Factors That Affect Profitability at the Conventional Bank of Indonesia

Rulyanti Susi Wardhani
Universitas Bangka Belitung

E-mail address: rulyantawardhani67@gmail.com

Abstract: This study aims to analyze the loan to deposit ratio, interest rates, inflation, and intellectual capital on profitability at the Indonesian Conventional Bank. This study uses panel data regression using three models: Common Effect, Fixed Effect, and Random Effects. The Chow and Hussman test results show that the best model is using the random effect model. The random effect model results show that the loan to deposit ratio and inflation effects, but interest rates and intellectual capital have no impact on profitability. This means that investors consider net income and pay attention to such as Loan to Deposit Ratio and Intellectual Capital. The company's performance in managing capital to be more effective and efficient, thereby increasing added value for companies and investors.

Keywords: Loan to Deposit Ratio, interest rate, inflation, intellectual capital, profitability.

INTRODUCTION

The intense competition between companies, which is the result of globalization, ultimately requires companies to change their business strategy. Likewise, with service companies such as banking. The existence of the banking sector plays an essential role in influencing both micro and macro in the financial system in Indonesia (Siringoringo, 2012). Today's modern society assumes that banks are the life to move the wheels of a country's economy, such as creating money, providing money for business activities, a place to secure money, investing, and other financial services (Astarina and Hapsila, 2019; Kasmir, 2014). The bank is one of the business entities whose function is to collect funds from the
public in the form of savings and channel it to the people in credit / or other documents to improve the people's standard of living (Fahmi, 2014; Hutagalung et al., 2013). To attract customers to invest their money or capital in the bank, it needs to be calculated financial ratios because these ratios can measure a bank's soundness, which is the evaluation of Bank Indonesia and the Financial Services Authority. The existence of a high profit makes the Bank gain the public's trust in collecting more funds so that the hope is that the Bank will have a broader opportunity to lend these funds (Pratama and Isynuwardhana, 2019). The profit and loss ratio in this study uses Return on Investment (ROI) because the measurement of ROI in a company illustrates the rate of return or effectiveness of generating profits by utilizing total assets after adjusting for costs to fund these assets. The greater the ROI, the greater the level of profit achieved by the company and the better the position of the company in terms of asset use (Harahap and Hairunnisah, 2017; Chol et al., 2020).

Furthermore, the Loan to Deposit Ratio (LDR) is a ratio that shows the level of effectiveness of a bank in channeling funds in the form of credit from the funds it has successfully collected from the public. The LDR can be used as an indicator in seeing how far the bank's function as an intermediary institution can be achieved and is used to assess the soundness and liquidity level of a bank. The higher the LDR level, the less liquid a bank is, which means that it will be difficult for the bank to meet its short-term obligations, such as a sudden withdrawal by customers of their deposits. Conversely, the lower the LDR level, the more liquid a bank is. However, the bank's more liquid condition indicates that there are many idle funds, thus reducing the opportunity for banks to obtain more significant revenues because the bank intermediation function is not well accomplished. Therefore, the LDR must be maintained so that it is neither too high nor too low (Irfan et al., 2019).

Bank Indonesia, which stabilized the country's economy, issued a monetary policy such as reducing and increasing the value of Bank Indonesia Certificates (SBI). The impact of rising interest rates affects an increase in deposit rates and, eventually, high lending rates so that the economy's investment decreases. Declining domestic investment has resulted in an increased dependence of domestic businesses on foreign investors, which means that there is an increase in the flow of US dollars into the country. The decline in the rupiah exchange rate against the US dollar will trigger inflation. Increased inflation is a negative signal for investors; high inflation causes a reduction in a company's profitability, which will reduce dividend distribution. High-interest rates and inflation have a negative relationship with the country's economy (Trabelsi and Trad, 2017). New economic development cannot be separated from the presence of information and knowledge. This condition requires an increase in intellectual capital as a tool to determine company value (Kianto et al., 2017), so this study of intellectual capital is a challenge that needs to be developed.

This study refers to (Octaviani and Andriyani's, 2018) research, (Wahyuningsih and Gunawan, 2017), related to LDR on profitability. Then research (Sahara, 2013) and (Wibowo et al., 2013), as well as (Mufidhoh and Andriyanto, 2017) and (Ayerza, 2018), study interest rates and inflation on profitability. Previous research, the results of each study were inconsistent; the results were still influential and did not affect. The difference between this research and the previous one is that it combines the independent variables, namely LDR, interest rates, inflation on profitability, and adds the intellectual capital variable. This research aims to analyze the effect of LDR, interest rates, inflation, and intellectual capital on profitability at the Indonesian Conventional Bank.
THERORETICAL REVIEW

This study uses (Freeman's, 2016) stakeholder theory, which was previously based on agency theory, which views management as only trying to increase owner or shareholder value. Stakeholder theory explains that a company is not only an entity that operates for its interests but provides benefits to stakeholders (Agriyanto, 2016; Argenti and Schoenl, 2018; Evans and Kartikaningdyah, 2019).

Furthermore, a conventional bank is a bank that serves the public by implementing an exciting system in its operational activities. Traditional banks generally operate by issuing products to absorb public funds, including savings, time deposits, current accounts, and subsequently, channeling available funds, including investment loans, working capital loans, consumptive loans, and other loans (Dewi, 2016; Bank Indonesia, 2015).

This study develops four hypotheses to test the influence of the Loan to Deposit Ratio (LDR), interest rates, inflation, and intellectual capital on profitability in Indonesian Conventional Banks. The first hypothesis is the effect of LDR on profitability, where studies from (Agustiningrum, 2013) and (Octaviani and Andriyani, 2018) state that LDR positively impacts profitability. This ratio is used to measure the extent to which loan funds come from third-party funds. (Harahap and Hairunnisah, 2017) stated that low liquidity causes the company to lose the opportunity to gain greater profits. So, in this case, the higher the LDR ratio, the greater the bank; on the contrary, the lower the LDR indicates the lack of effectiveness of the bank in extending credit so that the bank's opportunity to earn greater profits is lost. However, (Wahyuningsih and Gunawan, 2017) and (Oktaviani et al., 2019) state that LDR does not affect profitability.

H$_1$: LDR has a positive effect on profitability.

The second hypothesis is the effect of interest rates on profitability. Monetary policy, through the application of too fast interest rates, will tend to kill economic activity. Vice versa. The increase in Bank Indonesia's benchmark interest rate resulted in a tightening of banking liquidity. It was difficult for banks to obtain cheap funds from third parties (current accounts, savings, and time deposits). This results in the bank's cost of funds increasing/high. As a result, when there is a high increase in loan interest rates, the customer's business value is no longer comparable to the financing provided. If customers have started to object to high-interest rates, it will increase the possibility of bad credit, which will impact bank profitability. Research by (Zulfiah and Susilowibowo, 2014) states that interest rates hurt profitability. While (Sahara, 2013), (Ria Anggreni, Made, and Suardikha Sadha, 2014) and (Wibowo et al., 2013) state that interest rates do not affect profitability.

H$_2$: Interest rates have a negative effect on profitability. Interest rates have a negative effect on profitability.

The third hypothesis is the effect of inflation on profitability. The existence of inflation causes the entity or bank to increase production and operational costs, ultimately harming the entity. Inflation can increase credit interest; the increase will hinder credit growth, thus impacting the profitability of a company or bank. This condition is supported
by (Sahara, 2013), which states that inflation has a positive effect on profitability, but research by (Wibowo et al., 2013) says that inflation has no impact on profitability.

**H₃:** Inflation has a positive effect on profitability.

The fourth hypothesis is the effect of Intellectual Capital (IC) on profitability. (Riahi-Belkaoui, 2003) and (Janošević et al., 2013) stated that IC could positively impact a company's financial performance. This assumption is also shared by (Nuryaman, 2015), which states that companies optimizing IC are more competitive and successful than companies that do not pay attention to IC.

**H₄:** Intellectual Capital has a positive effect on profitability.

**Model Analysis**
The analytical Model in this study is presented as follows:

![Model Diagram]

**METHODS**

This research was conducted at conventional banks listed on the Indonesia Stock Exchange during the period 2014-2018. The data used is secondary data in the form of panel data obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id), IDN Financial (www.idnfinancials.com), and Bank Indonesia (www.bi.go.id). Data collection for this study was carried out in November 2019. This study's population were all finance companies in Indonesia that were listed on the Indonesia Stock Exchange for the period 2014-2018, namely 92 companies listed on the website www.idx.co.id. The sampling technique used purposive sampling. The criteria used in selecting samples can be shown in Table 1. As follows:
Table 1. Determination of Research Samples

<table>
<thead>
<tr>
<th>Number</th>
<th>Information</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Population</td>
<td>92</td>
</tr>
<tr>
<td>2</td>
<td>Non-conventional bank finance companies listed on the IDX in 2014-2018</td>
<td>(50)</td>
</tr>
<tr>
<td>3</td>
<td>Conventional Banks that do not publish financial reports during the 2014-2018 period</td>
<td>(3)</td>
</tr>
<tr>
<td>4</td>
<td>Conventional banks that experienced losses during the period 2014-2018</td>
<td>(10)</td>
</tr>
<tr>
<td></td>
<td>Total Samples</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: www.idx.co.id, 2020 (Processed by Researchers)

Based on Table 1, the sample in this study was 29 conventional banks that met the research criteria (attachment 1). The analysis technique used is panel data regression using three models. The three models are the Common Effect, Fixed Effect, and Random Effects. Furthermore, estimating the model from the studied variables to analyze the effect of the Loan to Deposit Ratio, Inflation, and Intellectual Capital on profitability are as follows:

\[ Y_{it} = \alpha + \beta_1 LDR_{it} + \beta_2 SB_{it} + \beta_3 IFL_{it} + \beta_4 IC_{it} + \epsilon_{it} \] .........................................................(1)

Where:

- \( Y_{it} \) = Dependent Variable
- \( \alpha \) = Constant
- \( \beta_{1,2,3,4} \) = The regression coefficient for each independent variable
- \( X_{1,2,3,4} \) = Independent Variable
- \( \epsilon_{it} \) = error / residual
- \( i \) = Company
- \( t \) = Time

The next step is to test the suitability to see the accuracy of the data using the following tests: 1) Chow test, 2) Hausman test, 3) Lagrange Multiplier, 3) Determination coefficient test, and 4) Hypothesis test with the following criteria: a) \( H_0 \) is accepted, and \( H_a \) is rejected \( \rho \) value > 0.05. If the significance value is more than \( \alpha = 0.05 \), the independent variable individually does not affect the dependent variable. b) \( H_0 \) is rejected, and \( H_a \) is accepted \( \rho \) value < 0.05, or if the significance value is less than \( \alpha = 0.05 \), it means that the independent variable individually affects the dependent variable.

RESULT AND DISCUSSION

Descriptive statistics describe the mean, median, standard deviation, minimum value, maximum value, range, and sum. This study looked at descriptive statistical calculations regarding the Loan to Deposit Ratio (LDR), Inflation, and Intellectual Capital (IC) variables shown in Table 2.
Table 2. Descriptive Statistical Analysis Results

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>LDR</th>
<th>Interest rate</th>
<th>Inflation</th>
<th>IC</th>
<th>Profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>145</td>
<td>87.31409</td>
<td>3.348925</td>
<td>4.294000</td>
<td>2.180609</td>
<td>1.210404</td>
</tr>
<tr>
<td>Median</td>
<td>145</td>
<td>88.68000</td>
<td>4.968943</td>
<td>3.350000</td>
<td>1.760000</td>
<td>1.120000</td>
</tr>
<tr>
<td>Maximum</td>
<td>145</td>
<td>144.8500</td>
<td>8.908888</td>
<td>8.360000</td>
<td>71.81000</td>
<td>2.942000</td>
</tr>
<tr>
<td>Minimum</td>
<td>145</td>
<td>50.76000</td>
<td>3.898860</td>
<td>3.020000</td>
<td>-41.91000</td>
<td>0.090000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>145</td>
<td>13.85445</td>
<td>2.990254</td>
<td>8.375167</td>
<td>0.674036</td>
<td></td>
</tr>
</tbody>
</table>

Source: Processed Data, 2020

The LDR value of banking companies listed on the IDX from 2014-2018 has fluctuated from year to year, with the lowest amount of 50.76 by Bank Capital Indonesia Tbk (BACA) in 2014. This is because the bank is in a liquid state with excess fund capacity ready to be loaned. The highest LDR value of 144.85 by Bank Woori Saudara 1 (SDRA) in 2018 shows the lousy condition of the bank's liquidity because credit placements are also financed from third-party funds, which can be withdrawn at any time. While the average value is 87.31409, the median is 88.68, and the standard deviation is 13.85445. The standard deviation value of the Loan to Deposit Ratio (LDR) variable is still below the mean value indicating that the Loan to Deposit Ratio variable in this study has a reasonably good data distribution and is normally distributed. The interest rates of banking companies listed on the IDX from 2014-2018 experienced fluctuations from year to year, with the lowest value of 3.898860 by Bank Capital Indonesia Tbk (BACA) in 2016. This was due to the lack of loan requests from the public. The highest interest rate value of 144.85 by Bank Rakyat Indonesia (BRI) in 2018 is due to many loan requests from the people and the bank's lack of funds. While the average value is 3.348925, the median is 4.968943, and the standard deviation is 2.990254. The standard deviation value of the interest rate variable is still below the mean value, indicating that this study's interest rate variable has a reasonably good data distribution and is typically distributed. The inflation rate from 2014-2018 has fluctuated from year to year, with the lowest value of 3.02 in 2016. This was due to the supply of commodities that remained adequate even though the increase in consumer demand was sufficient to curb inflation. The highest inflation rate was 8.36 in 2014, due to the rise in the money supply, the increase in production costs, and the imbalance between supply and demand. While the average value is 4.294, the median is 3.35, and the standard deviation is 2.051945. The standard deviation value of the inflation variable is still below the mean value, indicating that this study's inflation variable has a reasonably good data distribution and is typically distributed.

The IC value of banking companies listed on the IDX from 2014-2018 has fluctuated from year to year, with the lowest amount of -41.91 by Bank OCBC NISP Tbk (NISP) in 2018. This was due to a lack of attention to human resources in the company. The highest IC value was 71.81 by the State Savings Bank Tbk (BBTN) in 2015, due to the percentage increase in income that the company received due to innovation and knowledge-intensive services. Meanwhile, the average value was 2.180609; the median was 1.76, and a standard deviation of 8.375167. The IC variable's standard deviation value is still below the mean value, indicating that the IC variable in this study has a reasonably good data distribution and is typically distributed.
The profitability value of banking companies listed on the IDX for the 2014-2018 period fluctuated from year to year, with the lowest amount of 0.090 found at Bank Artha Graha Internasional Tbk (INPC) in 2015; this is because net income is only IDR 71,294,000, thus making INPC's lowest profitability value compared to other banking companies. The highest amount of 0.942 was found at Bank Central Asia Tbk (BBCA) in 2017, caused by an increase in net income more significant than the increase in total company assets. Meanwhile, the average profitability value of banking companies was 1.210404, the median was 1.12, and the standard deviation was 0.674036. The profitability variable's standard deviation value is still below the mean value, indicating that the profitability variable in this study has a reasonably good data distribution and is typically distributed.

Based on the Graph. 1 which shows the value of LDR, inflation, IC, and profitability in 2014-2018 as follows:

![Graph of LDR, Interest Rates, Inflation, IC and Profitability in 2014-2018](image)

**Figure 1.** Graph of LDR, Interest Rates, Inflation, IC and Profitability in 2014-2018

*Source: Data processed, 2020*

Based on Figure 1 shows that the LDR fluctuates every year. The higher the LDR level, the worse the bank's liquidity conditions because placements in credit are also financed from third-party funds, which can be withdrawn at any time. Conversely, the lower the LDR value, the bank is in a liquid state with excess capacity of funds ready to be lent. Interest rates fluctuate annually, and interest rates are related to the supply and demand for bank credit. An increase in demand for credit will cause an increase in interest rates, while a decrease in demand for credit will reduce interest rates. Likewise, inflation fluctuates every year. The higher the inflation rate can be alarming for the economy, this results in less public interest in saving and investing. Inflation has the potential to increase credit interest so that it will undoubtedly hamper credit growth itself. This has an impact on the profitability of the bank concerned. IC fluctuates every year due to the reduced use of IC in conventional banks. This is because traditional banks use more technology such as Auto Teller Machine (ATM) to make it easier for customers to access money withdrawals. For the value of profitability fluctuates every year. This means that the higher the company's profitability value, the greater the level of profit the company has. Conversely, if the profitability value is low, the less profit is owned, the company's goals will not be achieved.
The panel data method is used to overcome the intercorrelation between the independent variables, which can lead to incorrect regression estimates. The results of panel data regression are presented in Table 3 as follows:

**Table 3.** Results of Panel Data Regression Model Common Effects, Fixed Effects and Random Effects

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Common Effect</th>
<th>Fixed Effect</th>
<th>Random Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.0005</td>
<td>0.3783</td>
<td>0.0112</td>
</tr>
<tr>
<td>LDR</td>
<td>0.0003</td>
<td>0.4726</td>
<td>0.0163</td>
</tr>
<tr>
<td>SB</td>
<td>0.2162</td>
<td>0.1567</td>
<td>0.0006</td>
</tr>
<tr>
<td>INFLASI</td>
<td>0.2162</td>
<td>0.1567</td>
<td>0.0004</td>
</tr>
<tr>
<td>IC</td>
<td>0.8872</td>
<td>0.9375</td>
<td>0.9522</td>
</tr>
</tbody>
</table>

R-squared | 0.097832 | 0.437884 | 0.030663 |
Adjusted R-squared | 0.689868 | 0.549063 | 0.538944 |
S.E. of regression | 51.74549 | 26.04544 |
Sum squared resid | -117.7821 | -77.77721 |
Log likelihood | 4.985696 | 4.478396 |
F-statistic | 0.002980 | 0.000000 |
Prob(F-statistic) | 0.0005 | 0.3783 |

Source: processed data, 2020

After getting the results of the expected effect, fixed effect, and random effect, then do the Chow test, Hausman test, and Lagrange Multiplier test. This test is needed to select the most appropriate panel data regression estimation model. The Chow test will be used first to choose which model to use between the common effect or the fixed effect in this study. The first step is to estimate the regression with fixed effects. Then perform the Chow test to determine whether to use a common effect or fixed-effect model where the Chow test hypothesis is presented in Table 4.

**Table 4.** Chow Test Results

<table>
<thead>
<tr>
<th>Effect Test</th>
<th>Statistic</th>
<th>d.f</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>3.988557</td>
<td>(22,89)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>79.057699</td>
<td>22</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: processed data, 2020

Based on the Chow test results in Table 4, the probability value of cross-section F is 0.0000 <0.05 (α = 5%), so H0 is rejected, so the conclusion from the Chow test results above is that the fixed effect model is chosen. Then perform the Hausman test to determine which test between the two Fixed Effect Model or Random Effect Model methods is most appropriate for panel data modeling. The hypothesis of the Hausman test is as follows:

**H₀:** The random effect model is better than the fixed effect model.

**H₁:** The random effect model is no better than the fixed effect model.
If the Hausman statistical value is greater than the Chi-Square (χ) value with k degrees of freedom (number of independent variables), or the Hausman test probability value is less than 0.05, it is concluded that H0 is rejected. Therefore, the model chosen is the fixed effect model. The following is Table 5 of the Hausman test results.

**Table 5. Hausman Test Results**

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>1.500032</td>
<td>4</td>
<td>0.6783</td>
</tr>
</tbody>
</table>

Source: processed data, 2020

It shows that the Hausman probability value in Table 5 is 0.6823, which is greater than 0.05; it can be concluded that H0 is not rejected. It can be supposed that the random effect model is better than the fixed effect model. Test the Lagrange Multiplier Model to select the common effect model with random effects. The hypothesis of the LM test is as follows:

**H₀**: Common effect model is better than the random effect model.

**Hₐ**: The random effect model is better than the common effect model.

**Table 6. Lagrange Multiplier Test Results**

<table>
<thead>
<tr>
<th>Null (no.rand.effect)</th>
<th>Cross-section One-sided</th>
<th>Period One-sided</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breusch-Pagan</td>
<td>29.43978 (0.0000)</td>
<td>1.247794</td>
<td>30.70056</td>
</tr>
<tr>
<td>Honda</td>
<td>5.426525 (0.0000)</td>
<td>-1.167107</td>
<td>3.045621</td>
</tr>
<tr>
<td>(0.8678)</td>
<td>(0.0012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King-Wu</td>
<td>5.426725 (0.0000)</td>
<td>-1.120107</td>
<td>1.102564</td>
</tr>
<tr>
<td>(0.7778)</td>
<td>(0.1342)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SLM</td>
<td>5.765521 (0.0000)</td>
<td>-0.617875</td>
<td>--</td>
</tr>
<tr>
<td>(0.7328)</td>
<td>(0.1342)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GHM</td>
<td>--</td>
<td>--</td>
<td>29.44578</td>
</tr>
<tr>
<td>--</td>
<td></td>
<td></td>
<td>(0.0000)</td>
</tr>
</tbody>
</table>

Source: processed data, 2020

The magnitude of the Breusch-Pagan LM probability value in the table above is 0.0000, which is less than 0.05, so it can be concluded that H0 is rejected so that the model used is the random effect. The test results of the two stages above, namely the chow test, the Hausman test, and the LM test, show that the best model used in this study is to use the random-effects model. According to Lopez & Weber (2017), the panel data model can potentially heteroscedasticity and autocorrelation problems. This problem generally occurs because of the combination of two data forms, namely cross-section and time series. Therefore, the classical assumption is tested first. Suppose it is known that the random effect model is a suitable model for panel data regression. In that case, the classic assumption test is not relevant because random effects are believed to be able to overcome the problem of time series autocorrelation and inter-observation creation (cross-section).
Chow and Hussman test results; it was found that the best model used in this study is to use the random-effects model.

\[
P_t = \alpha + \beta_1 \text{LDR} + \beta_2 \text{IR} + \beta_3 \text{IFL} + \beta_4 \text{IC} + e \tag{2}
\]

Where:
- \( P_t \) = Dependent Variable
- \( \alpha \) = Constant
- \( \beta_{1,2,3,4} \) = The regression coefficient for each independent variable
- \( e \) = error / residual

**Table 7. Results of Panel Data Regression Model Random Effect**

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.286525</td>
<td>0.442287</td>
<td>-2.603465</td>
<td>0.0112</td>
</tr>
<tr>
<td>LDR</td>
<td>1.012741</td>
<td>0.005224</td>
<td>2.438974</td>
<td>0.0163</td>
</tr>
<tr>
<td>IR</td>
<td>0.035765</td>
<td>0.0024976</td>
<td>3.865475</td>
<td>0.0006</td>
</tr>
<tr>
<td>INFLATION</td>
<td>0.037430</td>
<td>0.010224</td>
<td>3.660836</td>
<td>0.0004</td>
</tr>
<tr>
<td>IC</td>
<td>0.000172</td>
<td>0.002861</td>
<td>0.060111</td>
<td>0.9522</td>
</tr>
</tbody>
</table>

Source: processed data, 2020

\[
P_t = -1.286525 + 0.012741^\times \text{LDR} + 0.035765^\times \text{IR} + 0.037430^\times \text{INFLATION} + 0.000172^\times \text{IC} + e \tag{3}
\]

Where:
- \( P_t \) = Dependent Variable
- \( \alpha \) = Constant
- \( \beta_{1,2,3,4} \) = The regression coefficient for each independent variable
- \( e \) = error / residual

The regression coefficient for the Loan to Deposit Ratio variable is 0.012741. If other independent variables are fixed in value, and the Loan's cost to Deposit Ratio increases by 1 point, the profitability amount will increase by 0.012741 points. Conversely, suppose the other independent variables have a fixed value, and the value of the Loan to Deposit Ratio has decreased by one end. In that case, the value of the Profitability variable will decrease by 0.012741 points. The interest rate with a coefficient of 0.035765 means that if other independent variables are fixed in the matter, and the interest rate's value increases by 1 point, the profitability amount will increase by 0.035765 points.

Conversely, if other independent variables have a fixed value, and the amount of inflation has decreased by 1 point, then the profitability variable's value will decrease by 0.035765 points. The regression coefficient for the Inflation variable is 0.037430. If other independent variables have a fixed amount, and the cost of inflation has increased by 1 point, then the value of profitability will increase by 0.037430 points. Conversely, if other independent variables have a fixed amount, and the cost of inflation has decreased by one end, then the profitability variable's value will decrease by 0.037430 points. Intellectual Capital has a variable regression coefficient value of 0.000172, meaning that if other independent variables have a fixed amount and the cost of Intellectual Capital has increased by 1 point, the value of profitability will increase 0.000172 points. Likewise, on the other hand, if the other independent variables have a fixed amount and the cost of Intellectual
Capital has decreased by one end, then the value of the profitability variable will decrease by 0.000172 points.

The coefficient of determination is used to measure the ability of the model to explain the dependent variable. An adjusted R-square value that is close to one means the independent variables' power to provide almost all the information needed to predict the dependent variable.

Table 8. R² Test Results

<table>
<thead>
<tr>
<th></th>
<th>R-squared</th>
<th>Adjusted R-squared</th>
<th>S.E. of regression</th>
<th>F-statistic</th>
<th>Prob(F-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.058777</td>
<td>0.030663</td>
<td>0.538944</td>
<td>2.195564</td>
<td>0.094362</td>
</tr>
<tr>
<td>Mean dependent var</td>
<td>-0.005108</td>
<td>S.D. dependent var</td>
<td>0.547756</td>
<td>Sum squared resid</td>
<td>32.38991</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.735464</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: processed data, 2020

Table 8 shows the coefficient of determination or Adjusted R Square is 0.030663, meaning that the percentage of the contribution of the influence of the independent variable on the dependent variable is 3.06% or it can be interpreted that the independent variable used in the model can explain 3.06% of the dependent variable. Factors outside the regression model influence the remaining 96.4%.

The results of testing the partial effect of the LDR, Interest Rate, Inflation, and IC variables on profitability are partially using the t-statistical test. Seeing the influence of the variables using partial testing or t-test is used to test each dependent variable's independent variable. Hypothesis testing partially using the t-test can be seen in Table 8 below:

Table 9. Result of t-statistic test

<table>
<thead>
<tr>
<th>Variabel</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-1.286562</td>
<td>0.442287</td>
<td>-2.603465</td>
<td>0.0112</td>
</tr>
<tr>
<td>LDR</td>
<td>0.012741</td>
<td>0.005224</td>
<td>2.438974</td>
<td>0.0163</td>
</tr>
<tr>
<td>IR</td>
<td>0.035765</td>
<td>0.024976</td>
<td>3.865475</td>
<td>0.0006</td>
</tr>
<tr>
<td>INFASLI</td>
<td>0.037430</td>
<td>0.010224</td>
<td>3.660836</td>
<td>0.0004</td>
</tr>
</tbody>
</table>

Source: processed data, 2020

The test criteria used a significance level of 0.05. If the significance value <5%, then H₀ is rejected, or Hₐ is accepted, and if the significance value is ≥5%, then H₀ is accepted, or Hₐ is rejected. Table IV.9 also shows the test results of the significance of LDR, Interest Rates, Inflation, and IC on profitability. The table shows that LDR has a positive effect on profitability; this indicates that the LDR significance value is smaller than 0.05 (0.0163 <0.05), so H₀ is rejected. The table shows that interest rates do not affect profitability. This is indicated by the significant value of interest rates greater than 0.05 (0.0698 >0.05), then H₀ is accepted. The table also shows that inflation positively affects profitability; this is indicated by the significant value of inflation, which is less than 0.05 (0.0004 <0.05), so H₀ is rejected. Meanwhile, IC does not affect profitability. Statistical testing shows that the IC significance value is more significant than 0.05 (0.9522> 0.05), so H₀ is accepted.

The hypothesis test above shows that the Loan to Deposit Ratio (LDR) has a positive effect on profitability. One of the financial measurement tools used is the LDR by calculating the amount of credit given compared to the number of public funds and capital.
This has resulted in the ability of conventional banks in Indonesia to repay depositors' withdrawals by relying on the credit provided as a source of liquidity, or in other words, how far the provision of credit to customers can offset bank obligations to immediately fulfill depositors' requests to withdraw their funds. Banks have disbursed in the form of credit; a higher ratio indicates the more significant amount of third party funds channeled in the way of recognition. This condition will provide more significant interest income, which will increase the profitability of conventional banks in Indonesia. This study's results are by stakeholder theory, which states that the company must provide benefits to stakeholders. The greater the profit a company gets, the higher the profitability of the bank. Thus investors invest in companies because of the potential for a more profitable loan repayment rate. The use of the LDR can be taken into consideration in determining investment strategies. These findings are in line with research from (Agustiningrum, 2013) and (Octaviani and Andriyani, 2018), which states that increasing LDR value will affect the level of profitability of conventional banks so that investors can make decisions to invest or not, the higher the long-term loan rate of a bank, the higher the level of profitability of a bank because if a bank's loan is higher, the interest that the bank will get will also be higher. However, this study is not in line with the research of (Wahyuningsih and Gunawan, 2017) and (Oktaviani et al., 2019), which states that LDR does not affect profitability.

Furthermore, interest rates do not affect profitability. One of the financial measurement tools used is the interest rate by calculating the amount of deviation and the loan term. This shows that although commercial bank interest rates have increased, profitability at conventional banks has not decreased significantly. Internal and external factors can influence the development of interest rates set by banks. Internal factors affect the structure of earning assets, in part of which fluctuations strongly influence interest rates. In contrast, external factors affect the number of customers who expect a reduction in interest rates before applying for a bank loan. This study's results are not by the stakeholder theory, which states that companies must provide benefits to stakeholders. By seeing that interest rates cannot affect bank profitability, in this case, interest rates do not offer services to internal and external parties because the high and low-interest rates do not affect bank profitability. This condition states that high and low-interest rates do not involve a bank's profitability. This research is supported by (Sahara, 2013), (Ria Anggreni, Made and Suardikha Sadha, 2014), and (Wibowo et al., 2013). However, (Zulfiah and Susilowibowo, 2014) research is not in line because of the study that interest rates hurt profitability.

Then inflation has a positive effect on profitability, where inflation is one of the financial measurement tools used to calculate the price level's comparison after deducting the price level with the price level in the previous year. Inflation reflects the increase in prices and services in the economy in a specific period. This indicates that an increase in the rate of inflation will impact bank operating expenses, which will also increase. Inflation also has a terrible effect on the economy because it weakens people's enthusiasm for saving. For banks, inflation can affect their financial performance, particularly about the allocation of credit that has been given to customers. The higher the inflation, the higher the output in the market. If the rise does not match this increase in people's income, it can suppress the sales of goods produced. This condition, in the end, can affect the company's financial performance, where some of the existing funds are funds obtained from bank loans because this causes some bad credit. This study's results are by stakeholder theory, which states that the company must provide benefits to stakeholders. By seeing that inflation can affect the
profitability of conventional banks in Indonesia, internal parties can determine several internal policies to maintain bank liquidity levels to remain stable regardless of inflation. This result is also in line with previous studies' effects, which found that the increase in assets and deposits during the global crisis occurs. The rise will follow it in the profitability of conventional banks. Inflation has a positive effect on profitability, which means that inflation can affect bank profitability. This research is in line with a study conducted by (Sahara, 2013) and (Hidayati, 2014). However, this research is not in line with (Wibowo and Syaicu, 2013), which proves that inflation cannot affect profitability.

Next, based on the hypothesis, it states that IC does not affect profitability. The size of intellectual capital does not affect the level of profitability of conventional banks in Indonesia. This is because traditional banks tend to use physical money instead of using human capital such as Auto Teller Machines (ATMs), which make it easier for customers to access cash withdrawals and cash deposits without having to come face to face with the teller; there are transactions in the form of money transfers via Mobile (e-banking), the existence of an electronic wallet (e-wallet) that helps the public in making transactions, and the existence of a debit card with a chip that allows people to make online transactions so that they are more likely to reduce their human resources. This is proven by seeing the movement of the number of employees that is decreasing every year, such as Bank OCBC NISP in 2014 had 6,922 employees, in 2015 it had 6,886 employees, in 2016 it had 6,796 employees, 6,477 employees in 2017 and 6,075 employees in 2018. Movement Employees who are decreasing every year prove that Bank OCBC NISP makes greater use of its physical capital and reduces employee costs; the goal is that customers can use operational tools more, the human resources in the company are more focused on providing services that cannot be replaced by physical capital such as HRD and CEO. Thus the IC issued by conventional banks has not directly influenced the company's efforts to increase profitability. This study is in line with (Riahi-Belkaoui, 2003) and (Janošević et al., 2013) that IC can positively affect a company's financial performance. This assumption is also shared by (Nuryaman, 2015).

CONCLUSION

LDR and inflation effect, but interest rates and IC do not affect profitability. This means that investors, before deciding to invest in a company, investors should consider various factors. Investors should consider the company's net profit and look at other factors such as the Loan to Deposit Ratio and Intellectual Capital. Companies must improve their overall financial performance every year to increase investor confidence in investing in the company. Improving company performance can be done by managing existing capital for activities to increase companies’ and investors’ added value to make it more effective and efficient. The next researcher uses other internal factors that can affect profitability such as Net Profit Margin, Debt to Equity Ratio, Current Ratio, Price to Book Value, and Total Asset Turnover so that it can better reflect the company's internal conditions. Then use external factors that can influence profitability such as Interest Rates, Exchange Rates, and Economic Growth. Expanding the population area in banking companies and adding other sectors that are listed on the Indonesia Stock Exchange and using more period years. Using more samples because the increasing number of pieces can provide more accurate results.
regarding the research being carried out and using other analytical methods that can give better results.

Acknowledgments. My article has been published in the Tarumanegara University Accounting journal. I want to thank Bangka Belitung University for supporting accounting lecturers always to do research.

REFERENCES


DOI: [http://dx.doi.org/10.24912/ja.v24i2.698](http://dx.doi.org/10.24912/ja.v24i2.698)