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**ASSESSING THE PERFORMANCE OF COMMERCIAL BANKS IN  
MALAYSIA: FINANCIAL RATIO ANALYSIS**

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***Abstract***

This study assesses the financial performance of commercial banks in Malaysia, during the period from 2003 until 2013 (11 years) and using a sample of seven banks. Financial ratios analysis is used to examine the financial position of the banks in order to know whether these factors are significantly correlated with financial performance of the banks or not as well as the impact of financial ratios. Capital ratio, bank size and total loan on total assets represent the financial ratios as independent variables while return on equity and return on asset are the proxies represented dependent variables. This study is based on secondary data which has been collected from the balance sheets and income statements of the banks from Thomson Reuters. The findings of the study show the positive relationship between capital ratio and bank size of the financial performance of commercial bank in Malaysia and negative relationship towards total loan on total asset.

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**Keywords:** Commercial banks, capital ratio, bank size, total loan on total assets, return on asset, return on equity.



## 1. Introduction

Bank Negara Malaysia (BNM) as a Central Bank of Malaysia has important roles in promoting Malaysia's monetary and financial system stability. In addition, BNM is functioning in progressive and sound financial sector in order to accomplish managed financial development for the advantage of the country. Thus, all banking and financial institutions in Malaysia have to follow the rules and regulations under Central Bank. Financial institutions in Malaysia are licensed under the Banking and Financial Institutions Act (BAFIA) 1989 and under the supervision of BNM. The institutions comprises of licenced institutions include merchant banks, commercial banks, finance companies and money brokers.

As developing country, Malaysia's banks play a major role in financing development. In Malaysia, commercial banks are contributing to their financial intermediation role. The performance appraisal of commercial banks is usually related to how well the bank can use its assets. Commercial banks' profit is derived from their main business which will take the short term deposits and transforming them into a long term (Mokhtar, 2006). Goh & Michael (2010) indicated that the evaluation of firms or banks performance usually by utilizing the financial ratio approaches, since it gives a straightforward information about the firm's financial performance. The request of their significance is unclear since on each study referred to a different ratio just like the best sign of effective indication of impending problems. Moreover, based on previous studies done by Kumbirai & Webb (2010), stated that financial ratios empower investors to distinguish unique banks' strengths and weaknesses, which are able to inform the banks' profitability, liquidity and credit quality. Capital adequacy theory is well related to the banks' performance as the theory indicated that banks may be in the position of 'buffer' of excess capital when their capital adequacy ratio is unstable in order to not fall under legal capital requirements.

Darus (2007) stated that commercial banks are the biggest providers of fund in the banking system as refers to the functions of commercial banks as compared to other types of banks. Besides that, commercial banks have a wide range of risks that must be controlled carefully, especially when the banks deal with a large amount of debt. Furthermore, any economic crisis with no effective supervision on risk management of the commercial banks will prompt to inconvenience in the banking system. Daly & Zhang (2014) done a study on assessing the profitability of banking institutions in Hong Kong which was influenced by financial ratios factors. Top seven banks owned by Chinese which operates in Hong Kong Became a target for the researcher from the year 2004 until 2010 with effect on net margin. For CITIC Bank, the result shown return on asset and return on equity are positively significant. Researcher revealed that unlicensed banks will make a smaller profit as compared to authorized Chinese banks as both are comparable in terms of management efficiency, asset risk and net interest margin.

Previous researches done by Al-Tamimi (2010), where he used the same dependent variables (return on assets and return on equity) to investigate the performance of Islamic and conventional banks in UAE. Besides that, Athanasoglou (2006) also used both proxies in evaluating the performance of Greek banks between the years 1985 to 2001. Tarawneh (2006) assessed the financial performance of Omani commercial banks utilized by multiple regression analysis and correlation by using return on asset and interest income as the dependent variables while bank size and some ratios as independent variables. In this study, the author indicated that return on asset has a strong positive correlation with bank size.

According to Adam (2014), bank size shows positive relationship with return on asset (ROA) with the coefficient 0.01 and there is insignificant relationship between return on asset (ROA) and bank size. However, capital ratio and total loan on total asset are negatively related with return on asset (ROA) with coefficient -0.05 and -0.02 separately. On the other hand, bank size shows positive relationship with return on equity (ROE) with coefficient 0.03 and there is insignificant relationship between return on equity (ROE) and bank size. Moreover, the capital ratio is negatively related with return on equity (ROE) with coefficient -0.03 and -0.05 for total loan on total asset, the result found that both ratios are insignificant. This study investigated the financial performance of Erbil bank by utilizing financial ratios to measure the financial position for the banks and on broader range and regression as well as correlation were used to find the impact and relationship of the Erbil banks.

Maudos & De Guevara (2011) has found a negative relationship between return on assets and size of banks where the smaller the banks, the more profitable they are. They investigated a large sample size by taking American, EU and Japanese banks for 8 years (2001 to 2008). Similarly, Tariq et al., (2014) also found indirect relationship of bank size in determining the profitability of Pakistani commercial banks. A study done by Sufian (2009), he measured the size of bank by using the logarithm of total asset which is similar with this study, and he found that bank size have positive relationship on the dependent variables. By the increasing in size of banks, it will subsequently decrease the acquisition cost, hence will increase the profitability of the banks. Ongore & Kusa (2013) found insignificant result of earnings quality and liquidity towards profitability with represented by net interest margin, return on equity and return on asset. He tested six regression models in investigating banks in Kenya during the year 2009 to 2013.

As per Elisa & Guido (2016), they identified the relationship between internal factors of banks and the performance of banks in Europe with a sample of 5 years (2009-2013). From the study, capital ratio and bank size found to have significant negative effects and influence the performance of banks. Despite the negative result, a positive relationship resulted for capital ratio and performance of bank in 1990s (Berger, 1995). Higher capital may increase the earnings and thus increase the profitability of the banks.

This study is mainly significance to the commercial banks as it discussed on the performance of commercial banks and how financial ratios affect them. Banks may adopt this findings and discussion to overlook the banks' performance and get to know the usage of some financial ratios in determining the commercial banks' profitability. Besides that, this study is relevant to future researchers as this will become the reference for them to have a big picture on the commercial banks' performance.

## **2. Problem Statement**

A few studies done on commercial banks using financial ratio analysis besides most of them using macroeconomic variables as their independent variables. As stated by Kiganda (2014), the main purpose behind both reviews was to build up the effect of macroeconomic determinants on profitability of banks with particular goals were evaluate, decide and assess the impact of economic growth, for example, real GDP, inflation and exchange rate, on bank productivity. Thus, this study is more focus toward commercial banks performance before and after financial crisis in 2008 by using financial ratios which the duration from the year 2003 to 2013. The global financial crisis was impacted Malaysian economy and negatively

affect the bank's profitability (Guisse, 2012). Hence, are the financial ratios give any impacts on the changes towards the performance of commercial banks in Malaysia?

### 3. Research Questions

- 3.1. Is there any significant relationship between financial ratios and the performance of commercial banks in Malaysia?
- 3.2. Is there any significant impact between financial ratios on the performance of commercial banks in Malaysia?

### 4. Purpose of the Study

- 4.1. To determine the significant relationship between financial ratios and the performance of commercial banks in Malaysia.
- 4.2. To investigate the significant impact between financial ratios on the performance of commercial banks in Malaysia.

### 5. Research Methods

This research consists of 7 commercial banks in Malaysia from the year 2003-2013 which has taken from Bank Negara Malaysia. Annual report of each commercial bank is retrieved from Bursa Malaysia and the data on the commercial banks' performance were collected from Thomson Reuters. The dependent variables of this study are the performance of commercial banks that represents by return on asset and return on equity while the independent consists are capital ratio, total loans to total assets and bank size.

#### 5.1. Explanatory variables

**Table 01.** Dependent and Independent Variable Measurement

Variables	Measures	Nomenclature
Return on asset	Net income / Total asset	ROA
Return on equity	Net income / Total equity	ROE
Capital ratio	Total equity / Total asset	CR
Total loans on total asset	Total loan / Total asset	TLTA
Bank size	Natural logarithm of total asset of the bank	BS

#### 5.2. Methodology

The researchers used Statistical Package for the Social Sciences (SPSS) in order to conduct the tests. This system helps to analysis the relationship among the variables that have been determined accurately besides the impact of the independent variables on dependent variable. Thus, the results of the analysis will then determine are the hypothesis should be rejected or accepted.

Correlation analysis is used by researchers in order to find out the relationship between performance of banks and the financial ratios. It measures two variables that are correlated each other and indicates whether they have a significant relationship in terms of positive or negative, or no relationship at all. Regression analysis used to identify the significant impact of financial ratios on banks' performance and

from that, researchers will determine which financial ratio give the significant impact on the performance of commercial banks in Malaysia.

**5.3. Model Equation**

$$Y1 = \alpha + \beta1CR + \beta2TLTA + \beta3BS + \mu$$

Where,

Y1= Return on assets

$\alpha$ = Constant value

$\beta$ = Coefficient value

CR= Capital ratio

TLTA= Total loans on total assets

BS= Bank size

$\mu$ = Error term

$$Y2 = \alpha + \beta1CR + \beta2TLTA + \beta3BS + \mu$$

Where,

Y2= Return on equity

$\alpha$ = Constant value

$\beta$ = Coefficient value

CR= Capital ratio

TLTA= Total loans on total assets

BS= Bank size

$\mu$ = Error term

**6. Findings**

**6.1. Correlation Analysis**

**Table 02.** Correlation analysis for ROA

	ROA	CR	TLTA	BS
ROA	1			
CR	0.718	1		
TLTA	0.074	0.125	1	
BS	-0.645	-0.711	0.160	1

Based on the Table 02, capital ratio shows positive relationship with return on asset with a coefficient 71.8% which is a high correlation. The independent variable total loan on total asset shows positive relationship between return on asset as the coefficient 7.4% which very weak correlation. However, bank size shows a negative relationship between return on asset with a coefficient -64.5% which moderate correlation according to the table of person correlation decision rule.

**Table 03.** Correlation analysis for ROE

	ROE	CR	TLTA	BS
ROE	1			
CR	-0.183	1		
TLTA	-0.104	0.125	1	
BS	-0.063	-0.711	0.160	1

For return on equity, Table 03 shows capital ratio has a negative relationship with return on equity with a coefficient -18.3% which is a very weak correlation. The independent variable total loan on total asset shows negative relationship between return on asset as the coefficient -10.4% which very weak correlation. However, all of them are insignificant correlated with ROE. However, bank size shows a negative relationship between return on equity with a coefficient -6.3% which very weak correlation according to the table of person correlation decision rule.

## 6.2. Regression Analysis

**Table 04.** Regression analysis for ROA

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	Beta	Standard Error	Beta		
Constant	0.019	0.009		2.131	0.036
CR	0.111	0.020	0.573	5.446	0.000
TLTA	0.001	0.006	0.018	0.221	0.826
BS	-0.002	0.001	-0.224	-2.145	0.035
R Square	0.5552				
Adjusted R Square	0.5369				
Sig F	0.00				

Established along the regression result above (model summary), it shows that the regression model was run from the commercial bank data with three independent variables which are the capital ratio, bank size and total loan on total asset. Regards to ROA, the result of R square indicates that 55.52% of the variance in ROA as the performance of commercial banks is significantly explained by all the independent variables used, while leaving 44.48% is need more independent variables which not included in this study.

$$ROA = 0.019 + 0.111CR + 0.001TLTA - 0.002BS + \mu$$

Research model above presents the information of financial ratios impacted on the commercial banks' performance with ROA as indicator. This study revealed a significant impact of CR on ROA since the significant value is less than 0.005, hence researcher rejects null hypothesis. As 1% of capital ratio increase, ROA will increase by 11.1%, as supported by Berger (1995). Furthermore, insignificant impact was found between ROA and total loans on total assets with the significant value more than 0.05 significant

level. It shows that even if total loans on total assets increased by 1%, it will not affect the performance of the banks. This result is supported by Ongore & Kusa (2013). For bank size, it also shows a significant impact due to significance value less than 0.05 however in inverse direction. Means that, when bank size go up by 1%, ROA will go down by only 2% and this result is align with previous study done by Maudos & De Guevara (2011).

**Table 05.** Regression analysis for ROE

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	Beta	Standard Error	Beta		
Constant	0.4650	0.133		3.505	0.001
CR	-0.767	0.310	-0.368	-2.474	0.016
TLTA	-0.028	0.087	-0.037	-0.324	0.747
BS	-0.029	0.015	-0.297	-2.010	0.048
R Square	0.1090				
Adjusted R Square	0.0724				
Sig F	0.0370				

As according to return on equity as the predictor for banks' performance, only 10.9% the variation in banks' performance is able to be explained by the financial ratios in this study and the remaining of 89.1% are explained by other independent variables that are not included in this study.

$$ROE = 0.4650 - 0.767CR - 0.028TLTA - 0.029BS + \mu$$

As per model above, this study found that there is significant impact of capital ratio and bank size on ROE with significant value stand at 0.016 and 0.048 respectively, which are less than 0.05 significance level. It is supported by Elisa & Guido (2016). The result for total loans on total assets, insignificant impact is identified since the significant value is more than 5% significant level and thus claims that even if total loans on total assets increased by 1%, it will not affect the performance of the banks. This study is align with Ongore & Kusa (2013). A negative impact found whereby 1% increase in capital ratio will reduce ROE by 76.7%, same goes to bank size where 1% increase in bank size will reduce ROE by 2.9% as supported by Tariq et al. (2014).

## 7. Conclusion

This study examines the impact on financial performance of commercial bank in Malaysia, which was taken as a sample for the purpose of analysis of financial performance. Return on asset and return on equity were used to represent the dependent variables while capital ratio, bank size and total loan on total asset were taken as independent variables. Succeeding collecting of data, descriptive model, correlation and regression have been tested. The result shows that the capital ratio and bank size are significant correlated and has impact on ROA with positive and negative relationship respectively. While for ROE, all of the

independent variables show insignificant result of relationship but have the significant negative impact for both capital ratio and bank size on banks' performance. As for recommendations, in order to obtain more reliable result, further researchers are advised to lengthen the period of study, the longer the better, while takes into consideration the crisis occurred in Malaysia. Moreover, more independent variables should be included in the study since there are a lot of predictors or determinants for financial performances for banks besides can considers on taking macroeconomics variables as well. Focusing on other types of banks such as investment banks, Islamic banks or may be all banks in Malaysia can be a good starts for future research whereby comparing with other countries in having a broad view of banking performance industry.

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