Website:

ejournal.umm.ac.id/index.php/jaa

Affiliation:

^{1,2,3,4}Faculty of Economics and Business, University of Muhammadiyah Purwokerto, Central Java, Indonesia

***Correspondence:**

sitinuraziah@ump.ac.id

DOI: 10.22219/jaa.v4i2.17897

Citation:

Meilani, A.Y., Azizah, S.N., Pramono, H., & Pratama, B., C. (2021). The Effect Of Ownership Structure On The Performance Of Intellectual Capital. *Jurnal Akademi Akuntansi*, 4(2), 229-245.

Article Process

Submitted:

August 26, 2021

Reviewed:

September 6, 2021

Revised:

November 25, 2021

Accepted:

November 29, 2021

Published:

November 30, 2021

Office:

Department of Accounting
University of Muhammadiyah
Malang
GKB 2 Floor 3.
Jalan Raya Tlogomas 246,
Malang, East Java, Indonesia

P-ISSN: 2715-1964

E-ISSN: 2654-8321

Article Type: Research Paper

THE EFFECT OF OWNERSHIP STRUCTURE ON THE PERFORMANCE OF INTELLECTUAL CAPITAL

Astian Yosi Meilani¹, Siti Nur Azizah^{2*}, Hadi Pramono³, Bima Cinintya Pratama⁴

ABSTRACT

This study aims to show empirical evidence of the effect of managerial ownership, institutional ownership, foreign ownership and government ownership on intellectual capital performance as the dependent variable. This study relates the influence between these variables by expanding the concept and understanding of Resource-Based Theory, Agency Theory and Stakeholder Theory. The sample in this study is the mining sector companies listed on the Indonesia Stock Exchange in 2016-2019 using purposive sampling technique, namely selecting samples with certain criteria to get more valid results. The data analysis technique used is the classical assumption test, then the results are analyzed using multiple regression analysis to prove the influence between variables by utilizing an accurate SPSS application. The results of this study indicate that institutional ownership and foreign ownership have a positive effect on intellectual capital performance in mining companies, while managerial ownership and government ownership do not show any effect on intellectual capital performance in mining companies in Indonesia. This research contributes to the theory and practice of companies in the conduct of business. However, this study has not been able to prove the influence of managerial and government ownership on intellectual capital performance, so that further research can consider other corporate sectors whose managerial and government ownership is quite dominant.

KEYWORDS: Managerial Ownership; Institutional Ownership; Foreign Ownership; Government Ownership; Intellectual Capital Performance.

ABSTRAK

Penelitian ini bertujuan untuk menunjukkan bukti secara empiris pengaruh kepemilikan manajerial, kepemilikan institusional, kepemilikan asing dan kepemilikan pemerintah terhadap kinerja modal intelektual sebagai variabel dependen. Studi ini menghubungkan pengaruh antar variabel tersebut dengan memperluas konsep dan pemahaman pada *Resource-Based Theory*, *Agency Theory* dan *Stakeholder Theory*. Sampel dalam penelitian ini adalah perusahaan sektor pertambangan yang terdaftar di Bursa Efek Indonesia tahun 2016-2019 dengan menggunakan teknik pengambilan sampel *purposive sampling* yaitu pemilihan sampel dengan kriteria tertentu untuk mendapatkan hasil yang lebih valid. Teknik analisis data yang digunakan adalah dengan uji asumsi klasik yang kemudian hasilnya di analisis menggunakan analisis regresi berganda untuk membuktikan pengaruh antar variabel dengan memanfaatkan aplikasi SPSS yang akurat. Hasil penelitian ini menunjukkan bahwa kepemilikan institusional dan kepemilikan asing berpengaruh positif terhadap kinerja modal intelektual pada

perusahaan pertambangan, sedangkan kepemilikan manajerial dan kepemilikan pemerintah tidak menunjukkan adanya berpengaruh terhadap kinerja modal intelektual pada perusahaan pertambangan di Indonesia. Penelitian ini memberikan kontribusi pada teori dan dan praktik perusahaan dalam pelaksanaan bisnis. Namun, penelitian ini belum mampu membuktikan pengaruh kepemilikan manajerial dan pemerintah terhadap kinerja modal intelektual, sehingga penelitian selanjutnya dapat mempertimbangkan sektor perusahaan lain yang kepemilikan manajerial dan pemerintahnya cukup dominan.

KATA KUNCI: Kepemilikan Manajerial, Kepemilikan Institusional; Kepemilikan Asing; Kepemilikan Pemerintah, Kinerja Modal Intelektual.

INTRODUCTION

The development and economic development are highly dependent on the corporate sector's dynamic development and total contribution. Companies need to create economic value that involves intangible assets or intangible assets, including intellectual capital. The role of intellectual capital is crucial for companies to survive in challenging economic conditions.

In addition, the phenomenon of free trade creates various obstacles that require companies to change the company's strategy to remain competitive in the economy. The company's competitive advantage is assessed from the ownership of intangible assets and the company's innovations, information systems, and resource management. Therefore, companies should focus on the importance of knowledge assets. One approach used to assess and measure knowledge assets is intellectual capital.

Intellectual capital is proven to provide a competitive advantage for the company to the attention of stakeholders. However, disclosure of intellectual capital in public companies listed on the IDX is still low. In line with [Guthrie, \(2001\)](#) cited in [Ulum \(2016\)](#), traditional financial reporting does not explicitly disclose information about intellectual capital, which represents the total value of the company. 87% of investment professionals agree that the annual report will be more valuable and useful for investors if it expands the disclosure of company information. The information is financial information and information related to corporate governance and the environment, human capital, and other indicators that drive the company's value in the future. It means that investors want more comprehensive disclosure of information about the company, including intellectual capital not explicitly disclosed in the ordinary financial statements.

Intellectual capital is part of intangible assets. PSAK No. 19 (revised 2009) states that entities often incur resources or create liabilities in acquiring, developing, or enhancing intangible resources, such as science and technology, design and implementation of new systems or processes, licenses, and intellectual property rights knowledge of markets and trademark. Intellectual capital, which consists of human capital, external capital, and internal capital together, are elements that create a company's competitive advantage and are a driver of company value. So far, the disclosure of intellectual capital in the company's annual report is still voluntary. Companies could decide the type and amount of intellectual capital information to be published. This statement further explains that intellectual capital disclosure is still voluntary, not standardized, and narrow.

Broader disclosure of intellectual capital has a critical role for investors and other stakeholders in decision-making. Through the disclosure of intellectual capital, users of the annual report can see the company's current and future performance. However, various studies still show inconsistent results in the relationship between ownership structure and the extent of intellectual capital disclosure ([Kholmi & Wahyuni, 2020](#)).

According to [Marcus & Kane, \(2006\)](#) the interests of management and shareholders will be equal when there is share ownership by the management. [Pradita & Solikhah's, \(2017\)](#) research shows that managerial ownership positively affects intellectual capital performance. However, this research contradicts [Ningsih et al., \(2017\)](#) research that managerial ownership is harmful and insignificant to intellectual capital performance. Meanwhile, [Ismiyanti & Hamidya's research \(2017\)](#) shows that managerial ownership does not affect the value-added of intellectual capital.

[Bathala et al., \(1994\)](#) states that the voting power of an institution will be greater if the share ownership by an institution is in the higher company. In addition, research conducted by [Supradnya & Ulupui, \(2016\)](#) institutional ownership has a positive influence on intellectual capital performance, and research conducted by [Pradita & Solikhah's, \(2017\)](#) stated that institutional ownership does not affect intellectual capital.

Foreign ownership has almost the same role as institutional investors because foreign ownership can be used as an appropriate way to monitor management ([Saleh & Rahman, 2009](#)). [Supradnya & Ulupui, \(2016\)](#) research shows that foreign ownership positively affects intellectual capital performance, while in [Pradono & Widowati's research \(2016\)](#) foreign ownership does not affect intellectual capital performance. Research by [Bohdannowicz & Urbanek, \(2013\)](#) foreign ownership harms the efficiency of intellectual capital.

Government ownership is a situation where the government owns the company's shares. The research of [Sabrina & Muharam, \(2015\)](#) stated that government ownership positively affects intellectual capital performance. However, [Ismiyanti & Hamidya's, \(2017\)](#) research shows that government ownership harms the value-added intellectual capital. [Tjedani et al. \(2018\)](#) also show that government ownership does not affect intellectual capital performance.

In measuring the disclosure of 8 intellectual capital, the researcher uses the ICD index, which contains forty (40) items with nine (9) items being internal capital items, seventeen (17) items being external capital items, and fourteen (14) items are human capital items. The independent variable in this study is the ownership structure consisting of managerial Ownership, Institutional Ownership, government ownership, and foreign Ownership. The ownership structure is used because it can affect the extent of information disclosure in the annual report. According to Punomosidhi, the relatively small composition of institutional investors in the ownership structure and the low percentage traded on the Indonesian stock exchange can reduce the amount of disclosure because managers do not have strong incentives to convince stakeholders about optimal performance. The use of the company's annual report is because the annual report contains broader and comprehensive company information. Sampling was taken from the most recent year, 2017-2019, using stakeholder, agency theory, and resource-based theory. Managerial Ownership is Ownership of company shares by managers. With high managerial ownership, managers will improve their performance in running the company because residual losses caused by a lack of transparency in disclosing company information will impact the shares owned by managers. Companies managed and controlled by owners have the most likely influence on the fewer

incentives issued so that the disclosure will be less. It is because owners can get information through informal channels.

Institutional Ownership is Ownership of company shares by other institutions outside the company. The high ownership owned by the institution is considered to increase the effectiveness of the supervisory function on the performance of managers in running the company. In addition, high institutional ownership will encourage managers to improve their performance and make more expansive disclosures of company information, including intellectual capital information. Government ownership is ownership of company shares by the government. In managing its investment, the government is responsible for the welfare of the wider community.

High government ownership in a company will be required to make company information transparent to the government so that managers will expand the disclosure of information, including intellectual capital information owned by the company. Foreign Ownership is Ownership of company shares by foreign parties. Today, foreign parties invest a lot in companies in Indonesia.

High foreign ownership requires companies to have high standards of corporate governance implementation. A high level of Information asymmetry in companies commonly is on foreign ownership. The management will disclose the information widely to avoid information asymmetry. Companies with governance that are guided by good corporate governance are believed to have more comprehensive disclosure practices. Therefore, the attributes of corporate governance are believed to be the critical determinants of intellectual capital development. Based on the gap phenomenon and research gap that have been described in the background above, this research contributes to the area of 10 intellectual capital disclosures related to the Effect of Ownership Structure on Intellectual Capital Disclosure in mining sector companies listed on the IDX in 2017-2019.

The type of data used in this study is secondary data from the company's annual report with a sample of all mining companies that meet the requirements. The analytical method used is multiple linear regression with analytical tools through the SPSS program to measure the level of influence and significance between the independent and dependent variables.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

Resource-Based Theory

Creating a sustainable competitive advantage is closely related to the company's ability to maintain valuable, rare, and irreplaceable resources and allocate and deploy these resources effectively ([Barney, 1991](#)). [Kozlenkova et al., \(2014\)](#) explain that the basic logic of this theory is based on fundamental assumptions about a company's resources and explains how these resources can generate a sustainable competitive advantage and why some companies can consistently outperform other companies. The same industry may have different resources ([Barney, 2003](#)). Resources consist of tangible components such as financial and physical assets such as buildings, plants, and equipment. While the intangible components such as human resources, patents, technological knowledge ([Amit & Schoemaker, 1993](#)). This theory assumes that companies with superior and competitive intellectual capital can win the competition in the market industry to create value and achieve optimal business performance ([Barney & Clark, 2007](#)).

Agency Theory

233

Agency theory explains the relationship between principal and agent. An agency relationship arose when one party referred to as the principal contracts another party called the agent to perform some service for his or her interests which involves delegating some decision-making authority to the agent ([Jensen & Meckling, 1976](#)). Agency theory assumes that all individuals act in their interests. For example, the principal wants the maximum and immediate return on the capital that has been invested. In contrast, the manager as an agent wants his interests to be fulfilled by providing the maximum compensation, bonuses, incentives, and remuneration for his performance. The conflict of interest between the agent and the principal to achieve the desired prosperity is the agency problem.

Agency theory assumes that differences in interests between managers and shareholders result in a conflict known as agency conflict. This very potential conflict of interest causes the importance of an implemented mechanism that is useful for protecting the interests of shareholders ([Jansen and Meckling, 1976](#)). Due to reduced agency costs, it can be taken to reduce agency conflicts by increasing the number of managerial Ownership, Institutional Ownership, foreign Ownership, and government ownership in the company. Each party can monitor and obtain its rights reasonably ([Jansen and Meckling, 1976](#)).

Stakeholder Theory

A stakeholder, or better known as a stakeholder, is any group or individual who can influence or be influenced by the achievement of organizational goals. Stakeholders can consist of shareholders, creditors, government, employees, customers, suppliers, and the community. This theory provides space for stakeholders to obtain the broadest possible information about the activities carried out by the company and their impact on stakeholders, both positive and negative.

Intellectual Capital, various explanations regarding the definition of intellectual capital, have been submitted by several researchers. Intellectual capital defines as "knowledge assets that can be converted into value." Intellectual capital as "a matter of creating and supporting connectivity between all sets of expertise, experience, and competencies inside and outside the organization." Alternatively, in other words, intellectual capital can be interpreted as an intangible asset that can be used to increase the value and competitiveness of the company. Intellectual capital is divided into three components: physical capital, human capital (HU), and structural capital (SC). Physical capital shows harmonious relationships with partners, suppliers, customers, government, and the surrounding community. This physical capital is known as capital employed (CE). Capital Employed refers to the company's financial capital, which consists of monetary capital and physical capital. Good management of company resources in capital assets is believed to increase market value and company performance. Human capital reflects the intellectual abilities possessed by each organization represented by its employees.

Human capital includes personal knowledge of an organization that exists in its employees generated through competence, attitude, and intellectual intelligence. Skilled and skilled employees can improve the company's performance and ensure the survival of the company. Structural capital shows knowledge that will remain in non-human companies, such as company routines, procedures, systems, culture, and databases. Structural capital arises from organizational processes and values that reflect the company's internal and external focus and the development and renewal of values for the future. Many empirical studies have been conducted to determine the effect of intellectual capital on a company's financial performance. In addition, the financial performance measurement tools used by

the researchers, Return on Assets (ROA) and Return on Equity (ROE), require different financial data that may affect the final results of the study. The difference in the results of empirical evidence between one researcher and another encourages this research to be carried out. The difference between this study and previous research is in selecting mining and manufacturing companies listed on the IDX as research subjects. In addition, this research period uses data from companies listed on the Indonesia Stock Exchange in 2010 – 2012. The differences in research subjects and research periods are expected to enrich previous studies.

No	Researcher & year	Variables used		Result
		Variable X	Variable Y	
1.	Hartati et al (2019)	Effect of Managerial Ownership, Institutional Ownership, foreign Ownership, and firm size	Intellectual Capital Performance	Managerial ownership has no significant effect on intellectual capital performance. Institutional ownership has a negative and insignificant effect on intellectual capital performance. Foreign ownership has no significant effect on intellectual capital performance, and firm size has a positive and significant effect on intellectual capital performance.
2.	Tjendani et al., (2018)	Independent: Digital banking, corporate governance, ownership structure: evidence from Indonesia	<i>Intellectual capital performance</i>	Digital banking has no significant implications for IC performance. However, family ownership, foreign ownership, government ownership do not affect intellectual capital performance, and corporate governance has significant implications for IC performance.
3.	Ningsih et al., (2017)	Effect of managerial ownership structure, profitability and firm size Intellectual capital performance	<i>Intellectual capital performance</i>	Managerial ownership structure has a negative and insignificant effect on intellectual capital performance. On the other hand, profitability and firm size have a positive effect on intellectual capital performance.
4.	Ismiyanti & Hamidya, (2017)	Effect of ownership structure	Performance <i>Value added intellectual capital coefficient as an intervening</i>	variable. Domestic managerial, institutional and foreign institutional ownership does not affect value-added intellectual capital (MVAIC TM). However, government ownership harms the value-added intellectual capital.
5.	Supradnya & Ulupui, (2016)	The effect of the industry		tional ownership, and foreign ownership on intellectual capital

No	Researcher & year	Variables used		Result
		Variable X	Variable Y	
		type, managerial ownership, institu		performance Intellectual capital performance The type of financial industry is higher than the intellectual capital performance of the non-financial industry type. Managerial ownership has no effect. However, foreign ownership and institutional ownership positively affect intellectual capital performance.
6.	Pradono & Widowati, (2016)	influence foreign commissioners, foreign directors, and foreign ownership	<i>Intellectual capital</i>	Foreign commissioners have no significant effect on <i>intellectual capital</i> Performance. Foreign directors have a positive effect on <i>intellectual capital</i> Performance. Foreign ownership has no significant effect on <i>intellectual capital performance</i> .
7.	Bohdanowicz, (2014)	managerial ownership	<i>Intellectual capital efficiency</i>	Managerial ownership has a positive effect on the efficiency of intellectual capital performance.

Table 1.
Previous research

Research Hypothesis

The influence of managerial ownership on intellectual capital performance

Based on agency theory, managerial ownership is one way to resolve agency conflicts that exist in the company ([Jensen & Meckling, 1976](#)). With increasing managerial ownership, managers will be motivated to improve their performance to obtain company incentives, compensation, bonuses, and remuneration. Therefore, management will be more careful in deciding because management will feel the benefits directly from the decisions taken, and management will also bear the loss if the wrong steps are taken in making decisions ([Sofyaningsih & Hardiningsih, 2011](#)). Managerial ownership is the proportion of shareholders from the management who are actively involved in the company's decision-making process ([Diah and Emran 2009](#)). When managerial ownership is high, managers will be more productive to increase the company's value so that contract costs and supervision costs will be below. The greater the manager's ownership in the company, the more social information the manager will disclose

H₁: Managerial Ownership has a positive effect on intellectual capital performance

The effect of institutional ownership on intellectual capital performance

Based on stakeholder theory, organizations or companies will voluntarily disclose information about their environmental, social, and intellectual performance, over and above their mandatory requests, to meet actual or recognized expectations by stakeholders ([Ulum, 2016](#)). In addition, the stakeholder theory indirectly forces the company's management to optimally manage all the potential resources it has in order to create value-

added (added value) while at the same time encouraging the improvement of financial performance, which in turn can provide benefits to all stakeholders including the institutions involved in the company.

Institutional ownership is the proportion of shareholders owned by institutional parties. Such as insurance companies, banks, investment companies, and other institutional ownership, except for subsidiaries and other institutions with a special relationship. Stock companies, namely shares owned by individuals above 5% for three consecutive years but not included in the class of insider ownership ([Diah and Emran, 2009](#)).

One of the factors that can affect the company's performance is institutional ownership. The existence of institutional ownership in a company will encourage increased supervision to be more optimal on management performance because share ownership represents a source of power that can be used to support or vice versa on management performance.

H₂: Institutional Ownership has a positive effect on intellectual capital performance.

The effect of foreign ownership on intellectual capital performance

Based on Resource-Based Theory, resources consist of tangible components such as financial and physical assets such as buildings, factories, and equipment. While the intangible components such as human resources, patents, technological knowledge. The presence of foreign ownership will increase the performance of the company's resources because the company has a global ownership affiliation. Foreign ownership is the proportion of shares owned by foreign parties. The presence of foreign investors in a company can improve the company's performance so that companies can implement a sound corporate governance system because foreign investors are parties who are considered concerned about this ([Supradnya & Ulupui, 2016](#)). Therefore, companies with more significant foreign ownership will be encouraged to report their information voluntarily and widely. It happens because companies with more foreign investors tend to have management systems, technology, innovation, expertise, and marketing that are pretty good and can positively influence the company ([Wiranata & Nugrahanti, 2013](#)). The importance of foreign investment in Indonesia's economic development is also reflected in the objectives stated in Law No. 25 of 2007 concerning investment in Indonesia ([David, 2014](#)).

H₃: Foreign Ownership has a positive effect on intellectual capital performance

The effect of government ownership on intellectual capital performance

According to stakeholder theory, stakeholders can consist of shareholders, creditors, government, employees, customers, suppliers, and the community. This theory provides space for stakeholders to obtain the broadest possible information about the activities carried out by the company and their impact on stakeholders, both positive and negative.

Government ownership is a situation where the government owns the company's shares. The selection of government ownership in this study is based on government ownership which will help pool interests between managers and shareholders ([Hunardy & Tarigan, 2017](#)). The research of [Sabrina & Muharam, \(2015\)](#) stated that government ownership positively affects intellectual capital performance. On the other hand, [Ismiyanti & Hamidya's, \(2017\)](#) research shows that government ownership has a negative effect on the value-added intellectual capital. [Tjedani et al. \(2018\)](#) also show that government ownership does not affect intellectual capital performance.

H₄: Government ownership has a positive effect on intellectual capital performance.

Figure 1.
Research
Framework

METHOD

This study uses secondary data, the data obtained indirectly in the form of financial statements. The population in this study are mining companies that have gone public and are listed on the Indonesia Stock Exchange (IDX). The samples in this study were companies in the mining sector in 2016-2019, which amounted to 42 companies.

Dependent Variable

In this study, the dependent is intellectual capital performance, represented by the modified value-added intellectual coefficient (MVAIC). Value-added intellectual capital is a way to measure intellectual capital performance. The value-added intellectual coefficient shows the level of efficiency in imaging the value of tangible assets and intangible assets owned by [Chen et al., \(2005\)](#).

Measurement of VA (Value added)

The first step is to calculate the company's ability to create added value (VA).

$$\text{Value added} = \text{OP} + \text{CE} + \text{D} + \text{A}$$

OP = Operating Profit, EC = Employee costs, D = Depreciation, A= Amortisation

Human Capital

The first relationship VA is between VA and HC is known as human capital efficiency (HCE). HCE demonstrates HC's ability to create value within the company.

$$\text{HCE} = \frac{\text{Value added}}{\text{human capital.}}$$

Human capital = Employee Expenses, value-added = Total value-added,
HCE = Human capital efficiency

Structural capital

Structural capital is calculated by subtracting VA with HC. The smaller the contribution of HC in value creation, the more significant the contribution of SC ([Pulic, 2000](#)).

$$SCE = \frac{\text{Capital Structure}}{\text{Value added}}$$

where, Structural capital = VA - HC, Value added = Total value-added, SCE = Structural capital efficiency.

Capital Employed

Capital employment is a form of the company's ability to manage its resources in capital assets. The third relationship of VA is with physical capital (CE), known as capital employed efficiency (CEE). CEE is an indicator for VA created by one unit of physical capital ([Pratama, 2016](#)).

$$CEE = \frac{\text{Value added}}{\text{capital employed.}}$$

Capital employed = Book value of net assets , value-added = Total value-added, CEE = Capital employed efficiency.

Relational Capital Efficiency (RCE)

Relational capital is a harmonious relationship/association network owned by the company and its partners, from reliable and quality suppliers, its relationship with the government, and the surrounding community. RCE describes investment efficiency in relational aspects. In this context, relational capital is proxied by marketing costs ([Nazari & Herremans, 2007](#)).

$$RCE = RC / VA$$

where, RC = Marketing expenses (Relational Cost, Value added = Total value added, RCE = Rational Capital Efficiency.

Modified Value Added Intellectual Capital (MVAIC)

The last stage is to calculate the Value-added intellectual capital (MVAIC). MVAIC indicates the organization's intellectual capital capabilities, which is also considered BPI (Business performance indicator).

MVAIC is the sum of the previous three components, namely human capital efficiency, efficiency, capital employed efficiency ([Pulic, 1999](#)).

$$MVAIC = HCE + SCE + RCE +$$

The advantage of the MVAIC method is because of the data. The advantage of the MVAIC method is that the data required is relatively easy to obtain from various sources and types of companies. The data needed to calculate these ratios are standard financial figures that are generally available from the company's financial statements. Other intellectual capital measurement alternatives are limited to only producing unique financial and non-financial indicators that are only to complete the profile of an individual company. These indicators, especially non-financial, are not available or not recorded by other companies ([Ulum, 2016](#)).

Variable independent

Independent variables are types of variables that explain or can influence other variables. For example, the variables used in this study are managerial Ownership, Institutional Ownership, foreign Ownership, and government ownership ([Indrianto & Supomo, 2002](#)).

Managerial ownership (X1)

Managerial ownership is the proportion of share ownership owned by executive managers. This executive manager includes directors and boards of commissioners. According to [Supradnya & Ulupui, \(2016\)](#), the measurement of managerial ownership refers to the research by [Supradnya & Ulupui, \(2016\)](#):

$$\text{Managerial ownership} = \frac{\text{Managerial stock}}{\text{total outstanding stock}} \times 100\%$$

Institutional Ownership (X2)

Institutional ownership as a condition where the institution is a company (PT), insurance company, investment company. This variable is measured by the percentage of shares owned by the institution at the end of the year. Institutional ownership is calculated by the following formula ([Fitriyah, 2011](#)).

$$\text{Institutional Ownership} = \frac{\text{Institutional stock}}{\text{Total outstanding stock}} \times 100\%$$

Foreign Ownership (X3)

Foreign ownership is the ownership of company shares owned by foreign investors, including foreign business entities. The measurement of foreign ownership refers to the research of [Supradnya & Ulupui, \(2016\)](#).

$$\text{Foreign ownership} = \frac{\text{Foreign Stock}}{\text{Total outstanding stock}} \times 100\%$$

Government ownership (X4)

Government ownership is the amount of share ownership by the government of all managed share capital ([Farooque et al., 2007](#))

$$\text{Government Ownership} = \frac{\text{Government Stock}}{\text{Total outstanding stock}} \times 100\%$$

RESULTS AND DISCUSSION

Classic Assumption test

The normality test results showed a significance value of 0.200 or $0.200 > 0.05$ which means that data are normal. Multicollinearity test in a regression model can be seen from the value of Tolerance and its opponent Variance Inflation Factor (VIF). The general limits used to indicate multicollinearity are tolerance values > 0.10 and $VIF < 10.00$ ([Ghozali, 2013](#)). This research shows that tolerance > 0.10 and $VIF < 10.00$. (Source: SPSS data for 2021). Based on the results of the heteroscedasticity test, a significance value of 0.05 was obtained, so in the regression model, there were no symptoms of heteroscedasticity. (Source: SPSS data in 2019).

Table 2.
Classic
Assumption
Test

Variables	Normality Test	Multicollinearity Test		Heteroskedasticity Test
		VIF	Tol	
Managerial Ownership	Asymp. sig 0.200	0.962	1.039	0.862
Institutional Ownership		0.721	1.386	0.286
Foreign Ownership		0.731	1.368	0.342
Government ownership		0.961	1.041	0.219
Conclusion	Data is normal	No Multicollinearity		No Heteroskedasticity

Table 3.
Result of R
square and f
test

Model Summary

Model	R	R Square	Adjusted Square	R Std. An of error Estimate	F the	Sig
1	.387 ^a	.150	.116	3.94901	4.440	0.002

Source: SPSS data for 2021

Based on the following table, it is known that the Adjusted R² Square value is 0.116. This value indicates that the independent variable can explain the variation of the dependent variable by 11.6%, and other variables outside the regression model explain the remaining 88.4%. The F Statistical Test table shows the magnitude of the calculated F is 4,440, which is indicated by a positive sign, then the direction of the relationship is positive. The value statistically shows a significant result at $\alpha = 0.05$, which is 0.002, meaning that the

significance value is <0.05 . It means that the research on the feasibility test of the model deserves to be researched.

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	5.312	.927			5.731	.000
Managerial Ownership	-.563	2.673	-.020		-.211	.834
Institutional Ownership	4.611	1.689	.295		2.729	.007
Foreign Ownership	6.820	1.785	.410		3.822	.000
Government Ownership	5.876	2.840	.194		2.069	.041

Table 4.
t-Test Results

Based on the table of partial test results on all independent variables, it shows that the sig value of Institutional (0.007), foreign (0.000), government ownership (0.041) shows a value of <0.05 with a positive coefficient direction. Thus, there is a positive influence between institutional ownership, foreign ownership, and government ownership on intellectual capital performance so that H2, H3, and H4 are supported. However, this is in contrast to managerial ownership, which has a sig value of $0.834 > 0.05$, which shows no influence between managerial ownership and intellectual capital performance, so H1 is not supported.

Managerial ownership does not affect intellectual capital performance.

The results of testing the first hypothesis can prove that managerial ownership does not affect intellectual capital performance. It means that the larger or smaller the managerial ownership, the less impact its intellectual capital performance. The agency conflict in the companies internal managerial does not contribute anything to the performance of intellectual capital. This study does not align with agency theory related to managerial ownership of intellectual capital performance in agency theory explaining that agency problems can occur due to information asymmetry between principal and agent. The results of this study are supported by ([Aisyah & Sudarno, 2014](#); [Mahardika et al., 2014](#)).

Institutional ownership has a positive effect on intellectual capital performance.

The results of testing the second hypothesis can prove that institutional ownership positively affects intellectual capital performance. The greater the institutional ownership, the higher the performance of the company's intellectual capital. On the other hand, the smaller the institutional Ownership, the lower the intellectual capital performance. This study is in line with agency theory related to institutional ownership of intellectual capital performance. It can reduce the conflict of interest between institutional agents and principals by increasing institutional share ownership. Based on agency theory, there is a conflict of interest between the agent and the principal through a control mechanism by institutional investors to direct, control, and supervise managers as agents acting in the interests of shareholders. According to stakeholder theory, institutional investors prefer policies to increase the company's long-term profits, one of which is intellectual capital management. Therefore, optimal intellectual capital management will result in high

intellectual capital performance ([Supradnya and Ulupuli, 2016](#)). The study results are under the research of [Putriani & Purwanto, \(2010\)](#), [Supradnya & Ulupui, \(2016\)](#), which state that institutional ownership has a positive effect on intellectual capital performance.

Foreign ownership has a positive effect on intellectual capital performance.

The results of testing the third hypothesis can prove that foreign ownership positively affects intellectual capital performance. The greater the foreign ownership, the higher the performance of the company's intellectual capital. On the other hand, the smaller the foreign Ownership, the lower the intellectual capital performance. The study results are in line with stakeholder theory related to foreign ownership of intellectual capital performance. With the presence of foreign investors, management can improve the company's intellectual capital performance. With full support and optimal supervision from foreign shareholders, the efficiency of management and utilization of intellectual capital will increase. Based on agency theory, other ways are used to reduce agency problems besides increasing manager ownership. By increasing foreign investors, foreign investors will prefer policies to improve the long term for the company, one of which is intellectual capital management policies ([Supradnya & Ulupui, 2016](#)). This study is in line with research conducted by [Dian, \(2011\)](#), [Supradnya & Ulupui, \(2016\)](#) which shows that foreign ownership positively affects intellectual capital performance.

Government ownership has a positive effect on intellectual capital performance.

The results of testing the fourth hypothesis show that government ownership has a positive effect on intellectual capital performance. It means that increasing government ownership in the company can improve the performance of its intellectual capital. Conversely, when government ownership decreases, the performance of intellectual capital will also decrease. The results of this study follow the resource-based theory that human resources belonging to a particular group can affect the performance of other groups, in this case, the government. In addition, the results of this study follow the agency concept where the role of the government here is as an agent who takes part in decision making and can influence the performance of intellectual capital in the company. Finally, the study results are under [Setianto & Purwanto, \(2014\)](#) research and [Asfahani's, \(2007\)](#) which shows that government ownership positively affects intellectual capital performance.

CONCLUSION

This study aimed to measure the effect of a company's ownership structure on intellectual capital performance. Based on agency theory which involves a conflict of interest as one of the factors inhibiting performance in the company, it can be minimized by involving agents in various company decisions. The data of this study are the financial statements of mining companies listed on the Indonesia Stock Exchange in 2016-2019, which were analyzed using multiple regression analysis. The study results indicate that the ownership structure has some influence on the performance of intellectual capital. This influence is a positive influence between institutional ownership, foreign ownership, and government ownership on the company's intellectual capital performance. Meanwhile, managerial ownership does not affect the intellectual capital performance of mining companies in Indonesia.

REFERENCES

- Aisyah, C. N., & Sudarno. (2014). Pengaruh Struktur Kepemilikan Dan. *Diponegoro Journal of Accounting*, 3(2), 233–241.
<https://ejournal3.undip.ac.id/index.php/accounting/article/view/6062>

- Amit, R., & Schoemaker, P. J. H. (1993). Strategic Assets And Organizational Rent. *Strategic Management Journal*, 14(1), 33–46. <https://doi.org/10.1002/smj.4250140105>
- Asfahani, E. S. (2007). Pengaruh Ukuran Perusahaan, Profitabilitas, Leverage, Umur Perusahaan dan Kepemilikan Pemerintah Terhadap Pengungkapan Intellectual Capital. *Jurnal Ekonomi Akuntansi*, 3(3), 40–61. <http://fe.ubhara.ac.id/ojs/index.php/equity/article/view/511>
- Barney, J. (1991). Firm Resources And Sustained Competitive Advantage. *Journal Of Management*, 17, 99–120. <https://doi.org/10.1177/014920639101700108>
- Barney, J. B. (2003). Unraveling The Resource-Based Tangle. *Managerial And Decision Economics*, 24(4), 309–323.
- Barney, J. B., & Clark, D. N. (2007). Resource-Based View Theory: Creating And Sustaining Competitive Advantage. *Oxford University Press Inc, New York*, 4, 1–10.
- Bathala, C. T., Moon, K. P., & Rao, R. P. (1994). Managerial Ownership, Debt Policy, and The Impact of Institutional Holdings: An Agency Perspective. *Financial Management*, 23(3), 38–50. <https://doi.org/10.2307/3665620>
- Bohdannowicz, & Urbanek, G. (2013). *The Impact of Ownership Structure on Intellectual Capital Efficiency: Evidence From Polish Emerging Market*. [https://doi.org/Bohdanowicz, Leszek and Urbanek, Grzegorz, The Impact of Ownership Structure on Intellectual Capital Efficiency: Evidence from Polish Emerging Market \(December 27, 2013\). Available at SSRN: https://ssrn.com/abstract=2372412](https://doi.org/Bohdanowicz, Leszek and Urbanek, Grzegorz, The Impact of Ownership Structure on Intellectual Capital Efficiency: Evidence from Polish Emerging Market (December 27, 2013). Available at SSRN: https://ssrn.com/abstract=2372412) or <http://dx.doi.org/10.2139/ssrn.2372412>
- Bohdanowicz, L. (2014). Managerial Ownership and Intellectual Capital Efficiency: Evidence From Poland. *China-USA Business Review*, 13(10), 626–635. <https://doi.org/10.17265/1537-1514/2014.10.002>
- Chen, M., Cheng, S., & Hwang, Y. (2005). An Empirical Investigation of The Relationship Intellectual Capital and Firm's Market Value and Financial Performance. *Journal of Intellectual Capital*, 6(2), 159–176. <https://doi.org/10.1108/14691930510592771>
- Diah, & Emran. (2009). *Kajian Riset Akuntansi*. Gramedia Widiasarana.
- Dian, G. (2011). Pengaruh Struktur Kepemilikan, Ukuran Perusahaan, dan Umur Perusahaan Terhadap Kinerja Intellectual Capital (Studi Pada Perusahaan Perbankan yang Terdaftar di BEI tahun 2009-2009). In *Tesis*. Universitas Diponegoro Semarang.
- Farooque, O. Al, Zijl, T. Van, Dunstan, K., & Karim, A. W. (2007). Corporate Governance in Bangladesh: Link between Ownership and Financial Performance, Blackwell Publishing Ltd 1453-1468. *Journal Compilation*, 15(6). <https://doi.org/10.1111/j.1467-8683.2007.00657.x>
- Fitriyah, F. K. (2011). Pengaruh Kepemilikan Institusional , Set Kesempatan Investasi Dan Arus Kas Bebas. *Media Riset Akuntansi*, 1(1), 31–76. http://journal.bakrie.ac.id/index.php/journal_MRA/article/view/14/14
- Ghozali, I. (2013). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21 Update PLS Regresi*. Semarang: Universitas Diponegoro.
- Guthrie, J. (2001). The Management, Measurement and The Reporting Intellectual Capital. *Journal of Intellectual Capital*, 2(1), 27–41. <https://doi.org/10.1108/14691930110380473>
- Hunardy, N., & Tarigan, J. (2017). Pengaruh Kepemilikan Pemerintah Terhadap Kinerja

- Keuangan Melalui Dewan Komisaris Independen Sebagai Variabel Intervening. *Business Accounting Review*, 5(2), 602–604.
- Indrianto, N., & Supomo, B. (2002). *Metodologi Penelitian Bisnis*. Yogyakarta: BPEE.
- Ismiyanti, F., & Hamidya, A. R. (2017). Pengaruh Struktur Kepemilikan Terhadap Kinerja Dengan Value Added Intellectual Capital Coefficient (VAIC) Sebagai Variabel Intervening [The Influence of Ownership Structure on Performance with Value Added Intellectual Capital Coefficient (VAIC) as an Intervening Variable]. *DeReMa (Development Research of Management): Jurnal Manajemen*, 12(1), 40. <https://doi.org/10.19166/derema.v12i1.340>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kholmi, M., & Wahyuni, E. D. (2020). Analisis Praktik Pengungkapan Intellectual Capital Studi Pada Perusahaan Sub Sektor Industri Otomotif. *Jurnal Akademi Akuntansi*, 3(2), 191–199. <https://doi.org/10.22219/jaa.v3i2.13227>
- Kozlenkova, I. V., Samaha, S. A., & Palmatier, R. W. (2014). Resource-Based Theory In Marketing. *Journal Of The Academy Of Marketing Science*, 42(1), 1–21. <https://doi.org/10.1007/s11747-013-0336-7>
- Mahardika, E. S. S., Khafid, M., & Agustina, L. (2014). Pengaruh Struktur Kepemilikan, Ukuran Dan Umur Perusahaan Terhadap Kinerja Intellectual Capital. *Accounting Analysis Journal*, 3(2). <https://doi.org/10.15294/aa.v3i1.4192>
- Marcus, A., & Kane, A. (2006). *Investemens, 6th Edition*. Jakarta: Salemba Empat.
- Nazari, J. A., & Herremans, I. M. (2007). Extended VAIC Model Measuring Intellectual Capital Components. *Journal of Intellectual Capital*, 8(4), 595–609. <https://doi.org/10.1108/14691930710830774>
- Ningsih, D. M., Arza, F. I., & Afriyenti, M. (2017). Pengaruh Struktur Kepemilikan Manajerial, Profitabilitas dan Ukuran Perusahaan terhadap Kinerja Intellectual Capital (Studi Empiris Perusahaan Perbankan yang terdaftar di BEI Tahun 2012-2014). *Jurnal Wahana Riset Akuntansi*, 5(1), 1–28. <https://doi.org/10.24036/wra.v5i1.8711>
- Pradita, I., & Solikhah, B. (2017). The Influence of Industry Type, Ownership Structure, Company Risk, and Intellectual Capital Efficiency on Intellectual Capital Performance. *Accounting Analysis Journal*, 6(2), 277–287. <https://doi.org/10.15294/aa.v6i2.13862>
- Pradono, N. S. H., & Widowati, E. H. (2016). Pengaruh Komisaris Asing, Direktur Asing Dan Kepemilikan Asing Terhadap Kinerja Intellectual Capital. *Kinerja*, 20(2), 132. <https://doi.org/10.24002/kinerja.v20i2.840>
- Pratama, B. C. (2016). The Impact of Intellectual Capital of Indonesia's High-Tech Company on Firm's Financial and Market Performance. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(4), 73–81.
- Pulic, A. (1999). *Measuring The Performance Of Intellectual Potential In The Knowledge Economy*.
- Pulic, A. (2000). VAIC : An Accounting Tool For IC Management. *International Journal Of Technology Management*, 20(5/6/7/8), 702–714. <https://doi.org/10.1504/IJTM.2000.002891>

- Putriani, F. D., & Purwanto, A. (2010). Pengaruh Struktur Kepemilikan, Tingkat Keuntungan Perusahaan, dan Risiko Perusahaan Terhadap Kinerja Intellectual Capital. *Jurnal Akuntansi & Auditing*, 3(1).
- Sabrina, F. N., & Muharam, H. (2015). Analisis Pengaruh Kepemilikan Pemerintah, Kepemilikan Asing, Risiko Likuiditas dan Risiko Kredit Terhadap Kinerja Keuangan Bank. *Diponegoro Journal of Management*, 224–236.
- Saleh, N. M., & Rahman, M. R. C. A. (2009). Ownership Structure and Intellectual Capital Performance In Malaysia. *Asian Academy of Management Journal of Accounting and Finance*, 5(1), 1–29. <https://ssrn.com/abstract=1153908>
- Setianto, A. P., & Purwanto, A. (2014). *Analisis Faktor-Faktor yang Mempengaruhi Pengungkapan Modal Intelektual (Studi Empiris pada Perusahaan yang Terdaftar di “Indeks Kompas 100” Tahun 2010-2012)*. Universitas Diponegoro Semarang.
- Sofyaningsih, S., & Hardiningsih, P. (2011). Struktur Kepemilikan, Kebijakan Dividen, Kebijakan Utang Dan Nilai Perusahaan Ownership Structure Dividend Policy And Debt Policy and Firm Value. *Jurnal Dinamika Keuangan Dan Perbankan*, 3(1), 20. <https://www.unisbank.ac.id/ojs/index.php/fe1/article/view/195>
- Supradnya, I. N. T., & Ulupui, I. G. K. A. (2016). Pengaruh Jenis Industri,. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 5(5), 1385–1410. <https://ojs.unud.ac.id/index.php/EEB/article/view/20586>
- Tjendani, R. D., Widagdo, A. K., & Muthmainah, M. (2018). Digital Banking, Corporate Governance, Ownership Structure, and Intellectual Capital Performance: Evidence from Indonesia. *Jurnal Keuangan Dan Perbankan*, 22(4), 715–734. <https://doi.org/10.26905/jkdp.v22i4.2481>
- Ulum, I. (2016). *Intellectual Capital, Model Pengukuran, Framework Pengungkapan, dan Kinerja Organisasi, Edisi Kedua*. Universitas Muhammadiyah Malang.
- Wiranata, Y. A., & Nugrahanti, Y. W. (2013). Pengaruh Struktur Kepemilikan Terhadap Profitabilitas Perusahaan Manufaktur di Indonesia. *Jurnal Akuntansi Dan Keuangan*, 15(1), 15–26. <https://doi.org/10.9744/jak.15.1.15-26>