THE EFFECT OF INTELLECTUAL CAPITAL, BOPO, AND RETURN ON INVESTMENT ON THE CAPITAL MARKET (CASE STUDY OF CONVENTIONAL BANKS LISTED ON IDX FOR THE 2011-2020 PERIOD)

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Abstract. This paper examines the effect of Intellectual Capital, BOPO, and Return on Investment on Capital Market at Conventional Banks Listed on the IDX for the 2011-2020 period. This research method uses a quantitative approach. Data collection is done secondarily by taking data from the company's annual report on the IDX. Sample research with purposive sampling technique. The analysis tool uses Eviews10 through the following stages: Panel Data Regression Model Selection, Classical Assumption Test, Multiple Linear Regression Test, and Hypothesis Test. The results of this study indicate (1) Intellectual Capital has no significant effect on Capital Market in Conventional Banks Listed on the IDX for the Period 2011 - 2020. (2) BOPO has no significant effect on Capital Market in Conventional Banks Listed on the IDX for the 2011-2020 Period. (3) Return of Investment has a negative significant effect on Capital Market at Conventional Banks Listed on the IDX for the 2011-2020 Period. (4) Intellectual Capital, BOPO, and Return of Investment simultaneously affect the Capital Market of Conventional Banks Listed on the IDX for the 2011-2020 Period.

Keywords: Capital Market, Market Capitalization Value, Intellectual Capital, VAIC, BOPO, ROI

1 INTRODUCTION

Banking as an institution engaged in the financial services sector has a special role, namely as financial intermediatery. As a financial intermediatary, banks have the main activities of providing loans to borrowers and collecting deposits from saving customers (Barbara, 2015). However, over time with the rapid development of technology, the community's need for banks has also increased. The increasing role of banking today has made the need for banking capital also increased. One way for banks to obtain capital is by having investors to invest in the bank, to be more effective and to attrack the attention of investors, banks are able to register themselves as Go-Public companies in the Indonesia Stock Exchange.

According to Undang-Undang Dasar Republik Indonesia No. 8 of 1995 Pasal 1 Ayat (13) regarding the Capital Market states that "The Capital Market is an activity related to the Public Offering and Trading of Securities, Public Companies related to the Securities they issue, as well as institutions and professions related to Securities". In the capital market there is one instrument that often attracts investors attention, namely stock instrument. The Indonesia Stock Exchange reviews the 50 largest companies that control the securities market in Indonesia (50 Biggest Market Capitalization) wich is released annually. Based in these statistic from 2011-2020, the top ten positions are dominated by the banking sector with the largest market capitalization value owned by PT. Bank Central Asia (BBCA), namely Rp 826,226 Billion, wich

is higher than the previous hyear, wich was Rp 815,852 Billion. Market capitalization value is one of the considerations for investors in making decisions to invest in a company. The higher the market capitalization value of a company, the higher company is valued by the market (Roosmawarni & Mauliddah, 2021).
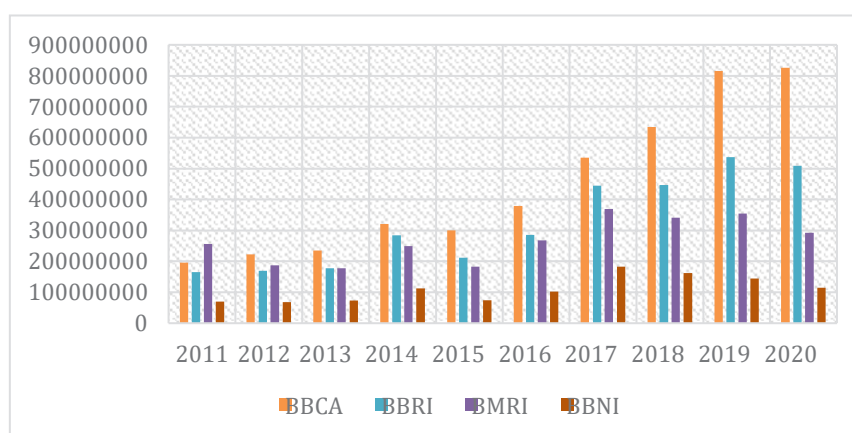

Figure 1 (Top 4 Market Capitalization Banking in IDX)
Source : Indonesia Stock Exchange 2020

Based on Figure 1 during the research period from 2011-2020, there are four banks that consistently the top 10 positions in the 50 Biggest Market Capitalization because they have a large enough market capitalization value. Not only BBCA who gained success with the largest market capitalization value, theh second rank wa occupied by PT. Bank Rakyat Indonesia (Persero), Tbk (BBRI) with a market capitalization value of Rp 509,208 Billioon in 2020 even though it decreased from the previous year, namely with market capitalization value of Rp 537,294 Billion, BBRI still consistently filled the second rank. Apart of BBCA and BBRI, there is PT. Bank Mandiri (Persero), Tbk (BMRI) in fourth place with a market capitalization value of Rp 292,215 Billion and in the last position in occupied by PT. Bank Negara Indonesia (Persero), Tbk (BBNI) with a market capitalization value of Rp 114,003 Billion, although both experienced a decline in market capitalization value, BMRI and BBNI were both consistent in maintaining their rankings. The four banking sector companies have always consistently dominated the Indonesia capital market for the last 10 years.

Market capitalization or Capital Market is an aggregate measure of a company, where the level of market capitalization is highly dependent on the number of outstanding shares released in the market (Roosmawarni et al., 2023).The company must be able to maintain its position in the market by attracting the attention of investors to invest in the company's shares. The way the company can do this is by signaling to investors about information related to the performance and positive values of the company. Signaling Theory shows that the quality of the signals

provided by the company can provide its own perception for investors, so the company must find the right strategy in signaling to investors. The signal or information can be provided through the annual report made by the company as a source of information for investors.

Competition between companies to survive in the capital market is getting tighter along with the emergence of technological innovation, forcing companies to make changes to the way they do business. The company's main focus should no longer be on the size of the workforce but on the added value that can be generated from various things that do not have a physical form, namely intellectual capital, for example the knowledge possessed by the workforce, the values that exist in the organization, and also the relationships owned by the company. Intellectual capital can be defined as the total of everything produced by the main elements of the organization, related to knowledge and technology that can provide added value to the Company in the form of competitive advantage. There are three main elements in Intellectual Capital, namely human capital, structural capital or organizational capital, and relational capital or customer capital (customer capital or relationship capital) (Chandra, 2021).

Banks with high Intellectual Capital values have a better ability to face the challenges and changes that occur in the banking industry. Based on the findings of the data studied, BBCA has the highest average intellectual capital value, which is 6.54% during the study period from 2011 to 2020. Meanwhile, BBRI has an average intellectual capital value of 4.55%, BMRI has an average intellectual capital value of 4.44%, and finally BBNI has a market capitalization value of 4.00% during the study period. Based on this explanation, it can be seen that BBCA has a better ability to manage intangible assets such as facing challenges, adaptation, science and technology, and innovation in the products and services provided so that it can survive and compete.

The existence of the company to be able to remain competitive in addition to changing strategies by paying attention to intellectual capital which is a combination of intellectual property, employees, and infrastructure, the company must also pay attention to aspects of risk in its operations. Operational risk is a risk that is usually caused by internal problems in the company, caused by the weakening of the company's internal management control system. Operating Expenses Operating Income (BOPO) is a ratio used to measure the ability of bank management to control operating costs against operating income. The higher the percentage of BOPO indicates the bank's poor ability to reduce its operating costs, resulting in inefficient costs (Jahrotunnupus & Manda, 2021). Bank Indonesia has regulated the implementation of risk management in the banking industry through Bank Indonesia Regulation Number 5/8/PBI/2003 Bab II Pasal 2 Ayat (1) regarding the Implementation of Risk Management in Commercial Banks

explaining that banks are required to implement Risk Management effectively. In the research data findings, BBCA has an average BOPO value of 61.00% during the research period from 2011 to 2020. While BBRI has an average BOPO value of 67.85%, BMRI has an average BOPO value of 70.91%, and BBNI has an average BOPO value of 73.73% during the study period. Based on the data obtained, it can be seen that BBCA has the smallest average BOPO value during the research period, this shows that BBCA has a better ability to manage the efficiency of the company's operational risks.

Companies with good ability to manage assets in investments that will generate profits, which have an important role in banking performance to increase profits so as to attract the attention of investors to invest in company shares. One indicator to assess company performance is to use profitability ratios. The profitability ratio that shows the company's ability to generate profits from assets in the investment used is called Return on Inevesment (ROI).

In the research data findings, BBCA has an average ROI value of 2.94% during the study period from 2011 to 2020. Meanwhile, BBRI has an average ROI value of 2.72%, BMRI has an average ROI value of 2.17%, and BBNI has an average ROI value of 1.87% during the study period. Based on the data findings, it can be seen that BBCA has the highest average ROI value during the study year period. This shows that BBCA has the ability to manage investments that generate profits for shareholders efficiently and more effectively.

The manager's ability to manage assets in investment that will generate profits for the company has an important role in the company's performance to increase profits, so that Return on Investment can be used as an indicator in assessing the company's performance in terms of investment. Investors are also interested in the level of Return on Investment in investing because by paying attention to the level of Return on Investment, it will be seen how the company can manage and make policies in it.

This study will discuss the relationship between market capitalization (Capital Market) which is influenced by intellectual capital (Intellectual Capital), BOPO, and Return on Investment, so that the four banking sector companies are able to maintain their consistency in dominating the capital market in Indonesia. On this basis, this research wants to be developed with the title "The Effect of Intellectual Capital, BOPO, and Return on Invesment on Capital Market (Case Study on Conventional Banks Listed on the IDX for the 2011-2020 Period)".

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Literature Review

Signaling theory is an action taken by company management to provide an overview of investors regarding the company's prospects. Signal theory is based on the assumption that the information received by each party is not the same. This theory relates to the information asymmetry between the Company's management and the parties with an interest in information. For this reason, managers need to provide information for interested parties through the issuance of financial reports (Sari, 2022).

Based on stakeholder theory Ulum, (2016) states that groups or individuals who can influence and/or be influenced by the achievement of certain goals. Based on this theory, organizational management is expected to carry out activities that are considered important by their stakeholders and report back on these activities to the company's stakeholders. Stakeholder theory emphasizes organizational accountability far beyond simple financial or economic performance. This theory states that organizations will choose to voluntarily disclose information about their environmental, social and intellectual performance over and above mandatory requests, to meet the true or recognized expectations of stakeholders.

Intellectual capital is intellectual material knowledge, information, intellectual property and experience that can be utilized to create wealth (Ghazzawi et al., 2020). When intellectual material is formalized and used effectively, it can create wealth with higher value assets, which are referred to as intellectual capital (Putri et al., 2020). Intellectual capital includes all processes and assets that are not usually shown on the balance sheet and all intangible assets (Edvinsson, 1996). Intellectual Capital recognizes three main types of intellectual capital and argues that human capital acts as a building block from which one can build structural capital, so human capital and structural capital interact and create customer capital. From these three capitals, there is value created by the interaction of these three elements, the more interactions that are carried out, the greater the value that will be created (Bontis et al., 2017). Intellectual Capital is not directly measured by the company, but proposes a measure to assess the efficiency of added value as a result of the company's intellectual capabilities through The Value Added Intellectual Coefficent (VAIC) developed by Pulic which is fully consistent with the knowledge-based economy and is a more objective alternative (Marzo, 2022). The measurement method used is the method developed by (Zhang et al., 2021), namely using the VAIC measurement which consists of several stages, including:

1. Value Added (VA) :

$$VA = OUT - IN$$

2. Value Added Capital Employed (VACE) :

$$VACE = \frac{VA}{CE}$$

3. Value Added Human Capital (VAHC) :

$$VAHC = \frac{VA}{HC}$$

4. Value Added Structural Capital (VASC) :

$$SX = VA - HC$$

$$VASC = \frac{SC}{VA}$$

5. Valule Added Intellectual Coefficient (VIAC)

$$VAIC = VACE + VAHC + VASC$$

Operational risk can be known by measuring the level of efficiency and ability of the company in carryingout its operating activities (Juwita & Muljono, 2020). In accordance with Bank Indonesia Surat Edaran No. 6/23/DPNP issued in Jakarta, May 31, 2004 Regarding the Commercial Bank Health Level Assessment System explainsthe calculation of operational risk is by comparing Operating Costs with Operating Income, formulated as follows:

$$BOPO = \frac{Operating\ Expenses}{Operating\ Income}$$

Return on Investment (ROI) is a measuring tool for the company's ability to generate profits with all the assets available in the company by seeing how much profit is generated on a number of investments that have been invested. According to (James & John M. Wachowicz, 2016). One of the measurements is the return on investment. Systematically Return on Invesments (ROI) can be written in the following formula:

$$ROI = \frac{Earning\ After\ Tax}{Total\ Assets}$$
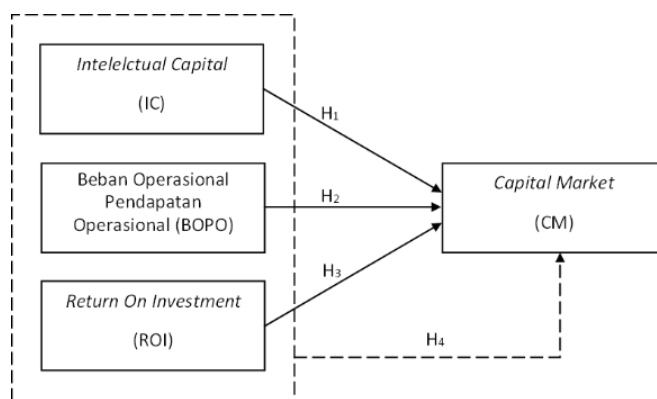
2.2 Conceptual Framework

Figure 2 Conceptual Framework

The research hypothesis may be stated as follows using the theoretical explanation and conceptual framework mentioned above as a basis:

H1: Intellectual Capital affects the Capital Market at Conventional Banks Listed on the IDX for the 2011-2020 Period.

H2 : BOPO affects the Capital Market at Conventional Banks Listed on the IDX for the 2011-2020 Period

H3 : Return on Investment affects the Capital Market at Conventional Banks Listed on the IDX 2011-2020 Period H4: Intellectual Capital, BOPO, Return on Investment simultaneously affect the Capital Market at Conventional Banks Listed on the IDX for the 2011-2020 Period.

3 RESEARCH METHODS

This research uses descriptive quantitative relational research, which is research that states the presence or absence of influence between variables and is expressed in numbers and represents by comparing existing theories and using data analysis techniques that are in accordance with the variables in this study. The population in this study is a Conventional Commercial Bank listed on the Indonesia Stock Exchange (IDX) for the period 2011- 2020, totaling 44 conventional commercial banks. As a population taken from conventional commercial banks, a survey will then be conducted with certain criteria, so as to take samples from the population. This study determines the sample using purposive sampling technique, namely the sample is selected based on the assessment of certain criteria that are suitable for sampling in this study. Based on the established criteria of consistent banks during the 2011-2020 survey period consistently ranked in the top 10 of the 50 biggest market capitalizations released by IDX, the sample is as follows:

Table 1 Sample Top 4 Market Capitalization Banking in IDX

No	Kode Saham	Nama Perusahaan
1	BBCA	PT. Bank Central Asia, Tbk
2	BBRI	PT. Bank Rakyat Indonesia (Persero), Tbk
3	BMRI	PT. Bank Mandiri (Persero), Tbk
4	BBNI	PT. Bank Negara Indonesia, Tbk

The study analyzes the effect of Intellectual Capital, BOPO, and Return on Investmen on Return on Asset using a data processing tool called EVIEWS 10 software. Panel data was used as the study's data source. The first four steps of data analysis are as follows:

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	771.475773	3	0.0000

The panel data regression model, which selects the Chow test model, the Haudman test, and the Lagrange multiplier test to identify which model should be used—CEM, FEM, or REM. Second, the normalcy, multicolinerity, and heteroskedastisity tests are used in the classical assumption test to see whether the regressive model demonstrates a meaningful link. Thirdly, double linear regression analysis can be used to ascertain how one variable affects another. The following double linear regression illustrates this:

$$Yit = a + Q1X1it + Q2X2it + Q3X3it + eit$$

Y_{it} :   *Capital Market*
$X1$:   *Intellectual Capital*
X_2 :   BOPO
$X3$:   *Return on Investment*
a :   Konstanta
$βi$:   Koefisien Regesi
e :   Nilai standar error
I :   Entitas ke-i
T :   Periode ke-i

The f test measures the simultaneous effect of the independent variable on the dependent variable, the t test measures the partial effect between variables, and the coefficient of determination (R^2) test quantifies the percentage of the independent variable that explains the model in this study. These tests are used in hypothesis testing.

4 RESULTS AND DISCUSSION

4.1 Panel Data Regressioon Model Selection Test

4.1.1   Chow Test

In this test it is used to find out the best from the comparison of the Common Effect Model methodwith the Fixed Effect Model method.

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4 RESULTS AND DISCUSSION

4.1 Panel Data Regressioon Model Selection Test

4.1.2   Chow Test

In this test it is used to find out the best from the comparison of the Common Effect Model methodwith the Fixed Effect Model method.

Redundant Fixed Effects Tests Equation: Untitled Test cross-section fixed effects			
Effects Test	Statistic	d.f.	Prob.
Cross-section F	257.163702	(3,33)	0.0000
Cross-section Chi-square	127.748094	3	0.0000

The results of the Chow test indicate that the cross-section Chi-Square probability value is 0.0000 <0.05, meaning that the model better suited for the Chow test is the Fixed Effect Model (FEM).

4.1.3   Hasuman Test

The Haussman test is conducted with the aim of selecting and comparing which is the best modelbetween the Fixed Effect Model or the Random Effect Model.

The results of the Hausman test indicate that the cross-section Chi-Square probability value is 0.0000 < 0.05, meaning that the model better suited for the Chow test is the Fixed Effect Model (FEM).
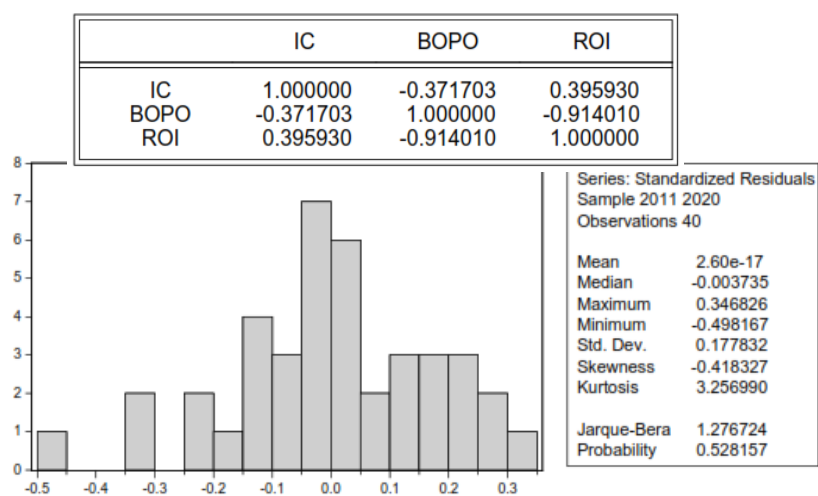
4.2 Classical Assumption Test

4.2.1 Normality Test

The normality test is a test of the distribution to be analyzed, whether the distribution is normal ornot, so that it can be used in parametric analysis.

Based on the results of the normality test, it can be seen that the Prob. Jarque-Bara (JB test) is 3.256990> 0.05 with a Probability of 0.528157> 0.05, it can be explained that the residual value is normally distributed.

4.2.2 Multicollinearity Test

The Multicollinearity test aims to test whether the regression model forms a high or perfect correlationbetween the independent variables.

	IC	BOPO	ROI
IC	1.000000	-0.371703	0.395930
BOPO	-0.371703	1.000000	-0.914010
ROI	0.395930	-0.914010	1.000000

Series: Standardized Residuals	
Sample 2011 2020	
Observations 40	
Mean	2.60e-17
Median	-0.003735
Maximum	0.346826
Minimum	-0.498167
Std. Dev.	0.177832
Skewness	-0.418327
Kurtosis	3.256990
Jarque-Bera	1.276724
Probability	0.528157

Based on the results of the Multicollinearity Test, it shows that there are no independent variables that have a correlation coefficient of more than 0.80 so it can be stated that all variables in this study do not have multicollinearity issues.

4.2.3 Heteroskedasticity Test

The heteroscedasticity test is that the residual variation is not the same from one observation to another.

```
Dependent Variable: ABS(RESID)
Method: Panel Least Squares
Date: 12/13/23   Time: 09:14
Sample: 2011 2020
Periods included: 10
Cross-sections included: 4
Total panel (balanced) observations: 40
```

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.004979	0.654365	1.535808	0.1341
IC	-0.017567	0.010255	-1.713074	0.0961
BOPO	-0.010057	0.007073	-1.421878	0.1644
ROI	-0.039372	0.080410	-0.489639	0.6276

Based on the results of the Heteroscedasticity Test, it shows that the value of each independent variable is more than 0.05 so it can be concluded that there is no heteroscedasticity problem.

4.3 Multiple Linear Regression

The Multiple Linear Regression Test aims to predict the parameters of the regression model, namely the constant value (α) and the regression coefficient (β_i).

Based on table above, it can be seen the coefficient value on each variable from each company. The multiple linear regression analysis equation can be written systematically as follows:

```
Dependent Variable: CM?
Method: Pooled Least Squares
Date: 12/13/23   Time: 09:25
Sample: 2011 2020
Included observations: 10
Cross-sections included: 4
Total pool (balanced) observations: 40
```

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.494898	1.231024	5.276013	0.0000
IC?	0.008384	0.019292	0.434577	0.6667
BOPO?	-0.016852	0.013306	-1.266462	0.2142
ROI?	-0.316686	0.151271	-2.093501	0.0441
Fixed Effects (Cross)				
_BBCA--C	-1.993694			
_BBNI--C	0.293014			
_BBRI--C	0.949663			
_BMRI--C	0.751017			

1. PT. Bank Central Asia, Tbk

   CM_BBCA = 4.5012037 + 0.00838378003411*IC_BBCA - 0.000168520583472*BOPO_BBCA -0.316686410537*ROI_BBCA

2. PT. Bank Rakyat Indonesia (Persero),Tbk

   CM_BBRI = 7.4445607 + 0.00838378003411*IC_BBRI - 0.000168520583472*BOPO_BBRI -0.316686410537*ROI_BBRI

3. PT. Bank Mandiri (Persero), Tbk

   CM_BMRI = 7.2459152+ 0.00838378003411*IC_BMRI - 0.000168520583472*BOPO_BMRI -0.316686410537*ROI_BMRI

4. PT. Bank Negara Indonesia (Persero), Tbk

   CM_BBNI = 6.7879124+ 0.00838378003411*IC_BBNI - 0.000168520583472*BOPO_BBNI -0.316686410537*ROI_BBNI

Based on the linear regression equation formula, it can be seen that:

1. The constant value of PT Bank Central Asia, Tbk (BBCA) is 4.50, which means that without the Intellectual Capital, BOPO, and ROI variables, the Capital Market variable at BBCA will increase by 45%.

2. The constant value of PT Bank Rakyat Indonesia (Persero), Tbk (BBRI) is 7.44, which means that without the variables of Intellectual Capital, BOPO, and ROI, the Capital Market variable at BBRI will increase by 74%.

3. The constant value of PT Bank Mandiri (Persero), Tbk (BMRI) is 7.24, which means that without the Intellectual Capital, BOPO, and ROI variables, the Capital Market variable at BMRI will increase by 72%.

4. The constant value of PT Bank Negara Indonesia, Tbk (BBNI) is 6.78, which means that without the variables of Intellectual Capital, BOPO, and ROI, the Capital Market variable at BBNI will increase by 67%.

4.4 Hypothesis Test

4.4.1 T-Static Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.494898	1.231024	5.276013	0.0000
IC	0.008384	0.019292	0.434577	0.6667
BOPO	-0.000169	0.000133	-1.266462	0.2142
ROI	-0.316686	0.151271	-2.093501	0.0441

Based on the table above, it can be seen that:

1. The Intellectual Capital variable has a Probability value of 0.6667 > 0.05 and the T-test results on the Intellectual Capital variable obtained a t-count of 0.434577 < t-table, namely 2.02, so partially it does not have a significant effect on the Capital Market variable.

2. The BOPO variable has a probability value of 0.2142 > 0.05 and the T-test results on the BOPO variable obtained a t-count of 1.266462 < t-table, namely 2.02, so partially it does not have a significant effect on the Capital Market variable.

3. The ROI variable has a probability value of 0.0441 < 0.05 and the T-test results on the ROI variable obtained a t-count of 2.093501 > t-table, namely 2.02, so partially it has a significant effect on the Capital Market variable.

4.4.2 F-Statis Test

```
R-squared              0.978431    Mean dependent var     4.615500
Adjusted R-squared     0.974510    S.D. dependent var     1.210869
S.E. of regression     0.193324    Akaike info criterion  -0.291270
Sum squared resid      1.233348    Schwarz criterion       0.004284
Log likelihood        12.82540     Hannan-Quinn criter.   -0.184407
F-statistic          249.4978      Durbin-Watson stat      0.706747
Prob(F-statistic)      0.000000
```

Based on the table above, it can be seen that the value of f-count is 249.4978> f-table 2.87 and based on the Prob (F-statistic) value of 0.000000 <0.05, then simultaneously the Intellectual Capital, BOPO, and ROI variables have a significant effect on the Capital Market variable.

4.4.3 Determination Coeffisient Test

```
R-squared              0.978431    Mean dependent var     4.615500
Adjusted R-squared     0.974510    S.D. dependent var     1.210869
S.E. of regression     0.193324    Akaike info criterion  -0.291270
Sum squared resid      1.233348    Schwarz criterion       0.004284
Log likelihood        12.82540     Hannan-Quinn criter.   -0.184407
F-statistic          249.4978      Durbin-Watson stat      0.706747
Prob(F-statistic)      0.000000
```

Based on Table 4.9, it can be seen that the R-Squared value is 0.978431 or 97.8431% where this value indicates that the IC, BOPO, and ROI variables are able to explain the Capital Market variable by 97.8431% while the remaining 2.1569% is explained by other variables outside the study.

5 CONCLUSION

The study aims to test The Effect of Intellectual capital, BOPO, and ROI on Capital Market on Conventinal Banking Listed in IDX 2011-2020 Period Based on the results of research conducted using the EVIEWS 10 software, the following conclusions can be drawn:

1. Based on the test results, it can be explained that the Intellectual Capital variable does not have a significant effect on the Capital Market variable.
2. Based on the test results, it can be explained that the BOPO variable does not have a significant effect on the Capital Market variable.
3. Return on Investment has a significant negative effect on Capital Market variable.
4. The variable Intellectual Capital, BOPO, Return on Investment simultaneously affects the capital market variable during the research period from 2011-2020.

Reference

Barbara, C. (2015). *Introduction to Banking*.

Bontis, N., Dragonetti, N. C., Jacobsen, K., & Roos, G. (2017). The intellectual capital of banks: An examination of its components and value. *Journal of Intellectual Capital*.

Chandra, H. (2021). Pengungkapan Modal Intelektual. *Jurnal Akuntansi*, *13*, 1–11. https://doi.org/10.28932/jam.v13i1.3118 Edvinsson, L. (1996). Developing a Model for Managing Intellectual Capital. In *European Management Journal* (Vol. 4, Issue 4).

Ghazzawi, I., Tuna, M., & Acar, A. (2020). Readings in Management. *Readings in Management*, *October*. https://doi.org/10.5038/9781732127562

Jahrotunnupus, N., & Manda, G. S. (2021). Analisis Pengaruh Risiko Kredit, Risiko Pasar dan Risiko Operasional Terhadap Profitabilitas pada Bank Umum BUMN yang Terdaftar di BEI Periode 2013-2020. *Eksis: Jurnal Ilmiah Ekonomi Dan Bisnis*, *12*(2), 157. https://doi.org/10.33087/eksis.v12i2.265

James, C. V. H., & John M. Wachowicz, J. (2016). *Fundamental of Financial Management* (E. S. Suharsi (ed.); 13th ed.). Salemba Empat.

Marzo, G. (2022). A theoretical analysis of the value added intellectual coefficient (VAIC). *Journal of Management and Governance*, *26*(2), 551–577. https://doi.org/10.1007/s10997-021-09565-x

Putri, S. A., Azwardi, & Sa'adah. (2020). Impact of intellectual capital, profitability and dividend on market capitalization. *Finance: Theory and Practice*, *24*(3), 174–182. https://doi.org/10.26794/2587-5671-2020-24-3-174-182

Roosmawarni, A., Fatihudin, D., & Mauliddah, N. (2023). Market Capitalisation and Financial Performance: Evidence from Banking Listed Company in Indonesia. *Jurnal Analisis Bisnis Ekonomi*, *20*(2), 124–136. https://doi.org/10.31603/bisnisekonomi.v20i2.7835

Roosmawarni, A., & Mauliddah, N. (2021). *Pengaruh ROE, Cash Ratio dan NPL terhadap Kapitalisasi Pasar Sub Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia (Tahun 2009-2018)*.

Sari, D. P. (2022). Sinyal Dan Teori Kontrak Dalam Pelaporan. *ResearchGate*, *November*, 1–26.

Ulum, I. (2016). *INTELLECTUAL CAPITAL (Model Pengukuran, Framework Pengungkapan, dan Kinerja Organisasi)*.

Zhang, X. B., Duc, T. P., Burgos Mutuc, E., & Tsai, F. S. (2021). Intellectual Capital and Financial Performance: Comparison With Financial and Pharmaceutical Industries in Vietnam. *Frontiers in Psychology*, *12*(March), 1–10. https://doi.org/10.3389/fpsyg.2021.595615