approach.

According to Vardiansyah, descriptive research is the ability to process data into something transparent and correct with the aim that it can be understood by people who are not directly involved in the field. (Sonny Leksono, 2014)

b. Time of Research

Research Time

The time needed in this research is:

Jenis kegiatan	December 2021				January 2022				February 2022				March 2022				May 2022				August 2022			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Title submission																								
Preparation																								
guidance																								
Seminar proposal																								
Hearing																								

c. Research Subjects and Objects

1. Research Subjects

The subject of this research is a document obtained from the official website of PT. Bank Muamalat Indonesia <https://www.bankmuamalat.co.id/> which is like the financial statements of PT. Bank Muamalat Indonesia 2015-2020.

2. Research Object

The objects of this research are Capital Adequacy Ratio (CAR), Capital to Assets (CA), Equity to Assets (EA), Non Performing Loans (NPL), Cost to Income (CIR), Loan to Assets (LA).

d. Types and Sources of Data

1. Data Type

The type of data used in this study is qualitative data that starts with secondary data. Qualitative data is data in the form of numbers that show a number of things. In this study, qualitative data such as annual financial reports (annual report).

The source of this research data is that it starts with secondary data, which is like documents that have been and can be obtained by researchers by reading, viewing or listening. This data comes from primary data that has been processed by previous

researchers(Fadilla, 2020). Data obtained in a ready-made form through books, journals, the internet and references from previous thesis or banking and capital market financial reports. So, the data source in this proposal uses secondary data, namely the Financial Statements of PT. Bank Muamalat Indonesia which was published in 2015-2020 which researchers obtained directly from the official website of Bank Muamalat Indonesia in the new range according to the desired data or can be called time series data. Time series is data that is chronologically arranged according to time on a variable. This data is divided into 3 namely: daily, weekly, monthly, and yearly.

Data Collection Techniques

Data collection is a technique that can be used to collect(Riduwan, 2018). The research data collection technique is by using financial reports for the 2015-2020 period. The data collection techniques used in this research are:

1. Library Studies

Literature study is a scientific series whose contents are about the opinions of various experts on a problem which are then reviewed and conclusions drawn. Literature study in this study, namely supporting theory and previous research as a reference that is linked to the analysis of the bank's soundness level using the Bankometer method.

2. Documentation Study

Documentation studies are secondary document information used in a study. The documentation of this research is the annual financial report published on the official website www.bankmuamalat.co.id of Bank Muamalat Indonesia Tbk for 2015-2020.

Data Analysis Techniques

The method of data analysis is an analysis of financial statements using the approach of Bank Indonesia Regulation No.13/1/PBI/2011 concerning Rating of Commercial Bank Soundness Levels. Analyzing data using the Bankometer method. Bankometer method is a method to assess the soundness of a bank.

$$S\text{-Score} = 1.5(CA) + 1.2(EA) + 3.5(CAR) + 0.6(NPL) + 0.3(CIR) + 0.4(LA)$$

CA = Capital to Asset Ratio

EA = Equity to Asset Ratio

CAR = Capital Adequacy Ratio

NPL = Non Performing Loan Ratio

CIR = Cost to Income Ratio

LA = Loans to Asset Ratio

Clarification of the financial distress index using the Bankometer S-Score method, namely:

S < 50% means the bank is experiencing financial distress

S < 70% means the bank is in very healthy condition

50% < S < 70% then the bank experiences a gray area

Some of the analysis steps that can be done are:

1. Calculate capital to assets, equity to assets, capital adequacy, non-performing loans/financing, costs to income, and loans to assets from banks for 2015-2020.
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2. Calculate the bankometer score of the bank during the period.
 The data is collected and then processed with the specified formula. The steps used in assessing the soundness of a bank are:
 - a. Collect documents from the bank's financial statements with research variables.
 - b. Calculating all indicators and ranking all CAR, CA, EA, NPL, CIR, and LA analysis.
 - c. Determine the level of components from 2015-2020. The composite value for each financial ratio is worth:
 1. Rank 1 = each time the checklist is multiplied by 5
 2. Rank 2 = each time the checklist is multiplied by 4
 3. Rank 3 = each time the checklist is multiplied by 3
 4. Rank 4 = each time the checklist is multiplied by 2
 5. Rank 5 = each time the checklist is multiplied by 1
 - d. Drawing conclusions on the soundness standard of a bank is the same as the measure of a bank's soundness level determined by Bank Indonesia based on ratio analysis calculations.

Result And Discussion

Table 4. Research Result

Research Result			
Year	Rangking	Criteria	Explanation
2015	73%	PK-2 (Healthy)	In 2015 PT. Bank Muamalat Indonesia is included in the "healthy" characteristic, which is ranked 2nd where the bank is able to deal with the effects of change.
2016	73%	PK-2 (Healthy)	In 2016 PT. Bank Muamalat Indonesia is included in the "healthy" characteristic, which is ranked 2nd where the bank has little expertise in dealing with external conditions.
2017	46%	PK-4 (unwell)	In 2017 PT. Bank Muamalat Indonesia is included in the "unhealthy" characteristic, which is ranked 4th where the company is less skilled at dealing with the negative effects of changing conditions.
2018	83%	PK-2 (Healthy)	In 2018 PT. Bank Muamalat Indonesia is included in the "healthy" characteristic, which is ranked 2nd where the company is less skilled in dealing with negative influences from changes in business conditions and other external factors.
2019	80%	PK-2 (Healthy)	In 2019 PT. Bank Muamalat Indonesia is included in the "healthy" characteristic, which is ranked 2nd

			where commerce is less skilled in dealing with negative influences from other external factors.
2020	80%	PK-2 (Healthy)	In 2020 PT. Bank Muamalat Indonesia is included in the "healthy" characteristic, which is ranked 2nd where commerce is less skilled in dealing with negative influences from changes in business conditions and other external factors.

Conclusion

Based on the analysis of sources in this analysis, it can be underlined: Assessment of the size of stability at PT. Bank Muamalat Indonesia from 2015-2020 using the Bankometer method with indicators (CA), (EA), (CAR), (LA), (CIR), (LA) as a whole is at the level of component 2 or you could say PT. Bank Muamalat Indonesia is in the "Healthy" category. This can be seen from the condition of the bank which is generally healthy so it can be seen that it can deal with relevant negative influences from other business changes and there are several weaknesses which in general are quite relevant weaknesses, if the manager has not corrected them as well as possible, they can disrupt business at that company.

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