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INDONESIAN BANKING PERFORMANCE OF PRE AND POST OF MERGERS AND ACQUISITIONS

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Abstract

The objective of this study to analyse the performance of banks before and after conducting Mergers and Acquisitions (M&A) using a risk approach and how it affects the value of banking companies. Banking performance was analysed from three years before and three years after conducting mergers and acquisitions. To analyse the impact of banking mergers and acquisitions on company value, paired sample t-test and the fixed effect model (FEM) and Random Effect Model (REM) are utilised to test the research hypothesis. The results show that the banking performance after conducting M&A is decreased. This is demonstrated by the improvement in banking value and performance by using variables PBV, Tobin's q, LDR and COMIN, which increase relatively after mergers and acquisitions, but the ability to generate profits, as measured by ROA is decreased.This is an implication of the combination of large assets that have not been used optimally to generate profits.

Keywords: *merger and acquisitions; performance; CEM; FEM; REM; value of firm*

INTRODUCTION

Mergers in Indonesia have evolved to become an attractive alternative strategy for many domestic companies. This phenomenon becomes increasingly difficult to stem because the government as a regulator and as a facilitator deems it necessary to encourage both private and state-owned companies to strengthen themselves in facing the challenges of globalisation of the world economy. We cannot stem, let alone prohibit the world's companies from operating in Indonesia for any reason. The strongest example today is the encouragement of Bank Indonesia (BI) through a single presence policy so that national banks merge. One of the regulations governing interbank M&Ais Republic of Indonesia Government Regulation No. 28 of 1999. In this regulation, a merger is the merger of two or more banks by maintaining one bank and dissolving other banks without liquidation. While the acquisition is a takeover of ownership of a bank so that there is a change in the control of the bank. The purpose of business combination through a merger is expected to improve banking performance.

A wave of M&A in the Indonesian banking industry continues; in 2018 negotiations between several local and foreign banks were underway and in order to reach an agreement for M&A, banks must have a strong and efficient capital structure and have a good level of bank health so that they are able to provide guarantees for the public funds placed (Mahmud, 2021). Strong capital is related to stable business fundamentals, whereas a healthy bank is in the sense of having a stable financial composition. This study used the risk analysis approach known as Risk-Based Bank Rating. It is a measurement of bank performance that focuses on risk, can help management to find out what is the true cost of capital of the business so the net rate of return from capital, which is really an investor's attention, can be clearly shown and what is the actual amount of capital invested in the business.

Business combinations can be in the form of mergers, acquisitions, and consolidations. A merger is a merger of two or more companies by transferring assets and liabilities of one company to another company. Consolidation is a business combination that is carried out by transferring the assets and liabilities of companies that join by forming a new company. An acquisition is a merger of two or more companies by buying a portion of shares owned by another company, but the company still stands alone. The definition of bank merger according to RI government regulation No. 28 of 1999 is a merger of two or more banks, by maintaining the establishment of one bank and dissolving the other bank without liquidating first. Consolidation is the merger of two or more banks, by establishing a new bank and dissolving the banks without liquidating them first. An acquisition is a takeover of a bank's ownership so that there is a change in the bank's control.

Based on economic activity, mergers are divided into several types, Horizontal Merger which is a merger is a merger between two or more companies engaged in the same industry. Before the merger, these companies competed with each other in the same market/industry. Vertical Merger is an integration that involves companies engaged in the stages of the production process or operation. Conglomerate Mergers are mergers of two or more companies, each of which is engaged in an unrelated industry (Ross., Westerfield., and Jordan, 1991: 676-677)

Bank soundness is qualitative assignment of various aspects condition or performance of a bank on capital factors, asset quality, management, profitability, liquidity and sensitivity to market risk. Banks can assess the health of their own banks using the new method issued by the government in PBI number 13/1/PBI/2011 Article 2 which states that banks are required to assess the soundness of banks using a risk-based bank rating, both individually and consolidated. The regulation replaced the previous assessment method, which was based on Capital, Asset, Management, Earning, Liquidity and Sensitivity to market risk or called CAMELS. The RBBR method uses an assignment of four factors based on BI Circular Letter No. 13/24/DPNP, namely Risk Profile, Good Corporate Governance, Earning and Capital.

From the Risk Profile factor, using the calculation of credit risk, market risk, and liquidity risk, the GCG factor takes into account the evaluation of the application of self-assessment. Earning factor is indicator of Return on Assets (ROA) and net interest margin to total asset (NIM). The capital factor is measured by the CAR ratio. In assessing the soundness of banking based on REBR, there are several indicators as a reference: 1) Risk Profile, which is an assessment of inherent risk and the quality of risk management application in bank operations carried out on 8 (eight) risks, namely, credit risk, liquidity, operational, legal, strategic, propriety and reputation (Peraturan Bank Indonesia, 2011). There are many to measure the risk, including to measure credit risk by using a Loan to Deposit Ratio (LDR) ratio and to measure liquidity risk by using a Loan to Deposit Ratio (LDR) ratio; 2) Good Corporate Governance (GCG) by analysing the corporate governance report. GCG is guided by Bank Indonesia Regulation No.13/1/PBI/2011 by searching for annual reports published in determining the assessment conducted by banks based on the system of self-assignment; 3) Earnings (Rentability); 4) Assessments are measured using ROA ratio with the following formula: ROA = (profit before tax)/(average total assets) x 100%; 5) The Capital (Capital) High and Low Minimum Capital Requirements (KPMM) or Capital Adequacy Ratio (CAR) of a bank will be influenced by two main factors, namely the amount of capital owned by the bank and the number of Risk Weighted Actions (ATMR), the assessment of capital factors is measured the CAR with the formula: CAR = (bank capital)/(risk-weighted assets) x 100%.

Several studies on the effects of M&A conducted indicate that there has been an increase in banking performance after conducting mergers and acquisitions. Kumar's study (2013) states that there has been an increase in efficiency in various parameters studied, namely profit per employee, business per employee, investment and advances, interest income, returns on assets, NPAs and so on. A study conducted by Shrestha et al. (2017) found positive impact of bank performance when large commercial banks were bidders of mergers. A different result was shown by Jayaraman et al., (2014) that banks that have conducted M&Adid not create a significant impact on profitability and operational expenses, especially during the initial phases of merged. Furthermore, Rehan et al. (2018) revealed that, of the five variables measuring banking performance before and after M&A in Pakistan, only one variable, namely return on capital employed, had a significant positive effect after mergers and acquisitions. While Patel (2017) revealed only two variables: profit per employee and business per employee showed a positive and increasing trend after mergers in selected banks in India during the 2003-2014 period. Using data on 293 banks in Asian countries that merged and acquired during the 1997-2007 period, Wang et al. (2014) revealed that the long-term performance of banks in Asian countries showed abnormal negative growth and there was no increase in efficiency after mergers and acquisitions.

The study of the effects of M&A on the performance of banks in developed countries also produced mixed findings. Frazer and Zhang (2009) found that acquisitions made by non-bank organisations to banks in America during the 1980-2001 period revealed that, through cross-border acquisitions, they were able to improve the performance of the acquired banks. Also, an increase in profitability and increased labour utilisation and loan losses did not increase in the banks that were targeted for acquisition. A study of the effects of M&Ain European Union banks found that, on average, there was an improvement in banking performance after conducting M&A (Altunbas and Marques-Ibanez, 2008). Long (2015) revealed that using univariate analysis showed that there was no significant difference in profitability before and after mergers from banks in the Czech Republic, but using panel data analysis showed that M&A activities had a positive effect on profitability, and subsequent company size and growth had a relationship which was significantly positive with banking profitability in the Czech Republic. Liargovas and Repousis (2011) conducted an event study approach and found that bank M&A have no effect and do not create wealth of shareholders in the Greek banking industry.

Studies on M&Ain banks in Indonesia have also been carried out by several researchers, but are usually carried out partially, such as Mulyaningsih et al. (2015) who revealed that foreign banks which have been acquisitors of existing local banks were more competitively, efficient and had lower overhead costs than local banks. According to a recent study by Shaban and James (2018), local acquisition tends to select acquired banks with a decrease in the efficiency. Non-regional foreign investors are related to a reduction in risk exposure and acquisition by regional foreign acquisition is related to performance yields.

METHODS

The population in this study is all banks that are listed on the Indonesia Stock Exchange (IDX). The sample in this study are all banks that have merged with domestic and foreign parties during the study period, 2002 to 2018 with the following characteristics domestic banks that were merged in the merger period from 2002 to 2018. Annual financial report data available during the study period, which is three years before and three years after the merger and acquisition.

The research variables consist of three types, namely dependent variable, independent variable and control variable. The dependent variable is measured firm value by using Tobin's q and stock return variables. The independent variables in this study are as follows; Risk Profile; Corporate Governance (CG) measured by number of boards and audit committee; Earnings are measured by ROA and Capital is measured by CAR. PBV stands for Price to Book Value, and Tobin's q stands for Tobin's q ratio to measure firm value, and LDR represents Loan to Deposit Ratio, while COMIN stands for Board of Independent Commissioners, and ROA stands for Return on Asset, and CAR represents Capital Adequacy Ratio, and SIZE stands for Growth of Total Asset.

In the estimation method of regression models, using panel data can be done through three approaches: Common Effect Model (CEM); Fixed Effect Model (FEM) and Random Effect Model (REM). Then, testing of differences will be utilised to identify whether there is any statistically different performance between before and after mergers and acquisition by using paired difference t-test.

RESULTS

As explained in the previous sections, researchers conducted an analysis of banking performance before and after mergers and acquisitions. The following shows as many as 13 banks that merged and acquisitions with banks in Indonesia or foreign banks in the period 2002 to 2018.

Table 1. Mean Value of Banking Performance Pre and Post Merger and Acquisition

YEAR	PBV	TQ	CAR	LDR	ROA	COMIN	SIZE
-3	1.93	1.10	14.92	81.76	1.84	3.30	1.38
-2	2.10	1.13	16.61	81.46	1.84	3.30	2.15
-1	2.04	1.10	16.69	82.92	1.47	3.46	1.40
Average Value of Pre M&A	2.02	1.11	16.07	82.05	1.72	3.35	1.64
0	1.57	1.09	16.69	86.15	1.51	3.53	3.08
1	1.51	1.05	16.38	86.53	1.55	3.53	1.38
2	1.48	1.05	17.84	89.76	1.47	3.61	1.48
3	1.45	1.08	17.69	90.07	1.44	3.76	1.31
Average Value of Post M&A	1.48	1.06	17.30	88.79	1.49	3.63	1.39

Based on the data in Table 1, the assessment of banking performance based on the level of risk is in accordance with the latest regulations from Bank Indonesia, namely PRI number 13/1/PBI/2011 article 2 which states that banks are required to assess the soundness of banks using a risk-based approach (Risk-Based Bank Rating) both individually and consolidated. The average growth of banking performance is relatively not much different before and after mergers and acquisitions. The comparison revealed that, on average during three years before and three years after M&A, that the value of variables of PBV, TQ, ROA and SIZE are decreased. The value of four variables namely PVB, TQ, ROA and SIZE before M&A respectively are 2.02; 1.11; 1.72; and 1.64 and after M&A are decreased to be 1.48; 1.06; 1.49 and 1.39 respectively. Then, three variables namely CAR, LDR and COMIN have increased respectively from 16.07 to be 17.30; 82.05 to be 88.79; and 3.35 to be 3.63 after M&A.

Table 2. Difference t-test Results

Variable	t-stat	Hypothesis
PBV	10.111***	Ha accepted
	(0.0515)	
Tobin's q	2.874**	Ha accepted
	(0.0148)	
CAR	-1.668	Ha rejected
	(0.6454)	
LDR	-4.743***	Ha accepted
	(1.2821)	
ROA	2.095*	Ha rejected
	(0.1070)	
COMIN	-3.253**	Ha accepted
	(0.07810)	
SIZE	-0.311	Ha rejected
	(0.5445)	

Notes: *p<0.10, regression significant at 10 per cent level of significance; **p<0.05, regression significant at 5 per cent level of significance; and ***p<0.01, regression significant at per cent level of significance.

To analyse any significant difference all of variables before and after merger and acquisition. Table 2 show the results of different tests of the two sample groups. Based on results of difference t-test it is shown that there are four variables have supported the research hypothesis namely PBV, Tobin's q, LDR and COMIN. Both variables of PBV and LDR are significant different at p-value 1%, and then variables of Tobin's q and COMIN are significant different at p-value 5%.

Table 3. Estimation Model Results

Variable	Model 1 (PBV)		Model 2 (Tobin's q)	
C	5.9061***	3.9245***	1.3006***	1.2595***
	(0.6594)	(0.6071)	(8.4017)	(7.3750)
CAR	-9.0036	9.0019	0.1209	0.0437
	(0.0098)	(0.0034)	(0.1674)	(0.1194)
LDR	-0.0533***	-0.0363***	-0.4699***	-0.4159***
	(0.0117)	(0.0066)	(0.1124)	(0.0479)
ROA	0.2475**	0.1862***	7.8667***	4.6967***
	(2.1539)	(0.0774)	(2.1327)	(1.2031)
COMIND	0.0151	0.0006	1.3330	0.0062
	(0.1732)	(0.0913)	(1.6658)	(1.1653)
EPS	-	0.0001	-	0.0115*
		(0.0004)		(0.0063)
NPM	-	0.0238***	-	0.3188***
		(0.0056)		(0.0822)
PER	-	0.0061***	-	0.1184**
		(0.0024)		(0.0556)
SIZE	-	0.0048	-	0.0552
		(0.0048)		(0.0441)
R-squared	0.7588	0.9177	0.3818	0.5413
Adjusted R^2	0.7066	0.8942	0.3530	0.4966
F-statistic	14.5531***	39.0642***	13.2792***	12.1000***
DW-Statistic	1.5989	1.7260	1.2185	1.5475
Estimation Model	Fixed Effect	Fixed Effect	Random Effect	Random Effect

Notes: *p<0.10, regression significant at 10 per cent level of significance; **p<0.05, regression significant at 5 per cent level of significance; and ***p<0.01, regression significant at 1 per cent level of significance. DW-statistic is Durbin-Watson d-test for autocorrelation; number of observations is 91.

The results of the t-test are shown in Table 3. By purposing two models for testing any determinant factors which influence the banking performance., it is found that LDR and ROA have significant impact on banking performance for both models, Price to Book Value (PBV) and Tobin's q ratio, as representative of dependent variables to measure of banking performance. Consistent results are also found that, by adding some control variables, it revealed that two main independent variables, LDR and ROA with control variables of Net Profit Margin (NPM) and Price Earnings Ratio (PER), have significant impact on banking performance.

In model 1, if LDR ratio increased 1 per cent that will decreased bank performance around -0.0533 per cent. In model 2, LDR and ROA variables are also significant impact on bank performance which Tobin's q ratio as dependent variable. When ratio of LDR increased with 1.00 per cent, it will make of banking performance decreased -0.47 per cent. Banking value is increased around 0.24% per cent when ratio of ROA is increased with 1.00 per cent in model 1 and then it will increased of 7.86 per cent when ratio of ROA is increased of 1 per cent in model 2.

DISCUSSIONS

Value of Mean CAR of banks before and after M&A increased from 16.07 per cent to 17.30 per cent. This shows that the ability to increase their own capital by banks after M&Ais relatively better. It has exceeded the minimum CAR requirement of 8 per cent. The effect of the CAR has no significant effect on banking performance. The results of this study contradicts with previous studies, such as by Elyor (2009), Fanta, Kemal and Waka (2011) and Saif-Alyousfi, Saha and Md-Rus (2017) which found a positive and significant effect on the performance of domestic and foreign banks in Saudi Arabia. Furthermore, research conducted by Olalekan and Adeyinka (2013) shows that there is a positive and significant effect on the ratio of capital adequacy to banking performance as measured by profitability ratios in domestic banks, but has no effect on foreign banks in Nigeria.

Results of this study indicate that the ratio of the amount of lending to third party funds collected (LDR) is a negative and significant effect on the performance of banks conducting mergers and acquisitions. This result implies that the higher the amount of credit extended will increase the amount of risk from the channelled credit, such as the risk of bad credit in the bank. The mean LDR has increased quite high, from 82.05 per cent before M&A to 88.79 per cent after mergers and acquisitions. According to Bank Indonesia regulations, the ideal LDR ranges from 85 per cent and does not exceed 100 per cent. Increasing LDR will be perceived by investors or fund owners as increasing the risk of bad credit in the banking sector, because it is likely that banks will be less selective in channelling credit to those who are at risk of default.

The results of this study are consistent with research conducted by Cornett and Tehranian (1992) and Altunbas and Marques (2008) which revealed that, on average, bank mergers have resulted in improved performance. Marwansyah and Setyaningsih (2018) and Revita (2018) found that the LDR variable has a negative and significant effect on the banking performance of state-own banks as measured by the ROA variable. This study also supports research from Sambul, Murni and Tumiwa (2016) who revealed that LDR has a negative and significant effect on banking performance as measured by its share price.

CONCLUSIONS

Based on the results of the analysis and discussion in the previous sections the following conclusions can be drawn from the research topics. By using two variables to measured banking value, namely PBV and Tobin's q and four main variables in evaluating banking performance based on the level of banking risk, the banking performance after conducting M&A has decreased. Banking value measured by using PBV and Tobin's q are significantly different before and after merger and acquisition. Banking performance measured by LDR, COMIN and ROA are also significantly different before and after merger and acquisition. Value of banking before and after M&A is influenced by LDR and ROA.

For banks, those who do M&A should pay attention and improve the ability to generate better profits after conducting mergers and acquisitions, because these make the value of bank assets and capital become even greater, but if these assets and capital are not empowered optimally it results that the ability to generate profits from assets and large capital will decrease. For investors in the capital market, in the initial period after the banks make regular M&A they are still in the stage of management and employee adjustments, so when choosing the shares of banks that do M&Ait is recommended not only to pay attention to short-term performance, but also to pay attention to performance of the bank in the long run, where large assets and capital will have the potential to create a better value for the banking company in the future.

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