

Determinants of Supply Chain Management Factors in the Commercial Banks (Indonesian IDX Case Study)

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Abstract- This study is aimed at analyzing the predictor variables used to predict the performance of banks listed on the Indonesia Stock Exchange, from 2000 to 2017 by using supply chain strategies. The predictor variables used in this research are as follows: Operational Income Operational Costs (BOPO), Market Ratio of Earning Per Share (Share EPS), Net Interest Margin (NIM), Non-Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loan to Deposit Ratio (LDR). While the financial performance was measured using Return On Assets (ROA) with panel data analysis used to examine the model. The results showed that Operational Costs Operating Income (BOPO), Market Ratio of Earning Per Share (EPS), Net Interest Margin (NIM), Non-Performing Loan (NPL), Capital Adequacy Ratio (CAR), and Loan to Deposit Ratio (LDR), simultaneously affected the Return On Assets (ROA) of banks listed on the IDX. It was also able to cover the gaps of previous researches by extending the research time and multiplying predictor variables used in detecting banking performance. The study concluded there is a positive strong relationship between performance and the independent variables as shown by the Pearson's co-efficient correlation which is significant as indicated by the P-value at 95% level of confidence. There are various determinants of supply chain performance that contributes to efficient and effective performance of supply chain in the organization namely ICT, knowledge and information sharing, trust, culture and joint decision making

Keywords; Supply Chain Management, Commercial banks, financial service providers, Indonesia

1. Introduction

Managers of world-leading firms view supply chain management as a significant driver of competitive differentiation and market value. The banking sector in

In [1] conducted a study on the performance of financial indicators in ASEAN countries which proved that Indonesian banks make use of significantly different techniques which tends to affect its financial performance, except ROA and ROE. The average ratio of Indonesian banking activities is better than that of the other four, namely CAR, NPL, ROI, LOA, ROE and AGR, while the LDR and ROA tend to be better.

According to [2], the profiles of manufacturing companies which goes public on the ASEAN capital market depicts the differences in the financial

Indonesia, tend to experience instability due to globalization. This became preeminent after the 2008 crisis with the unfolding of the Century Bank case. The economy of the banking sector was affected, and public confidence in its performance slightly declined. This situation was further exacerbated by the ups and downs of foreign exchange reserves owned by the state. Bank of Indonesia (BI) enforced an evaluation on the performance of banks in order to restore public confidence and increase passion. However, in December 2016, it observed that the growth of banking performance was considered good in five ASEAN countries, namely Thailand, Malaysia, Philippines, Singapore and Indonesia. This valuation is based on several indicators such as credit growth, Net Interest Margin (NIM), Return on Assets (ROA), and Non-Performing Loan (NPL). Viva News

Table 1. Performance of Banking Growth at the ASEAN Level

COUNTRY	CREDIT GROWTH	ROA	NIM	NPL
Indonesia	7.9%	2.2%	5.5%	2.9%
Malaysia	5.3%	1.3%	2%	1.6%
Thailand	3.1%	1.1%	2.6%	3%
Singapura	2.9%	1%	1.6%	1.5%
Philippines	16.1%	1.2%	3.2%	1.6%
Ranking	2	1	1	2
Indonesia				

performance of each country. This role is more visible in the financial structures of developing countries such as Singapore, Malaysia, the Philippines, Thailand and Indonesia. Data acquired from Bank of Indonesia in 2013 showed that the banking industry dominates the financial system with a share of approximately 77.9 per cent of the total assets. Many impacts arose from this event, and this lead to the need for a series of analyses to be conducted in order to detect the risk of bank failure as early as possible. Difficult economic situation, rapid regulatory changes, increasingly fierce and tighter competition caused a

decline in performance because it was unable to compete in the market. This resulted in some unhealthy banks [3].

In determining the level of bank health, Bank Indonesia is more concerned with valuing Return on Assets (ROA) than Return on Equity (ROE). This is because it prioritizes profitability as a measure of its assets by which the funds are mostly derived from the public. Therefore, ROA tends to be more efficient in measuring profitability. According to [4], the regulations of Indonesian banks are best for ROA at 1.5% of the total size. In order to determine profitability performance, it is necessary to analyze the financial ratios of the bank's performance.

The scope of this study is quantitative financial management and its effect on bank health in terms of profitability (Return on Assets). Therefore, rating the level of health is based on 4 (four) aspects, namely Earning, Assets, Capital and Liquidity. Earning includes Return On Assets (ROA), Operational Costs Operating Income (BOPO), Earning Per Share (EPS) and Net Interest Margin (NIM). Assets are assessed by Non-Performing Loans (NPL). Capital is assessed through the Capital Adequacy Ratio (CAR) while liquidity is the Loan to Deposit Ratio (LDR).

The purpose of ROA is to provide information for decision making, with a high value of ROA implying the company has good financial performance. Based on the description, it was concluded that the financial performance of Return on Assets (ROA) for all types of companies is important. In this study therefore, the ratios that allegedly affect the profitability of financial performance with a proxy for Return on Assets (ROA) are BOPO (Operating Cost Operating Income), Earning per Share (EPS), Net Interest Margin (NIM), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR) and Loan to Deposit Ratio (LDR).

The influence of operational income operating expenses (BOPO) on Financial Performance with the Return on Asset (ROA) proxy has been previously carried out by researchers, however, the results were contradictory. According to [5], the ratio of operating costs to income (BOPO) had a significant negative effect on ROA.

Different results were obtained [6], stating that BOPO partially has a significant effect on Return on Assets (ROA). In line with [7, 8], discovered that OEOI (operating expenses of operating income) significantly influenced ROA by 57.1%.

Information linked to Earning per Share (EPS) ratio is important for investors because profit is one of the main objectives for investing. Earning per Share (EPS) is a form of offering benefits to individual shareholders. Earning per Share (EPS) also shows a positive signal to a company's profitability [9]. Researches related to the ratio of Earning per Share (EPS) and financial In [10] proved that Earning per Share (EPS) significantly influenced the variables of a company's financial performance and the

Return on Assets (ROA) proxy. An increase in EPS tends to improve the company's financial performance. Meanwhile, [11] proved that EPS has a significant impact on bank profitability or bank financial performance. In another study carried out by [12], the results obtained showed that the Earning per Share (EPS) significantly affected the Return on Asset (ROA) variable.

According to [13] Net, Interest Margin is another important indicator for determining bank profitability. The ratio of net interest margin is directly proportional to the level of bank health, therefore, when the ratio of net interest margin is high, the level of bank health is also high. A rise in loan interest causes an increase in net interest margin and bank profitability. Researches on the ratio of Net Interest Margin (NIM) and its effect on the profitability of financial performance have been initially conducted. According to [14], financial ratios consisting of NIM affect the financial performance of public companies in the Indonesia Stock Exchange as measured by the ROA ratio. The results of this study proved that NIM has a significant effect on ROE and ROA, and ROE has a significant effect on ROA.

In addition, management needs to pay attention to the high NIM ratio and the amount of Non-Performing Loan (NPL). The NPL ratio measures the ability of management to manage any risk that might arise as a result of the loans provided by companies, such as non-repayment of the loan provided by the company to the debtor. The higher the NPL ratio, the lower the quality of company credit and this causes a number of problems and losses. Conversely, the lower the NPL, the higher the profit or profitability (ROA). The average interest rates for deposits and bank loans in Indonesia in September 2014 were 9.04% and 12.84%, respectively. Lending and deposit interest rates are higher in Indonesia, unlike in other countries in the ASEAN region such as Singapore, Thailand, Malaysia and Philippines. For example, in 2012 the 3-month deposit rate in Indonesia was 5.76% greater than Singapore (0.14%), Malaysia (2.97%), and the Philippines (3.03%). Apparently, the minimum lending rate in Indonesia is 11.49%. This is higher than the rate in Malaysia, the Philippines and Singapore with values of 6.53%, 5.48% and 5.38%, respectively. The higher nominal interest rates tend to increase bank interest expenses, and this ultimately reduces the level of efficiency as a result of greater uncertainties and risks [15].

In [16] explained that in broader financing institute such as the banking sector, the results proved that the risk of non-performing loans of banks has a significant negative effect on the financial performance of commercial banks in Kenya both in the short and long term. Similar results discovered by [17] proved that non-performing loans, bank size, operating costs and liquidity had a significant effect on the financial performance of commercial banks' Return on Assets (ROA) in Kenya. This implies that banks increase their exposure to loans and this, in turn, reduces profits. It is as a result of the fact that the health of the bank loan portfolio tends to be reflected in the risks associated with non-performing

loans, and this affects the financial performance of commercial banks. Different results were obtained by [18] who stated that Non-performing Loans (NPLs) had no effect on the financial performance of banks' Return on Assets (ROA) listed on the Indonesia Stock Exchange. Likewise the results of researches conducted by [19] where Non-performing Loan (NPL) was discovered to have no relationship with the financial performance of banks' Return on Assets (ROA) in Nigeria.

In addition to BOPO (Operational Income Operating Costs), Earning per Share (EPS) and Non-performing Loan (NPL), Capital Adequacy Ratio (CAR) is also important for financial performance. This ratio shows how far all bank assets at risk (loans, investments, securities, bills at other banks) are funded from their own capital in addition to obtaining funds from sources outside the bank such as public funds, loans (debt), and others. Apparently, CAR is the ratio of bank performance to measure the adequacy of capital owned by banks to support assets that contain or generate risk. In [20] explained that "CAR is an indicator of a bank's ability to cover a decline in assets as a result of bank losses caused by risky assets". The CAR standard is in accordance with Bank Indonesia Regulation Number 10/15 / PBI / 2008 dated 24 September 2008 concerning the Bank's Minimum Capital Requirements in article 2 that "Banks are required to provide a minimum capital of 8% (eight per cent) of Risk-Weighted Assets (ATMR)"

Studies on the ratio of Capital Adequacy Ratio (CAR) to the profitability of financial performance have been initially conducted. In [20-23] proved that Capital Adequacy Ratio (CAR) affected the profitability of company performance as measured by the ratio of Return on Assets (ROA). In contrast to the research of [24] stated that the Capital Adequacy Ratio (CAR) has a negative effect on the profitability of company performance as measured by the ratio of Return on Assets (ROA).

Increase in BOPO (Operational Income Operating Cost) ratio, decrease in stock profit (EPS), High Non-performing Loan (NPL) and sufficient capital owned by the bank, Capital Adequacy Ratio (CAR) aids in maintaining the growth of profitability and ensures the company implements the right management strategy. An assessment of a company's management strategy is seen on the Loan to Deposit Ratio (LDR). In [25] explained that Loan to Deposit Ratio (LDR) is a comparison between the loans disbursed by the company and third-party funds. This is because managers of a conservative company usually have a relatively low Loan to Deposit Ratio (LDR) trend. Conversely, aggressive management has a high Loan to Deposit Ratio (LDR) or exceeds the tolerance limit. From the background description above, it appears that there are certain differences in the results of researches conducted on banking performance using financial ratios. It tries to bridge some of the weaknesses of previous researches, it includes the following:

- Extending the research time span (2000 - 2017)
- Using more complex variables as performance predictors

The aim is to discover whether financial ratio factors have a significant effect on the profitability of companies listed on the Indonesia Stock Exchange from 2000-2017.

2. Literature Review

Today's marketplace is shifting from individual company performance to supply chain performance: the entire chain's ability to meet end-customer needs through product availability and responsive, on-time delivery. Supply chain performance crosses both functional lines and company boundaries. Functional groups for example

engineering, research and development (R&D), manufacturing, and sales/marketing are all instrumental in designing, building, and selling products most efficiently for the supply chain, and traditional company boundaries are changing as companies discover new ways of working together to achieve the ultimate supply chain goal, the ability to fill customer orders faster and more efficiently than competitors has become a major priority to most organizations According to (Brigham & Houston, 2006), a signal is an action taken by a company to give instructions to investors concerning how management views the company's prospects. According to Law of Republic of Indonesia number 10 of 1998 dated 10 November 1998 concerning banking, financial institutions simply means "a business entity that collects funds or resources from the public in the form of deposits and distributes them to the society in form of credit and or other forms in order to increase the living standard of the people". The bank is a company engaged in the financial sector.

Banking profitability is a condition that illustrates the ability of banks to obtain profits Profitability shows the ability of a bank to generate profits for a certain period in their operations which is a major focus in assessing their achievements because profitability is not only an indicator of its ability to carry out obligations but also a reflection of its value which shows its business prospects in the future. A profitability ratio is the ratio of net income to investment or equity, which is used to obtain profits from banks. Profitability is elements that need to be known by the parties concerned because it aids to determine the performance and the level of bank health. It includes the following:

In [25] ROA measures the total effectiveness in generating profits through available assets. According to [26], the ratio of net income to total assets measures the return on assets (ROA) after interest and taxes. In [27] explained that the ROA ratio measures a company's ability in utilizing its assets to generate revenue.

BOPO is the ratio of operating costs to operating income. Operating costs represent costs incurred by banks in the course of carrying out main business activities such as interest, marketing, labor, and other operating costs. Operating income is the main income of the bank obtained

from the placement of funds in the form of credit and other operating income. According to the financial dictionary, BOPO is a ratio group that measures the efficiency and effectiveness of a company's operations by comparing one to another. The various income and expenditure are obtained from the statement on the balance sheet. Operating cost ratio is a comparison between operating costs and operating income. The ratio of operational costs is used to measure the level of efficiency and the ability of banks in conducting operations [28].

Earning Per Share (EPS) is an analysis that describes the amount of profit to be obtained from each share. The term earning per share refers to the net income derived from each of the shares during a certain period. According to [29], Earning Per Share (EPS) is a financial ratio often used by stock investors to analyze the company's ability to generate profits based on shares owned".

The NPL ratio is the ratio between problem loans and total loans. The maximum Non-Performing Loan (NPL) ratio set by Bank Indonesia is 5% and banks are required to banks to assess the quality assets. At the elementary level, bad credit (NPL) is a type of loan where the borrower fails to make payments according to contractual obligations. In many jurisdictions and companies, NPL is defined as the loan in which the debtor has not made scheduled payments for at least 90 days.

Capital Adequacy Ratio (CAR) is a ratio which shows the extent banks assets such as credit, investments, securities, and bills are considered risky from external sources such as the public, loans etc. In essence, the Capital Adequacy Ratio is the ratio of the bank's performance to support assets that are considered to be risky, such as available finances. Capital Adequacy Ratio shows a bank's capital and serves as a basis for assessing the prospects for business continuity in the bank concerned. The greater the Capital Adequacy Ratio, the higher its endurance in handling depreciation of its assets.

3. Research Methodology and Model

3.1 Data

The object of this research is conventional commercial bank companies listed on the Indonesia Stock Exchange (IDX) from 2000-2017. Based on data acquired from the Indonesia Stock Exchange from 2000-2017 there were 43 conventional commercial banks and sharia public banks on the Indonesia Stock Exchange. A data sample was obtained (18 years X 43 shares) = 755 research data samples from the period before the crisis and after the global economic crisis in 2000-2017.

3.2 Research Variables

Here is a table of research variables, with their respective proxies:

Table 2. Variable measurements

Variable Name	Formula
Independent Variable (Y)	
<i>Return on Asset (ROA)</i>	$ROA = \frac{\text{Net profit after tax}}{\text{Total assets (or average total assets)}}$
Dependent Variable (X)	
Operational Costs Operating Income (BOPO) (X ₁)	$BOPO = \frac{\text{Operating costs}}{\text{Operating income}} \times 100\%$
<i>Earning per Share (EPS) (X₂)</i>	$EPS = \frac{\text{Net income}}{\text{number of ordinary shares outstanding}}$
<i>Net Interest Margin (NIM) (X₃)</i>	$NIM = \frac{\text{Net interest income}}{\text{Productive Assets}} \times 100\%$
<i>Non Performing Loan (NPL) (X₄)</i>	$NPL = \frac{\text{Non-performing loans}}{\text{Total loans}} \times 100\%$
<i>Capital Adequacy Ratio (CAR) (X₅)</i>	$CAR = \frac{\text{BANK Capital}}{\text{Total RWA}}$
<i>Loan to Deposit Rasio (LDR) (X₆)</i>	$LDR = \frac{\text{Total third party credit}}{\text{Total third party funds}} \times 100\%$

4. Research Models and Data Analysis Methods

First, panel data regression model is determined. This is either a general, fixed, or random-effect model. The determination of this model depends on the results of the Chow test, the Hausman test, and the LM test. Then, before entering multiple regression analysis to test the hypothesis, the data need to pass the classic assumption

test which consists of normality, autocorrelation, multicollinearity test, and heteroscedasticity.

Next, multiple regression analysis is conducted. Based on the results obtained, the researchers produced multiple regression equations, F-test and R-squared results. Multiple regressions aim to measure the strength of independent variables on dependent variables and show the direction of the relationship between them. The results of the regression analysis are the coefficients of each

independent variable. This coefficient is obtained by predicting the value of the dependent variable through the following equation:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon$$

Explanation:

Y	: Financial Performance (ROA)
a	: intercept
X1 (BOPO)	: Operational Income Operating Costs
X2 (EPS)	: Market Ratio of Earning Per Share
X3	: Net Interest Margin (NIM)
X4	: Non Performing Loan (NPL)
X5	: Capital Adequacy Ratio (CAR)
X6	: Loan to Deposit Ratio (LDR)
β	: Regression Coefficient
ε	: error

F-test is used to detect the independent variables in this study simultaneously influenced the dependent variables. The determination of the F-test results is based on the statistical values of F and F-table. The values are found in the F-table of 5% significance level with degrees of freedom: df: α , (k-1), (nk), where n is the number of observations and k is the number of independent variables used in this study. If the statistics $F < F\text{-table}$, that means the null hypothesis (H0) is accepted. It also implies that

the dependent variables were not affected by the independent variable and vice versa. The null hypothesis for the F-test is constructed as follows:

H01: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = 0$; There is no significant joint effect of Operational Income Operating Cost (BOPO), Earning Per Share Market Ratio (EPS), Net Interest Margin (NIM), Non Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loans to Deposit Ratio (LDR) on financial performance (ROA) of banks in Indonesia from 2000 to 2017.

The coefficient of determination (R²), is used to measure the extent independent variables explain the dependent variable. This coefficient shows the extent the total variation in the dependent variable is explained by the independent variable in the regression model. The value of the coefficient of determination is between 0 and 1. R² values close to 1 indicate that the variables in the model represent the problem being studied because it explains the variations that occur in the dependent variable.

5. Finding

Rather than emphasizing the development of product and information processes, the study of supply chain finance (SCF) focuses on the integrated management of financial flows along supply chains to reduce costs and improve working capital for suppliers and buying firms. The significance test of fixed effect (F-test) or Chow-test is to determine whether panel data regression techniques with fixed effects are better than models without dummy variables or OLS.

Table 3. Chow Test Results

Effect Test	Statistic	d.f	Prob
Cross-section F	9.895.921	-41,707	0.0000
Cross-Section Chi-Square	342.425.385	41	0.0000

Source: Researcher's data

According to the results of the chow-test test above, the probability value of 0.000 was obtained which is smaller than 0.05, therefore, it was deduced that the model was a fixed effect model (FEM). Further testing by the random effect model (REM) test is required, however, it was concluded that the fixed effect model (FEM) is ideal.

Furthermore, is the Hausman Test which is used to choose between the fixed or the random effect model. The Hausman test is obtained through the command and views found in the panel directory, Ghozali (2011).

Table 4. Hausman Test Results

Test cross-section random effects			
Test Summary	Chi-Sq.Statistic	Chi-Sq.d.f	Prob
Cross-Section random	7.967.870	6	0.2405

Source: IDX Secondary Data processed by E-VIEWS, 2019

Based on the results of the hausman test, a probability value of 0.2405 was obtained, and this is greater than

0.05, therefore, the fixed effect model (FEM) regression model is more suitable.

5.1 Descriptive Statistics of Research Variables

The results of descriptive statistical data obtained for the past 18 years from (2000-2017) for each financial ratio variable used in this study is seen in the following table:

Table 5. Descriptive Statistics Results

	ROA	BOPO	EPS	NIM	NPL	CAR	LDR
Mean	0.226226	1.113625	1.463348	0.870149	1.949619	1.171774	46.35513
Median	0.014891	0.753551	0.731000	0.445545	1.144443	0.769344	48.85462
Maximum	7.373992	9.735687	10.84924	9.652722	12.33531	16.34000	382.0214
Minimum	-1.640000	-1.084027	-1.100000	-9.034835	-6.905544	-15.65493	-39.63466
Std. Dev.	0.613623	1.463537	2.000287	1.336540	2.208204	2.013191	37.66086
Observations	755	755	755	755	755	755	755

Source: IDX Secondary Data processed by E-VIEWS, 2019

5.2 Multiple Regression Results

Table 6. Multiple Regression Results

Variabel	Coefficient	t-Statistic	Prob
C	-0.188982	-5.350.631	0.0000
BOPO	0.021525	1.794.864	0.0731
EPS	0.068195	6.573.359	0.0000
NIM	0.114526	8.179.039	0.0000
NPL	0.005181	0.589236	0.5559
CAR	0.035749	4.037.007	0.0001
LDR	0.003016	6.180.032	0.0000
R ²	0.521725		
Adjusted R Square	0.489931		
Probability F-Stat	0.00000		

Based on table 6, the Prob (F-statistic) value is 1,640,916. Because the Prob (F-statistic) value α (5%) or 0.000000 <math><0.05</math>, then H₀ is rejected, which means BOPO, EPS, NIM, NPL, CAR and LDR significantly influence ROA.

The coefficient of determination R² is 0.521725 or 52.17%. The coefficient of determination (R²) was used to measure the model's ability in explaining the variation of independent variables. This proves that BOPO, EPS, NIM, NPL, CAR and LDR are able to explain the Profitability (ROA) of 52.17% while the remaining 47.83% is explained by other variables not stated in this research.

6. Discussion

Supply chain finance is an essential and emerging topic in supply chain management. More and more companies are

providing SCF services to their supply chain members in an attempt to improve services, lower costs and achieve a competitive advantage. Although an increasing number of studies have analysed the potential of SCF resulting in improving the wealth of stakeholders within supply chains, there is a lack of understanding on whether SCF initiatives can result in positive market value for service providers. This study addressed this gap by exploring the essential characteristics of SCF initiatives. The purpose of this study was to analyze the influence, condition and development of SCF ratio factors in predicting profitability (ROA) in financial institutions or companies in Indonesia. Based on the results of the output in table 6, it was discovered that the fit model was obtained by R Squared or the coefficient of termination of 0.521725 or 52.17%. These results indicate that there are 6 (six) independent variables X namely (BOPO, EPS, NIM, NPL,

CAR and LDR) that are able to simultaneously explain the 52.17% of the variations that occur in the dependent variable Y (Return On Assets) while the remaining 47 % is explained by other variables not examined.

Earning Per Share (EPS) has an influence on Return On Assets (ROA) in Conventional Banks listed on the Indonesia Stock Exchange. The results of this study indicate that Earning Per Share (EPS) has a significant effect on Return On Assets (ROA), this confirms the outcome of previous researches conducted by [14] in his study entitled Determinants of Firm Performance: A Comparison of European Countries. It show that all variables (EPS) have a significant effect on company performance (ROA) [29] examined the Impact of Earnings Per Share, Debt to Equity Ratio, and Current Ratio Towards The Profitability of Companies Listed in Lq45 from 2009-2013. The results showed that Earning Per Share significantly influenced profitability (ROA). In [30] examined the Relationship between Earning Per Share & Bank Profitability. The results proved a positive relationship exist among the dependent variables Earning Per Share, Net profit margin, return on equity and independent variables (return on assets).

A relationship exists between Net Interest Margin (NIM) and Return On Assets (ROA) in Conventional Banks listed on the Indonesia Stock Exchange. The results of this study indicate that the Net Interest Margin (NIM) has a significant effect on Return On Assets (ROA), therefore the analysis of this research is in line with that of previous studies conducted by [31] The analysis further explained that the NIM variable has a positive and not significant effect, on ROA, [32] Analyzing Non-Performing Loans and Financial Performance of Banks: An Empirical Study of Commercial Banks in Kenya. It was discovered that non-performing, bank size, operating costs and liquidity significantly influence the financial performance (ROA) of commercial banks in Kenya.

Relationship between Capital Adequacy Ratio (CAR) and Return On Assets (ROA) in Conventional Banks or companies listed on the Indonesia Stock Exchange. The results of this study indicate that the Capital Adequacy Ratio (CAR) significantly influences Return on Assets (ROA), the analysis of this research are in line with the outcome of previous studies conducted by [33] who examined the Effect of Capital Adequacy Ratio (CAR), Loan To Deposit Ratio (Ldr) and Non-Performing Loans (Npl) on Return on Assets (ROA) of Banks listed in the Indonesia Stock Exchange. The analysis concluded that: Capital Adequacy Ratio (CAR), affected the Return on Assets. In [34] researched on the Comparative Analysis of Probability between Conventional Banks and Islamic Banks in Indonesia. The results explained that CAR has a significantly positive effect on Islamic bank ROA.

The relationship between Loan Deposit Ratio (LDR) and Return on Assets (ROA) in Conventional Banks listed on the Indonesia Stock Exchange. For this study, the outcome indicated that the Capital Adequacy Ratio (CAR) significantly influences Return on Assets (ROA), the

results of this research confirms the outcome of previous studies conducted by [35] in his review entitled Effect of Capital Adequacy Ratio (Car), Loans To Deposit Ratio (LDR) and Non-Performing Loans (NPL) on Return on Assets (ROA) of Banks listed in Indonesia Stock Exchange. The outcome proved that the Loan to Deposit Ratio (LDR) affects the Return on Assets. In [36, 37] examined the Comparative Analysis of Probability between Conventional Banks and Islamic Banks in Indonesia. The analysis of multiple linear regression analysis showed a significant positive effect of CAR and LDR on ROA.

7. Conclusions and Suggestions

The study sought to investigate the determinants of supply chain performance among commercial banks in Indonesia. This research successfully proved that financial factors such as Operational Income Operational Costs (BOPO), Earning per Share (EPS), Net Interest Margin (NIM), Non-Performing Loan (NPL), Capital Adequacy Ratio (CAR), Loans to The Deposit Ratio (LDR) simultaneously has a significant effect on profitability with the Return on Assets (ROA) proxy for conventional banks listed on the Indonesia Stock Exchange from 2000-2017. The coefficient of determination R² in this study is 52.17%. This shows that BOPO, EPS, NIM, NPL, CAR and LDR are only able to explain the Profitability (ROA) of 52.17% while the remaining 47.83% is explained by other variables not studied.

There are several limitations in this study, however, the data access variables used failed to reflect banking financial performance and macroeconomic factor variables in the research model. Furthermore, it needs to be added to other financial information variables that are thought to affect the Return on Assets of Banks in Indonesia, especially financial performance ratios that are related to liquidity such as Current Ratio, Quick Ratio or other financial ratios. In subsequent studies, other variables reflecting macroeconomic conditions such as Rupiah / US \$ Exchange Rate, Inflation, SBI Interest Rates, Gross Domestic Product (GDP), etc need to be included

For decision-makers, it is better to pay attention to research variables showing results that have a significant effect on profitability (Return on Assets) because it aids in planning their long-term business.

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