

Strengthening Firm Performance Through Corporate Governance, Intellectual Capital and Financial Policy

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ABSTRACT

This study aims to examine the effect of corporate governance, intellectual capital and financial policy on firm performance conducted on 14 pharmaceutical companies listed on the Indonesian stock exchange. The data obtained was processed using warp pls software 7.0. The results of the study indicate that corporate governance has no significant positive effect on financial policy and firm performance. Meanwhile, intellectual capital has a negative and significant effect on financial policy and a significant positive effect on firm performance. Next, financial policy has a significant positive effect on firm performance.

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1. Introduction

Firm performance is defined as a measure of the success of firm management in achieving set goals, often referred to as good or indifferent management measures (Sefiani et al., 2018). Sanistasya et al., (2019) found that firm performance is the end result of business activity achieved by economic agents over a specific period of time. Measuring firm performance can be viewed from her two perspectives: financial and non-financial. From a financial perspective, a firm performance can be viewed in terms of profitability and can represent a firm's profits over a period of time (Sanistasya et al., 2019).

According to Sarafina & Saifi, (2017) in measuring the firm financial performance, it can be known through two sides, namely the firm internal side by looking at the financial statements and the firm external side, namely the firm value by calculating the firm financial performance. This includes the firm performance, especially from a financial perspective, so it is important to observe as a picture of the success of a firm. One of the interesting industries to observe and study in the midst of the Covid-19 outbreak is the pharmaceutical industry in Indonesia.

The chemical, pharmaceutical, and traditional medicine industries actually accelerated during the Covid-19 pandemic. The demand for medicines, especially vaccines and traditional medicines to maintain a healthy body during the pandemic, has made this industry actually reach its highest level in the last 9 years. The Central Statistics Agency (BPS) reports that the domestic product (GDP) of the chemical, pharmaceutical and traditional medicine sub-sectors at current prices (ADHB) will reach Rp. 339.18 trillion in 2021. This value accounts for 11.51% of the GDP of the national non-oil and gas processing industry. which reached Rp. 2.95 quadrillion. If measured by GDP at constant prices (ADHK) 2010, the chemical, pharmaceutical and traditional medicine industries grew 9.61% to Rp233.87 trillion last year compared to the previous year. The achievements of the chemical, pharmaceutical and traditional medicine sectors were better than the previous year which only grew

9.3%, and above the national GDP growth of 3.69%. This sector growth is the highest since 2013. The improvement in this achievement is in line with public consumption expenditure for health and education which also grew 1.7% last year.

Data on the value and GDP growth of the chemical, pharmaceutical and traditional medicine industries which have improved in the last 10 years do not go hand in hand with Indonesia's economic conditions during the Covid 19 pandemic. Companies listed on the Indonesia Stock Exchange, are not necessarily able to support the Indonesian economy during the Covid-19 pandemic. The Covid-19 pandemic has had a significant impact on the health, economy, and social structure, thus bringing challenges to the implementation of firm activities to be able to maintain sustainability. In any condition, the firm must still be able to improve the firm welfare and be able to improve the firm financial performance (Fahlevi et al., 2019; Juhandi et al., 2019). Several factors that affect the firm performance are financial policy, corporate governance and intellectual capital.

According to agency theory, to overcome the problem of misalignment of interests between agents and principals, one of them is through Good Corporate Governance or good firm management [6]. Shao, (2018) proves that corporate governance has a significant influence on firm performance. On the other hand, Saidat et al., (2019) stated that corporate governance has an insignificant effect on firm performance. Furthermore, in increasing competitiveness, companies must make changes to the way they do business. Business changes from business processes based on labor (labor-based business) to knowledge-based business. Companies that apply knowledge-based business are able to create a way of managing knowledge as a means to earn firm income. With the application of knowledge-based business, it is expected that the firm performance will increase.

The firm competitive ability is not only on ownership of tangible assets, but more on intangible assets on innovation, organizational management, skills and resources it has. One approach to the valuation of knowledge assets is intellectual capital (IC). Intellectual capital has become the focus of attention in various fields, both financial management, information technology, sociology and accounting [9]. Intellectual capital can be viewed as knowledge in the formation, intellectual property and experience that can be used to create wealth [10], [11]. Gómez-Valenzuela, (2022) proves that intellectual capital has a significant influence on firm performance.

The policies taken in a business with good governance and with the intellectual ability of its human resources to be able to carry out a combination of good financial policies. Optimal Financing Policy theory explains the importance of having an optimal funding policy so that companies do not experience financial problems due to too much debt [13]–[15]. Mohammed & Ani, (2020) show that financial policy has a significant effect on financial performance. On the other hand, [17] prove that financial policy has no significant effect on financial performance. Based on the phenomena and research results that have been described previously, this article will explain the importance of financial policy as a mediation between corporate governance and intellectual capital on firm performance in pharmaceutical companies listed on the Indonesia Stock Exchange.

2. Method

This study uses a descriptive research approach with quantitative research. In accordance with the research objectives, this research approach is explorative descriptive, namely research by conducting and providing a description of the symptoms and phenomena that occur in the field (Creswell & Creswell, 2017). However, this research is also directed at explaining the effect between variables (explanatory) by conducting a hypothesis test. The unit of analysis of this study is a pharmaceutical firm listed on the Indonesia Stock Exchange. The population is a generalization area consisting of objects/subjects that have certain qualities and characteristics set by the researcher to be studied and then draw conclusions (Creswell & Creswell, 2017). The population in this study were 23 pharmaceutical companies listed on the Indonesia Stock Exchange.

The determination of the sample in this study was based on the non-probability sampling method with purposive sampling technique, namely the sample was selected with the following considerations or criteria: (1) Health Sector Companies listed on the Indonesia Stock Exchange in 2017-2021; (2) The firm publishes annual reports and financial reports for 5 consecutive years in rupiah currency; (3) The firm has complete data related to the variables used in the study. Based on

these criteria, 14 companies were obtained that were appropriate to be the research sample. The secondary data obtained was processed using PLS software developed at the University of Hamburg Germany which was named Warp PLS 7.0. The concept model of this research can be seen in Figure 1 below:

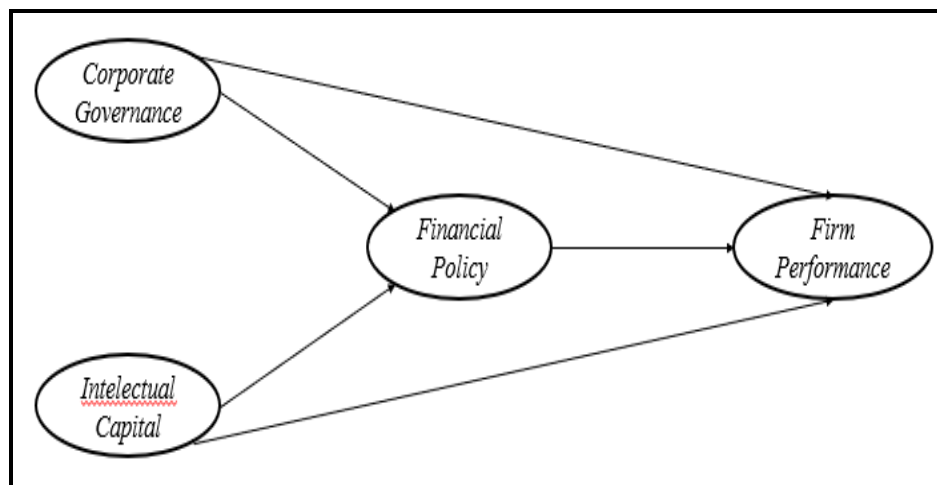


Fig. 1. Research Concept Model

3. Results and Discussion

This study will show the results of PLS warp data processing in the form of outer and inner models. Where the inner model is to see the validity of the indicators for each variable and the inner model is to see the results of the research hypothesis testing. Testing the validity of formative variable indicators can be seen from the weight estimate and Indicator Variance Inflation Factor (VIF). In the weight estimate test, the indicator is declared valid if it has a P Value <0.05. This can be seen in the following table of weight estimate test results:

Table 1. Test Results of weight estimate

Variable	Indicator	Formative	SE	P value
<i>Corporate Governance</i>	<i>Board Size</i>	0.528	0.101	<0.001
	<i>Ownership Concentration</i>	0.211	0.112	0.031
	<i>Outside Directors</i>	0.544	0.100	<0.001
<i>Intellectual Capital</i>	<i>Inside and outside capital</i>	1.000	0.086	<0.001
<i>Financial Policy</i>	<i>NUBE</i>	-0.434	0.104	<0.001
	<i>NPUE</i>	-0.356	0.106	<0.001
	<i>DPR</i>	0.487	0.102	<0.001
	<i>DPS</i>	0.331	0.107	0.001
	<i>MBE</i>	-0.008	0.119	0.472
<i>Firm Performance</i>	<i>ROA</i>	0.512	0.101	<0.001
	<i>ROE</i>	0.512	0.101	<0.001

^a. Source: Data Processed by Researchers, 2022.

Based on the table above, it can be seen that all indicators of this research, namely Corporate Governance (CG), Intellectual Capital (IC), and Firm Performance (FPer) variables produce P value < 0.001, with probability < alpha (5%). Thus, all of these indicators are declared valid to measure the variables of Corporate Governance (CG), Intellectual Capital (IC), and Firm Performance (FPer). While the indicator in the Financial Policy (FP) variable, there is one indicator that produces a P value of 0.472 meaning probability < alpha (5%), namely the MBE indicator, meaning that the indicator is not valid. Meanwhile, the four indicators in the Financial Policy (FP) variable produce a P value < 0.001, meaning probability < alpha (5%). Thus, all of these indicators are declared valid in measuring the Financial Policy (FP) variable.

Meanwhile, in the Indicator Variance Inflation Factor (VIF) test, the indicator is declared valid if it has a VIF smaller than 10. This can be seen in the following table of the Indicator Variance Inflation Factor (VIF) test results:

Table 2. Test Results of the Variance Inflation Factor (VIF) Indicator

Variable	Indicator	Formative	SE	VIF
Corporate Governance	<i>Board Size</i>	0.528	0.101	1.474
	<i>Ownership Concentration</i>	0.211	0.112	1.029
	<i>Outside Directors</i>	0.544	0.100	1.507
Intellectual Capital	<i>Inside and outside capital</i>	1.000	0.086	0.000
Financial Policy	NUBE	-0.434	0.104	1.113
	NPUE	-0.356	0.106	1.049
	DPR	0.487	0.102	1.149
	DPS	0.331	0.107	1.040
	MBE	-0.008	0.119	1.013
Firm Performance	ROA	0.512	0.101	5.710
	ROE	0.512	0.101	5.710

^b. Source: Data Processed by Researchers, 2022.

Based on the table above, it can be seen that all indicators on the variables of Corporate Governance (CG), Intellectual Capital (IC), Financial Policy (FP) and Firm Performance (FPer) produce a smaller VIF value of 10. This indicates that there is no multicollinearity between indicators, which measures Corporate Governance (CG), Intellectual Capital (IC), Financial Policy (FP) and Firm Performance (FPer).

Goodness of fit Model is used to determine the ability of exogenous variables to explain the diversity of endogenous variables, or in other words to determine the magnitude of the contribution of exogenous variables to endogenous variables. Goodness of fit Model in PLS analysis is carried out using the coefficient of determination (R-Square) and Q-Square predictive relevance (Q²). The results of the Goodness of fit Model that have been summarized in the following table:

Table 3. Results of Goodness of Fit Model

NO	Endogen	R Squared	Q Squared
1	Financial Policy	0.120	0.159
2	Firm Performance	0.249	0.261

^c. Source: Data Processed by Researchers, 2022.

The R-square of the Financial Policy variable is 0.120 or 12%. This can indicate that the Financial Policy variable can be explained by the Corporate Governance and Intellectual Capital variables of 12%, or in other words the contribution of the Corporate Governance and Intellectual Capital variables to the Financial Policy variable is 12%, while the remaining 88% is the contribution of other factors that not discussed in this study. Then the Q-square of the Financial Policy variable is 0.159. This shows that the Corporate Governance and Intellectual Capital variables have a fairly strong predictive power on the Financial Policy variable.

The R-square of the Firm Performance variable is 0.249 or 24.9%. This can indicate that the Firm Performance variable can be explained by the Corporate Governance, Intellectual Capital, and Financial Policy variables of 24.9%, or in other words the contribution of the Corporate Governance, Intellectual Capital, and Financial Policy variables to the Firm Performance variable is 24.9%, while the rest of 75.1% is the contribution of other factors that are not discussed in this study. Then the Q-Square Firm Performance variable is worth 0.261. This shows that the Corporate Governance, Intellectual Capital, and Financial Policy variables have a fairly strong predictive power on the Firm Performance variable.

The results of testing the direct effect hypothesis are used to test whether there is a direct effect of exogenous variables on endogenous variables. The test criteria state that if the p-value level of significance ($\alpha = 5\%$) then it is stated that there is a significant effect of exogenous variables on endogenous variables. The results of hypothesis testing can be seen through table 4 below:

Table 4. Results of Direct Effect Hypothesis Testing

Eksogen	Endogen	Path Coefficient	SE	P-value
Corporate Governance	Firm Performance	0,002	0.119	0.493
Corporate Governance	Financial Policy	0,112	0.115	0.167
Intellectual Capital	Financial Policy	-0,321	0.108	0.002
Intellectual Capital	Firm Performance	0,250	0.110	0.013
Financial Policy	Firm Performance	0,419	0.104	<0.001

^d. Source: Data Processed by Researchers, 2022.

Based on the tests listed in table 4, it can be seen as follows:

1. The influence of Corporate Governance on Firm Performance produces a p-value of 0.493. The test results show that the p-value > level of significance (alpha = 5%). This means that there is an insignificant effect of Corporate Governance on Firm Performance.
2. The influence of Corporate Governance on Financial Policy produces a p-value of 0.167. The test results show that the p-value > level of significance (alpha = 5%). This means that there is a significant influence of Corporate Governance on Financial Policy.
3. The influence of Intellectual Capital on Financial Policy produces a p-value of 0.002. The test results show that the p-value < level of significance (alpha = 5%). This means that there is a significant influence of Intellectual Capital on Financial Policy.
4. The influence of Intellectual Capital on Firm Performance produces a p-value of 0.013. The test results show that the p-value < level of significance (alpha = 5%). This means that there is a significant influence of Intellectual Capital on Firm Performance.
5. The influence of Financial Policy on Firm Performance produces a p-value of <0.001. The test results show that the p-value < level of significance (alpha = 5%). This means that there is a significant influence of Financial Policy on Firm Performance Behavior.

While the results of the indirect effect are obtained that the influence of Corporate Governance on Firm Performance through Financial Policy produces a p-value of 0.248. The test results show that the p-value > level of significance (alpha = 5%). This means that there is an insignificant effect of Corporate Governance on Firm Performance through Financial Policy. Meanwhile, the influence of Intellectual Capital on Firm Performance through Financial Policy resulted in a p-value of 0.020. The test results show that the p-value < level of significance (alpha = 5%). This means that there is a significant influence of Corporate Governance on Firm Performance through Financial Policy.

The path diagram conversion in the structural model is intended to predict how the influence of exogenous variables on endogenous variables. It is known that the structural model formed is:

$$\text{Equation 1: FP} = 0.112 \text{ CG} - 0.321 \text{ IT}$$

Based on these equations, it can be informed that:

- 1) The coefficient of Direct Effect of Corporate Governance on Financial Policy is 0.112 which states that Corporate Governance has a positive and insignificant effect on Financial Policy. This means that the higher the Corporate Governance, the more likely it is to improve Financial Policy, although the increase is not significant.
- 2) The Intellectual Capital Direct Effect Coefficient on Financial Policy is -0.321 stating that Intellectual Capital has a negative and significant effect on Financial Policy. This means that the higher the Intellectual Capital, the more likely it is to be able to significantly reduce Financial Policy.

$$\text{Equation 2: FPer} = 0.002 \text{ CG} + 0.250 \text{ IT} + 0.419 \text{ FP}$$

Based on these equations, it can be informed that:

- 1) The coefficient of Direct Effect of Corporate Governance on Firm Performance is 0.002. states that Corporate Governance has a positive and insignificant effect on Firm Performance. This means that the higher the Corporate Governance, the more likely it is to increase Firm Performance, although the increase is not significant.
- 2) The Direct Effect Intellectual Capital coefficient on Firm Performance is 0.250 which states that Intellectual Capital has a positive and significant effect on Firm Performance. This means that the higher the Intellectual Capital, it tends to significantly increase Firm Performance.

- 3) The coefficient of Direct Effect Financial Policy on Firm Performance is 0.419 which states that Financial Policy has a positive and significant effect on Firm Performance. This means that the higher the Financial Policy, the more likely it is to be able to significantly increase Firm Performance.
- 4) The Indirect Effect Coefficient of Corporate Governance on Firm Performance through Financial Policy of 0.047 states that Corporate Governance has a positive and insignificant effect on Firm Performance through Financial Policy. This means that the higher the Corporate Governance caused by the strong Financial Policy, the more likely it is to be able to increase Firm Performance, although the increase is not significant.
- 5) The Indirect Effect Coefficient of Intellectual Capital on Firm Performance through Financial Policy is -0.134 stating that Intellectual Capital has a negative and significant effect on Firm Performance through Financial Policy. This means that the higher the Intellectual Capital caused by the strong Financial Policy, it tends to significantly reduce Firm Performance.

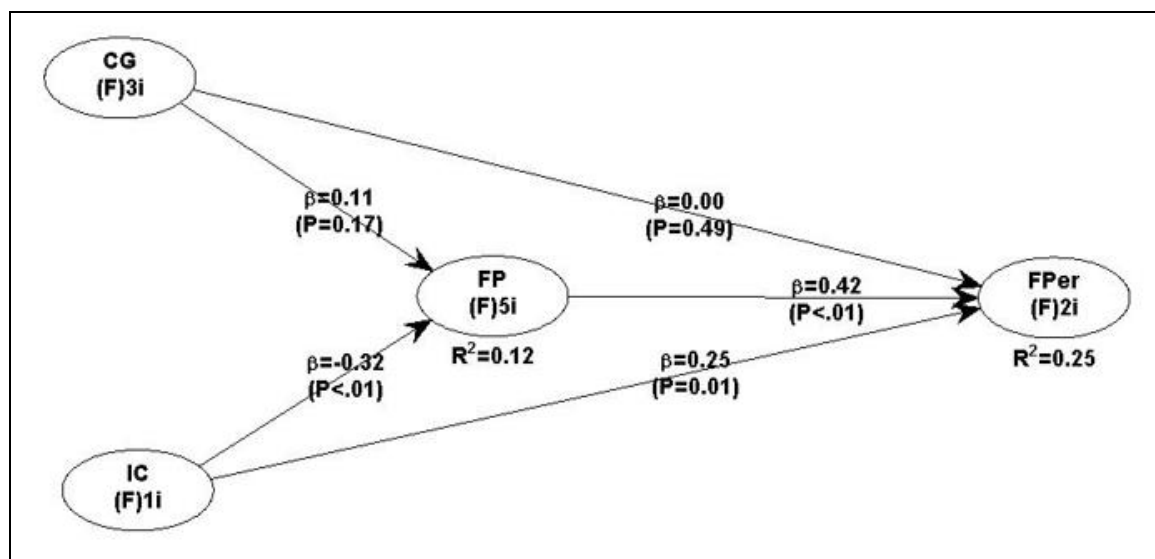


Fig. 2. research model

^e. Source: Data Processed by Researchers, 2022.

Discussion

The impact of Corporate Governance on Firm Performance.

Based on the results of data processing using Warp-PLS, the coefficient of direct effect of Corporate Governance on Firm Performance is 0.002 which indicates that Corporate Governance has a positive and insignificant effect on Firm Performance, thus the first hypothesis is not accepted. This means that the higher the Corporate Governance, the more likely it is to increase Firm Performance, although the increase is not significant. This means that agents in the companies that are the research sample are only limited to doing routines to improve firm performance, so it is expected that the performance of board size and outside directors needs to be more proactive in improving firm performance.

This is in line with previous research, namely Buallay et al., (2017) which states that there is an insignificant effect on the implementation of Corporate Governance on Firm Performance. While the results of this study are different from the findings of Ooi et al., (2022); Outa & Waweru, (2016); Reddy et al., (2010); and Saidat et al., (2019) which states that corporate governance has a positive and significant effect on firm performance.

This result is supported by the Agency Theory which explains that the principal recruit agents to make operational/day-to-day decisions in the firm. But over time there is a conflict of interest (agency problem) between the agent and the principal (Bhagat & Bolton, 2019). So related to these results, the theory and previous research show that the implementation of Corporate Governance is

able to improve Firm Performance, although the increase is not significant in the sample companies studied.

The impact of Corporate Governance on Financial Policy

Based on the results of data processing using Warp-PLS, the direct effect coefficient of Corporate Governance on Financial Policy is 0.112 which states that Corporate Governance has a positive and insignificant effect on Financial Policy. This means that the higher the Corporate Governance, the more likely it is to be able to improve Financial Policy, although the increase is not significant. These results indicate that the performance of board size, ownership and outside directors need to direct agents in making better financial policies.

As Agency Theory explains that shareholders recruit agents to make operational/day-to-day decisions in the firm, including in formulating policies that benefit the firm and the principle (Bhagat & Bolton, 2019). But this result is not in line with the research that has been done previously with the results showing that the Corporate Governance mechanism has a significant positive effect on financial performance conducted by Soewarno (2018).

The impact of Intellectual Capital on Firm Performance.

The results of data processing related to Intellectual Capital on Firm Performance show a Direct Effect Coefficient of 0.250 stating that Intellectual Capital has a positive and significant effect on Firm Performance. This means that the higher the Intellectual Capital, it tends to significantly increase Firm Performance. These results are in line with previous research conducted by Sami et al., (2011); Xu & Wang, (2018) that Intellectual Capital is positively related to the firm operational performance and the firm financial performance.

This result is also in accordance with the Signaling Theory where Intellectual Capital Disclosure is the disclosure or reporting of the firm intellectual capital which is a signal that the firm has high performance and a good future so that Intellectual Capital Disclosure has the potential to have an influence on Firm Performance (Brusca et al., 2019). Based on the results of data processing shows that the disclosure of Intellectual Capital Disclosure will significantly improve the firm financial performance in accordance with Holienka & Pilková, (2017); Molodchik et al., (2019); Smriti & Das, (2018); Xu & Li, (2019) confirm that there is a positive and significant relationship between the efficiency of Intellectual Capital and the firm financial performance. These results provide information that investors value companies that have better Intellectual Capital efficiency.

The impact of Intellectual Capital on Financial Policy.

The results of data processing related to Intellectual Capital on Financial Policy show that the Intellectual Capital Direct Effect Coefficient on Financial Policy is -0.321 stating that Intellectual Capital has a negative and significant effect on Financial Policy. This means that the higher the Intellectual Capital, the more likely it is to be able to significantly reduce Financial Policy. This proves that the intellectual capital of the companies that are the sample of this study tend to issue financial policies that are less precise.

The results of this study are in line with Alves & Martins, (2014) which state that intellectual capital has a significant negative effect on financial policy, especially debt and dividend payment policies. While this research is not in line with previous research conducted by (Mohammed & Al Ani, 2020; Xu & Wang, 2018). The results of his research indicate that Intellectual Capital has a positive effect on financial performance. The results of this analysis also show that with Intellectual Capital Disclosure where intellectual capital is generally intangible which is becoming widely accepted as the firm main strategic asset and is able to generate sustainable competitive advantages and superior financial performance (Barney, 1991).

The results of this study which show that it is inconsistent with signaling theory which states that companies that have high quality generally pay higher dividends give a positive signal to investors. Therefore, intellectual capital is needed that is able to formulate financial policies that are able to benefit the firm and investors. The results of the study indicate that the application of Intellectual Capital tends to reduce financial policy so that further research is needed to examine further the variables and research samples used.

The impact of Financial Policy on Firm Performance.

The coefficient of Direct Effect of Financial Policy data processing on Firm Performance is 0.419 which states that Financial Policy has a positive and significant effect on Firm Performance. This means that the higher the Financial Policy, the more likely it is to be able to significantly increase Firm Performance. The results of this analysis are in line with Santos et al.,(2022) proving that financial policy has a positive and significant effect on firm performance.

In addition, the results of this analysis are also in line with the Optimal Financing Policy or Optimal Capital Structure which explains that optimal funding policies are able to prevent companies from experiencing financial problems due to too much debt increasing firm performance (Modigliani & Miller, 1958, 1963; Myers, 1977b). So that the implementation of Financial Policy can significantly improve Firm Performance. In relation to previous research, in this hypothesis not many studies have been carried out so that the results of this hypothesis analysis become findings that can be used for further research or as a basis for decision making.

4. Conclusion

Based on the results of this study, it is clear that a company's corporate governance can increase financial policy and firm performance, albeit not significantly. Intellectual capital can significantly enhance firm performance, while Intellectual capital can decrease financial policy significantly. Financial policy can significantly boost firm performance. This indicates that better levels of corporate governance and intellectual capital can result in an improvement in the quality of financial policy, which ultimately noticeably enhances company performance. Moreover, the company's performance greatly benefits from the presence of Financial Policy. In other words, there's a likelihood that certain Financial Policies will enhance Company Performance and succeed as an intervening variable.

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