

The Influence of Bank Characteristics on Financial Performance with Intellectual Capital as Intervening Variable (Study on National Commercial Banks in Indonesia)

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ABSTRACT

This study aims to examine the effect of bank characteristics on financial performance using 7 financial proxies on bank characteristics from market concentration of third party funds (HDPK), credit market concentration (HLOA), capital adequacy (CAR), bank liquidity (LDR), bank efficiency. (BOPO), non-performing loans (NPL), leverage (LEV), and Financial Performance with the proxy of Return On Assets (ROA) as the dependent variable and Intellectual Capital as the Intervening variable. The method of data collection in this study is to collect secondary data. This research is focused on National Commercial Banks in Indonesia. The results of this study obtained that there is a significant effect between Bank Characteristics on Financial Performance with a T-Statistic of (5.360 > 1.96) and a coefficient value of 0.838. The effect of bank characteristics on intellectual capital has a significant effect with a T-statistic of (4,089 > 1.96) and a coefficient value of 0.626. Furthermore, the influence of Intellectual Capital on Financial Performance does not have a significant T-statistical effect of (0.304 < 1.96) and the coefficient value is -0.058.

Keywords: Bank Characteristics; Financial Performance; Intellectual Capital.

INTRODUCTION

The ups and downs of the economy at the micro level are reflected in the financial performance of companies listed on the stock exchange (Franco, 2017; Kizildag & Ozdemir, 2017; Quevedo & Quevedo-Prince, 2019). According to data obtained from the IDX, there are several issuers who experienced a decrease in net profit in the 2018 period. This decline in profit occurred in companies in the banking sector. Bank is an organization which acts as a financial intermediary that brings the parties together who have excess funds with party which need capital, as well as organization which works to expedite current payment. Starting from operational bank until transfer fund public to they who need through loan, bank get credit interest as a form of income (Susanti, 2019). This income is the bank's main income, specifically bank general. This situation cause bank attempt to increase loan to debtors, to increase their income. However, bank management face other problems as it gets worse economic conditions Indonesia. It is estimated

that the bank no longer benefit from margin profit net (Net Profit Margin/NPM) or net interest margin (Net Interest Margin/NIM) as high as before. The government insists that drop loan interest rates will have an impact on margin profit. According to this view, banks are required to diversify income. This can be done more efficiently through commission-based income or by reducing the company's operating costs (Faez et al., 2014; Fen & P'ng, 2019).

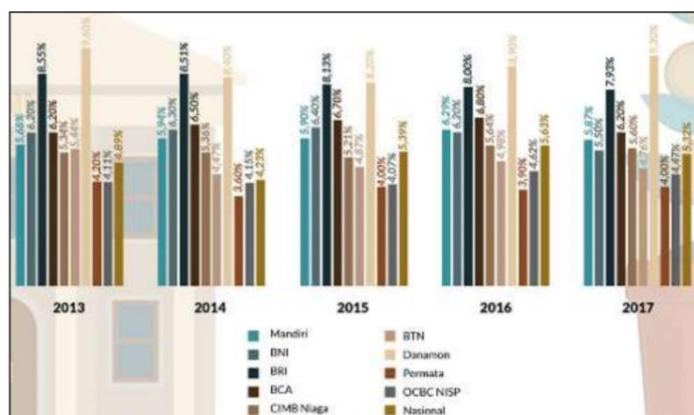
Banking industry Indonesia is one of the countries with Highest NIM in world with a value of 5%. Even though the value of The ideal is as big as 2.5%. Based on data from bank global, margin ratio the bank's net profit is Indonesia highest in the range of 5.6-5.8%, much more tall from country other country neighbors like Malaysia only 2%, Thailand 2.5, Singapore around 1.5-2% and the Philippines 4%. Korean below 2% and even Japan enter less than 1% (Raharjo et al., 2014; Syadullah, 2018).

The high net profit margin of Indonesian banks indicates that Indonesian banks are inefficient. NIM distinguishes between return on investment and interest expense. Through NIM, you can calculate the difference between loan interest and savings interest. In general, looking at profits, the greater the difference between the loan interest rate and the deposit rate, the higher the bank interest rate. The size of this spread is usually ineffective and reflects the efficiency of the bank (Said & Ali, 2016; Sriyana, 2015).

The high NIM status of banks in Indonesia reflects the fact that the Indonesian banking industry faces problems of high risk and productivity. Banks also need to find new sources of income in the form of fee-based revenue. Non-interest income is a form of diversification of bank income. Non-interest income is an effort to increase bank income while minimizing risk for banks (Hakim, 2017; Setiawan & Wisna, 2021; Shaban et al., 2014; Sriyana, 2015).

The empirical picture of interest and non-interest income in Indonesian banking shows a change in the structure of banking income. This clearly presents an interesting case for further research. Further research is needed to investigate the factors that change the income structure of Indonesian banks (AL-SLEHAT & ALTAMEEMI, 2021; Bian et al., 2015; Ghosh, 2020; Kiweu, 2012).

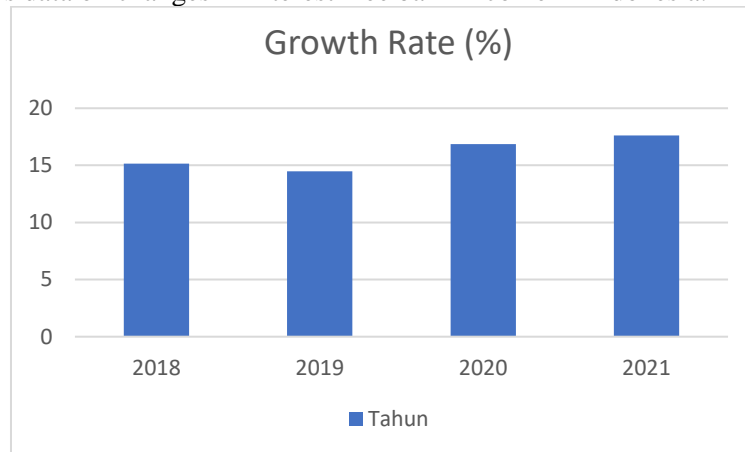
Banks are now actively looking for sources of income other than loan interest. In addition, Bank Indonesia (BI) lowered the benchmark interest rate and the Deposit Insurance Corporation (LPS) lowered the guarantee interest rate. It is almost certain that a bank's profit margin or net profit margin will decrease.



Source: <https://tirto.id>, 2018

Figure 1. Development of Banking NIM in Indonesia

Based on the data, interest-free income from banks in Indonesia has increased over the last five years. The increase in non-interest income was due to a surge in electronic banking services. The following is data on changes in interest-free bank income in Indonesia.



Source: *Financial Services Authority, 2021*

Figure 2. Development of Non Interest Income Banking in Indonesia

The increase in interest-free income from 2018 to 2021 is profitable as the bank drives growth through its bancassurance business, cards and transactions with optimized digital banking. A source of commission-based income (FBI) is the income that a bank earns based on the price of banking services which can only be increased in retail transactions such as e-commerce.

Financial performance appraisal such as banking has a different business scope from other business scopes. Banking is an intermediary institution that connects parties who have excess funds (financial surplus) with parties who have lack of funds (financial deficit), and the bank is tasked with bridging the two (Fahmi, 2015). Amelia and Fauziah (2017) show that the capital adequacy ratio has a negative effect, while third party funds and exchange rates have a positive effect. However, the inflation vector and the rate of profit sharing have little effect on bank sales. Chandrasegaran (2020), a 2013-2017 survey in Sri Lanka, shows that CAR affects bank earnings. According to a survey by Saunders, Schmid & Walter (2016) in developed countries such as the UK and the European Union, the CAR variable affects bank performance, including bank income.

As Figure 1 shows, Indonesia's interest-free income is starting to grow. Therefore, in this study, we examine the factors that choose interest-free income as one of the focal points. Research on this topic is still inadequate in Indonesia itself, but research on the factors driving interest-free returns is widespread in other countries. For example, research on the factors that determine interest income and non-interest income is quite different. Hahm (2008) found that bank size, bank efficiency, and economic growth account for interest-free returns at banks in OECD countries. However, asynchronous spending is shown by Meslier, Takaneng, and Tarazi (2014), explaining that bank size and efficiency have a negative impact on non-interest income.

The evolution of changes in the structure of bank interest income and the development of non-interest income in Indonesia is certainly an interesting topic that needs further research. This study focuses on the factors that determine it. Therefore, this study conducted an empirical test of the bank's internal factors attached to bank characteristics such as capital adequacy ratios, bank liquidity, and bank efficiency. In addition, the researchers also linked factors outside the bank. Above all, national income, inflation and benchmark interest rates are tested against interest and non-interest income of Indonesian commercial banks. Based on theory and research empirical, The author is interested in conducting a research entitled "The Influence of Bank Characteristics on

Financial Performance with Intellectual Capital as an Intervening Variable (study on national commercial banks in Indonesia)”.

METHOD

The data analysis technique used to discuss the problems in this research is the Structural Equation Model (SEM). Structural Equation Models (SEM) are statistical techniques that allow the simultaneous testing of a relatively complex series of relationships (Ghozali, 2014). The path diagram aims to determine the effect of the independent variable on the dependent variable by using an intermediate variable. The path diagram provides an explicit causal relationship between variables based on theory (Hardinis, 2019). Complex relationships can be built between one or several dependent variables with one or more independent variables. There may also be a variable that has a dual role, namely as an independent variable in a relationship,

The method of data collection in this study is to collect secondary data. This survey focuses on the Indonesian National Commercial Bank. Due to the small population, this study uses a saturated sample that uses all population data as the survey sample: state-owned banks, FX BUSN, non-FX BUSN, BPD, joint venture banks, foreign banks, and Islamic banks. The variables used are market concentration of third party funds (HDPK), credit market concentration (HLOA), capital adequacy (CAR), bank liquidity (LDR), bank efficiency (BOPO), non-performing loans (NPL), leverage (LEV), and Financial Performance with the proxy of Return On Assets (ROA) as the dependent variable and Intellectual Capital as the Intervening variable.

Testing the hypothesis of this study using the Partial Least Squares (PLS) method (Ghozali, 2014) PLS is a powerful factor indeterminacy analysis model, because it does not assume the data must be of a certain scale, and the number of samples is small, and can also be used to confirm theory, further (Ghozali, 2014) PLS helps researchers to get the value of latent variables for prediction purposes. The parameter estimates obtained with PLS can be categorized into three, including (Ghozali, 2014):

- a) The first category is the weight estimate used to create the latent variable score;
- b) The second category reflects the path estimate that connects the latent variable and between the latent variable and its indicator block (loading); and
- c) The third category relates to the means and location of parameters (regression constant values) for indicators and latent variables.

To obtain the three estimates above, PLS uses a three-stage iteration process and each stage of iteration produces an estimate. The first stage produces weight estimates, the second stage produces estimates for the inner and outer models, and the third stage produces estimates of means and locations (constant).

RESULTS AND DISCUSSION

Test Outer Model

The outer model with reflective indicators is evaluated through convergent validity, which can be seen from the outer loading of each variable indicator. The indicator is said to have good reliability, if the outer loading value is above 0.7. The following figure is the result of the first stage of the PLS Algorithm on the research construct and its indicators.

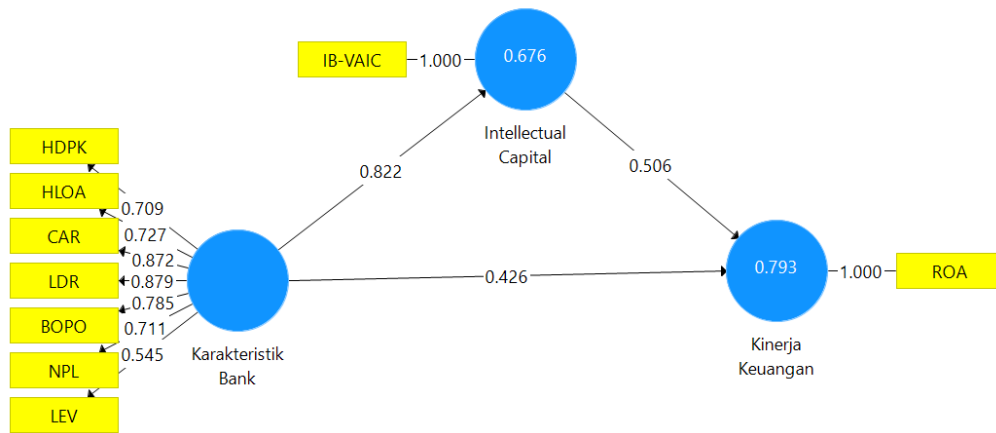


Figure 3 First Phase PLS Output on Research Constructs and Its Indicators

Based on Figure 3, the output results show that convergent validity with loading factor for fundamental factor constructs, dividend policy and firm value shows that all indicators have met convergent validity because all loading factors are above 0.70. Another test is the composite reliability of the indicators that measure the construct. The reliability of each construct used in this study can be seen through composite reliability and Cronbach alpha, with the required value > 0.70.

Table 1
Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Intellectual Capital	1.00	1.00	1.00
Bank Characteristics	0.89	0.91	0.61
Financial performance	1.00	1.00	1.00

Source: SmartPLS 3.0

Inner Model Test

Testing the inner model will give the results of the relationship between constructs. Table 2 below is the result of bootstrapping which describes the estimation results of each 5% significance construct (T-Statistic > 1.96). The following are the results of the path coefficients in table 2.

Table 2
Path Coefficients

	Orginal..	Sample...	Standard...	T Statistic...	P Values
Intellectual Capital => Financial performance	-0.058	-0.101	0.189	0.304	0.761
Bank Characteristics => Intellectual Capital	0.626	0.621	0.153	4.089	0.000
Bank Characteristics => Financial performance	0.838	0.853	0.156	5.360	0.000

Source: SmartPLS 3.0

Table 2 shows that the effect of Bank Characteristics on Financial Performance has a significant effect with the T-Statistic of (5.360 > 1.96) and the coefficient value of 0.838. The effect of Bank Characteristics on Intellectual Capital has a significant effect with a T-statistic of (4.089 > 1.96) and a coefficient value of 0.626. Furthermore, the influence of Intellectual Capital on Financial Performance does not have a significant T-statistical effect of (0.304 < 1.96) and the coefficient value is -0.058.

Table 3
Indirect Effect

	Orginal..	Sample...	Standard...	T Statistic...	P Values
Bank Characteristics => Financial performance	0.416	0.374	0.195	2.128	0.034

Based on table 3, it can be seen that the influence of Fundamental Factors on Firm Value with Dividend Policy as a significant moderating variable with a T-statistic of (2.128 > 1.96) and a coefficient value of 0.416. The following Figure 3 shows the complete bootstrapping result that describes the relationship between the construct and the T-statistic value based on the SmartPLS 3.0 output:

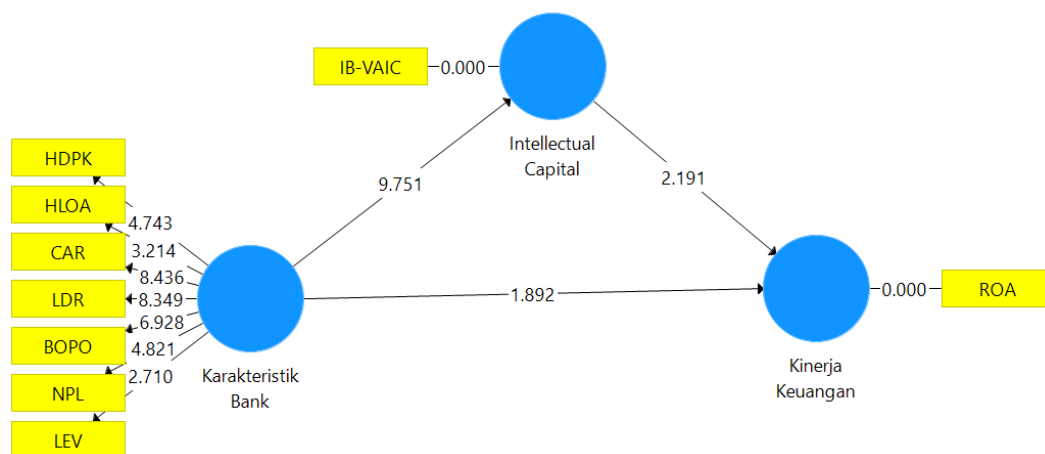


Figure 4 Bootstrapping Results

Characteristics of Banks on Financial Performance

Based on Table 2 shows that the effect of Bank Characteristics on Financial Performance has a significant effect with T-Statistic of (5.360 > 1.96) and coefficient value of 0.838. The results of this study support previous research conducted by Mahardian (2018) on the characteristics of banks with proxies CAR, BOPO, NPL, NIM, and LDR have an effect on ROA. Contrary to the results of previous research conducted by Sasmitasari (2015) which showed that the CAR, BOPO, NPF, and inflation variables together had no significant effect on ROA.

From the results of statistical tests prove that the ability of bank management in managing non-performing loans, in controlling operational costs on operating income and the ability of banks to provide funds for business development purposes and accommodate the risk of losses and those caused by bank operations affect the bank's financial performance.

Bank Characteristics Against Intellectual Capital

Based on Table 2 shows that Bank characteristics on Intellectual Capital have a significant effect with a T-statistic of $(4,089 > 1.96)$ and a coefficient value of 0.626. The results show that intellectual capital has a significant effect on the Loan to Deposit Ratio (LDR), this indicates that any changes in intellectual capital will cause changes to the Loan to Deposit Ratio (LDR). Intellectual capital is part of knowledge that can be useful for banking companies, namely being able to provide added value. This added value provides a competitive advantage for banking companies so that it differs from one company to another.

The results of this study are in line with the research results of Mawardi et al. (2017), which states that there is a simultaneous influence between intellectual capital which includes Value Added Capital Employed, Value Added Human Capital, Structural Capital Value Added on the health of banks listed on the IDX, which in this study uses NPL which represents the health of the bank.

Intellectual Capital on Financial Performance

Based on Table 2, it shows that Intellectual Capital on Financial Performance does not have a significant T-statistical effect of $(0.304 < 1.96)$ and the coefficient value is -0.058. The results of this study contradict the research of Soetedjo & Mursida (2014) who conducted research on intellectual capital on financial performance. The results of this study indicate that intellectual capital has a significant positive effect on financial performance.

However, this research is in line with Ciptaningsih (2013) and Haryanto & Henny (2013) research which states that intellectual capital does not have a significant effect on performance. It can be said that financial performance is not influenced by intellectual capital but may be influenced by other variables. Ciptaningsih (2013) states that other variables such as leverage have a more negative impact on performance. This is because in carrying out its operations to meet the needs of bank customers, they use debt or other funds such as third party funds to run their operations rather than using intellectual capital.

CONCLUSION

This study aims to determine the effect of bank characteristics on financial performance with Intellectual Capital as an intervening variable. . The effect of Bank Characteristics on Intellectual Capital has a significant effect with a T-statistic of $(4.089 > 1.96)$ and a coefficient value of 0.626. Furthermore, the influence of Intellectual Capital on Financial Performance does not have a significant T-statistical effect of $(0.304 < 1.96)$ and the coefficient value is -0.058. Future research needs to add other variables that affect financial performance. Variables that can be added in this study, for example, are ownership structure, investment decisions and others. Adding the number of samples in a longer observation time so that later it is hoped that the results obtained will be more generalizable.

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