

# Analysis of Indonesia Banking Performance

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## ABSTRACT

The development of the number of banks in Indonesia has been increasing along with the flow of globalization, which resulted in tighter level of competition in the banking industry. The tight competition requires banks to improve their performance healthily and solidly. Banking health alone is not enough to define in detail the state of the bank so that an approach is needed through an industrial organization model using structural, behavioral, and performance instruments. This study discusses detailed performance of banks using a sample of 78 banks in Indonesia that were processed through panel data from 2008 to 2015. The result proves that the banking performance measured through ROA is not influenced by the market share of the bank, but influenced by assets, sales intensity, and the intensity of costs incurred by the bank itself.

**Keywords:** *performance, banking industry, Indonesia*

## 1. INTRODUCTION

Indonesia's economic development growth from 2008 to 2015 fluctuated between 6-4% in line with world economic growth. Even though in 2009 Indonesia's economic growth declined by 2%, the situation recovered quickly in a relatively short period. In 2016, the Indonesian economy is expected to grow more than 5% supported by monetary policy, macroprudential, and strengthening fiscal stimulus. In addition, it is in line with the government's program in promoting the Tax Amnesty, which leads to better condition of Indonesian economy.

As one of the five largest countries in ASEAN, Indonesia has the highest net interest margin and it indicates that banks in Indonesia have better efficiency than other ASEAN countries. However, the role of the financial sector still contributes little to Indonesia's economic growth. The contribution of the Indonesian financial sector to the Gross Domestic Product (GDP) from 2008 - 2015 was only around 3% - 4%, this number is considered too large for a country the size of Indonesia because there are more than 64% of the business sectors that have not been touched or served by the financial services (Sari, 2016).

The oligopoly of national banking structure, controlled by certain players, influences the behavior of the banking industry directly or indirectly. The directly influence is if banks have lack of power in the market, then it will die slowly if they do not merge and raise themselves with several other banks, while large banks that have power will still be able to stand up. Large assets are one of the reasons banks can become players in the banking industry.

### 1.1 Problem Statement

Indonesian banking consists private banks, state-owned banks, regional banks, and others. The existence of these banks certainly affects the condition of the Indonesian banking sector, especially since the existence of Bank Indonesia (BI) policy to separate microprudential policies which were ultimately held by the Financial Services Authority (OJK). The structure of the Indonesian banking system has not changed completely, but the impact of this policy and the financial crisis that hit Indonesia from 2008 - 2015 certainly has an influence on the Indonesian banking structure.

To find out the state of Indonesian banking, an instrument is needed to analyze it. One of the instruments that can be used is the industrial organization model approach, namely structure, conduct, and performance (SCP). SCP sees an industry from its structure, behavior, and performance. However, this study only discusses one aspect, namely the structure of the banking industry.

Sahoo and Mishra (2013) suggest that there is a significant relationship to sales intensity, assets, performance, and market size. The relationship between assets and market size due to competitive competition by having assets and large market size will support the structure of banking industry. So, this study discusses the effect of assets, sales intensity, performance results on the number of assets used (return on assets/ROA), and market size.

### 1.2 Research Objective

The purpose of this study is to analyze the performance of Indonesian banks and identify the variables that influence them. In addition, this study wants to look at the performance of Indonesian banks and analyze them for the future.

## 2. LITERATURE REVIEW

Performance is the result of work that is influenced by the structure and behavior of the industry which is usually identified with the amount of market dominance or the amount of profit of a company in an industry. However, to be more detailed, performance can also be reflected through efficiency, growth (including market expansion), job opportunities, professional prestige, personnel welfare, and group pride. In practice, performance measures can vary depending on the type of industry. First, performance measures can be based on the management's point of view. Second, performance can be seen from the added value, productivity and efficiency (Kuncoro, 2007).

Baye (2010) defines performance as profit and social welfare resulting from operating an industry. Industry profit, which is the aggregation of the difference between total revenue and total company costs in the industry, is a criterion commonly used in business performance analysis. In this study, industry performance is measured through the profitability approach. Profitability in the company's annual report is seen from the financial ratios of ROA. This is because ROA can show the extent to which banks have accumulated profits each year. Selected previous research as reference of this study are as follows.

Title	Author	Content
Analysis of the Effect of Indonesian Banking Architecture Policy (API) on the structure, behaviour and performance of the Indonesian banking industry	Mayasari (2012)	Identifying the shape of the structure, the effect of API policies on the level of competition in the banking industry and analyzing the impact of applying the API to Indonesia's banking performance in the year 2001 – 2008.
Analysis of Market Structure Behavior and Performance of the Indonesian Banking Industry (Study of Banks Listed on the Indonesia Stock Exchange 2008-2012)	Mandei, engka, and Belangkaehe (2014)	The Indonesian banking industry supports differentiation and efficiency so that banking performance improves
Analysis of Factors Affecting Commercial Bank Performance in Indonesia	Syaichu and Sukarno (2006)	CAR, LDR, and BOPO significantly influence ROA but not for NPL and DER. CAR,

		LDR, and NPL have a positive effect on ROA while BOPO and DER have a negative effect
Factors That Influence Bank Performance (Empirical Study of The Banking Industry in The IDX	Sudiyatno and Purwoko (2013)	BOPO and NPI

## 3. DATA

The data used in this study are secondary data taken from the active annual reports of Indonesian banks from 2008 to 2015 totalling 78 banks. Data taken from the annual banking report are assets, branch office growth, return on assets (ROA), and the number of sales per bank or credit that has been offered. All of the data was taken from 2008 to 2015.

## 4. METHODOLOGY

According to Firdaus (2011), the approach with panel data is done by looking at the behavior of various individuals (cross-section) at a predetermined period (time series). Panel data conducted in this study aimed to see the effect of several variables that have been determined on the structure of the Indonesian banking industry in the period 2008 to 2015. Panel data regression analysis has three models, namely: (1) Common Effect Model; (2) Fixed Effect Model (FEM); and (3) Random Effect Model (REM).

There are several advantages to the panel data method. First, the panel data regression method uses two types of data, namely time series and cross-section so that it will reduce the bias in regression calculations. Second, the panel data method can reduce lack of time series or cross-section.

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Whereas:

ROA : Banking Performance

SHARE : Market Share

ASET : Asset

SELL : Selling Intensity

COST : Cost Intensity

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
SELL	-0.542972	0.122927	-4.417008	<b>0.0000</b>
SHARE	2.468710	11.11146	0.222177	0.8243
ASET	0.450427	0.112272	4.011935	<b>0.0001</b>
COST	-0.292835	0.097111	-3.015486	<b>0.0027</b>
D1	-0.188470	0.097111	-2.540726	<b>0.0114</b>
C	-1.386209	2.944762	-0.470737	0.6381
<i>R-squared</i>	0.822326			
Adjusted R-square	0.790859			

Table 1. Behavioral model estimation results

## 5. RESULTS AND EMPIRICAL ANALYSIS

The third model is a measurement of the performance of the banking industry itself. This performance measurement itself is measured through ROA to find out the company's ability to generate profits. In fact, many other measures can be used as a performance measurement, but the most obvious performance is seen from how much the company can generate profits.

Based on the results of panel data regression processing, it can be seen that the SELL, ASET, COST, and D1 variables have a significant effect on the ROA variable because the probability value is below alpha 0.05 while the SHARE variable does not have a significant effect on ROA because it has a probability value of 0.82, which is more than the real level used at 0.05.

SELL is market share variable, and in this study, the results of panel data regression analysis shows that it has significant effect on the ROA variable. This relationship is inversely proportional because the SELL coefficient is negative, which means that each increase in one unit of ROA will reduce SELL by 0.54.

ASSET is a variable that describes the assets of banks, and this study shows that it has significant influence and direct proportional relationship to ROA. Every increase of one unit of ROA means that it will have an effect of 0.45 increase in ASSET.

In addition, to the two variables above, the COST variable also has a significant relationship to ROA with a probability value of 0.0027. This relationship has a negative effect or inversely proportional, which means that each increase of one unit in the ROA variable will cause a decrease in the COST variable of 0.29.

### Performance of the Indonesian Banking Industry

Indonesian banking statistics for the October 2015 period published by the FSA reduced the bank's NPL ratio by

2.67%. This increase in NPL was in line with the slowdown in bank lending, which grew by 10.26% from October 2014. In addition, to the slowing domestic economy, credit growth slowed due to the influence of write-offs by banks and the sale of assets of several banks to related groups.

Performance measurement can be done with various models. It was starting from the traditional performance measurement, which is considered very lacking in determining the performance of both individuals and organizations. It was followed by performance measurement using performance prism, which has five perspectives, namely stakeholder satisfaction, strategy, process, capability, and stakeholder contribution. In addition, there was a balanced scorecard that assessed an organization or industry from financial, business processes, knowledge, and corporate strategies.

Based on Sahoo and Mishra (2012), Belkhoui (2013), and Nabieu (2013), banking performance is influenced by SELL, ASSET, and COST. However, this study has different result because SHARE does not significantly influence bank performance. It might be because market share does not affect performance in the ROA ratio because in generating ROA it does not require the role of market share in order to accumulate large bank assets.

Assessed from the continuum of performance, there are several phases in instilling good performance in the company. This phase is known as plan-do-check-action (PDCA). These four activities must be continuously carried out to control the good performance of the company. In the "plan" or planning phase, the policyholder will identify the problem and design a plan to overcome it. After observation and analysis, the formulation of appropriate actions will be carried out to improve performance in this regard. Next is the "do" or implementation in which the plans that have been made will be carried out accordingly. At this stage, it will analyze the causes and carry out the continuous improvement to find the right formulation to solve the problem. Together with the implementation, a check or control will be carried out. In this phase, verification of the results of the implementation will be carried out and

compared with the desired objectives. Then the last is action or standardize and consolidate all of these phases. After finding the right formulation to deal with existing problems then standardization is carried out, so that it will prevent these problems to reoccur and also will improve performance.

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