

Good Corporate Governance in Mediating the Effects of Intellectual Capital and CSR on Company Performance: Empirical on BUMN in Indonesia

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Abstract

Finance is a vital aspect for companies, especially State-Owned Enterprise (BUMN). In Indonesia, the trend of financial markets determines the company's profit. It oriented this study to get empirical evidence about the effect between intellectual capital and corporate social responsibility (CSR) on company performance, where the relationship is determined by good corporate governance (GCG) which acts as a moderator for BUMN companies. The sample includes 13 state-owned companies listed on the Indonesia Stock Exchange (IDX) through a purposive sampling stage. Interpreting the data using the model is the SEM structural equation method (SEM) for the period 2012-2020. The statistical software is supported by SmartPLS. The results of the analysis conclude that intellectual capital and CSR have a significant effect on company performance. Then, GCG has no significant effect on the relationship between intellectual capital and company performance. Interestingly, GCG also does not significantly moderate the relationship between CSR and company performance. The limitations of the study need to be discussed.

Keywords: Company Performance, Intellectual Capital, CSR, GCG, BUMN, Indonesia

JEL Classification: L25, J11, M14, G34, O43

How to cite:

Salviantono, B., Paminto, A., & Ulfah, Y. (2022). Good Corporate Governance in Mediating the Effects of Intellectual Capital and CSR on Company Performance: Empirical on BUMN in Indonesia. *International Journal of Finance Research*, 3(1). 63 – 83. DOI: <https://doi.org/10.47747/ijfr.v3i1.683>

1. Introduction

1.1 Background

Company performance is a measure that reflects the condition of the company based on an evaluation of existing standards and criteria (Bin Yusoff, Zainol, Ismail, Kasuma & Darma, 2021). The criteria and standards for measuring company performance (CP) are usually related to the ratio of profit and market-based performance (Azis, Ilmi, Hakim, Qodri & Darma, 2021). This can be understood because performing a company is good if the company has a high level of profit. CP is also said to be good if they project it to earn profits in the future, because it is related to business continuity. According to the publication by Yu (2013), the ratios that are widely used to calculate the level of company profitability are Return on

Assets (ROA) and Return on Equity (ROE). The company's performance is also said to be good if it is projected to earn profits in the future, because it is related to business continuity. According to research by Inoue & Lee (2011) and McConnell & Servaes (1990), market-based performance is proxies by the value of Tobin's Q.

Increasing the performance and existence of the company depends not only on the company's tangible assets but also comes from other things that are no less important, namely intellectual capital or intellectual capital (IC), which is an intangible asset. A good IC will manage and optimize tangible assets for the company's performance and existence in the new economic era, namely the knowledge-based economy. The most popular model in measuring intellectual capital was proposed by Pulic (1998) with the concept of Value Added Intellectual Coefficient (VAICTM). The proxies for the VAICTM model are Value Added Capital Employed (VACE), Value Added Human Capital (VAHC) and Structural Capital Value Added (SCVA).

BUMN is aware of the importance of IC, as can be seen from the selection of BUMN as a finalist for the Indonesian Most Admired Knowledge Enterprise (MAKE) Study Award. This means that it has recognized the company for managing knowledge in its organization so that it has a beneficial effect on the company's performance and results. PT Bukit Asam (PTBA) is one of the BUMNs that has consistently been a finalist for the MAKE Study Award for the 2018-2020 period. This indicates that PTBA has been recognized to manage knowledge well in the organization so that it will increase CP. When IC increased (proxies by VAHC) in PTBA, in fact, CP did not follow it (proxies by ROA & ROE), as shown in *Fig. 1*.

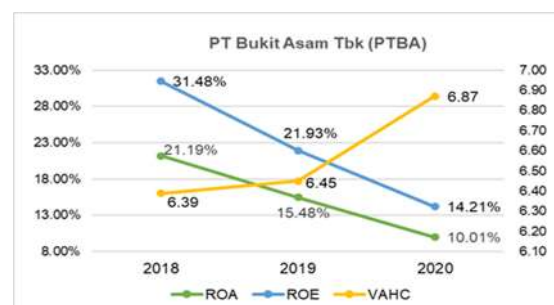


Figure 1. Graph of ROA, ROE and VAHC at PTBA (2018-2020)

Source: The IDX (2021).

Besides contradicting the theory of IC effects on CP, *Fig. 1* also contradicts observations by Maheran & Ismail (2009), Sutanto & Siswantaya (2014), Bontis (1998), and Chen, Bontis, Wu, Cheng & Hwang (2005) which states a significant and positive relationship between IC and CP. But on the other hand, it is relevant to studies by Firer & Williams (2003), Santosa (2012), Boekestein (2012) and Ramdani, Enas & Darna (2019) which confirms that there is no significant relationship between IC and CP.

The obligation to allocate a minimum of 2% of profits for CSR costs by BUMN companies can be found in Law No.19 of 2003 concerning BUMN. With the implementation of CSR, the company will gain social legitimacy to ensure the company's sustainability. Optimal implementation of CSR can affect the company's image and will ultimately have an impact on CP as a whole because the company's products are well known by consumers so that their

loyalty will also increase. This study identifies CSR through proxies that are adjusted to indicators of CSR disclosure according to the GRI Index (2020), namely economic (economic-ECO), environmental (environment-ENV) and social (social-SOC) indicators.

The importance of CSR is realized by BUMN, as can be seen from the selection of BUMN as finalists for the TOP CSR Award. This award is an activity of assessing and giving the highest award to companies that are considered to have carried out the best CSR programs. PT Perusahaan Gas Negara (PGAS) is one of the BUMNs that has consistently been a finalist for the TOP CSR Award for the 2018-2020 period. This indicates that PGAS has implemented CSR well so that it will increase CP. However, the increased implementation of CSR (proxied by CSR on the economic dimension) in PGAS was not followed by CP (proxied by ROA & ROE).

Besides contradicting the theory of CSR effects on CP, where *Fig. 2* clarifies that there are things that are contrary to the publications of Bai & Chang (2015), Nugroho & Rahardjo (2014), and Ariantini, Yuniarta & Sujana (2017) which states a significant and positive relationship between CSR and CP. In contrast, Alexander & Buchholz (1978), Kusuma & Aryani (2020), and Hackston & Milne (1996) revealed an otherwise significant relationship between CSR and CP.

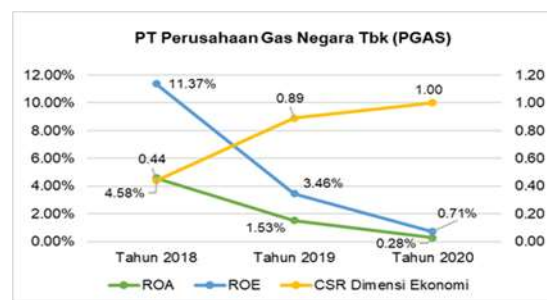


Figure 2. Graph of ROA, ROE and CSR on PGAS (2018-2020)

Source: The IDX (2021).

In the past, it used BUMN as “cash cows” for high-ranking government officials, political parties and their cronies. However, in practice, the government firmly positions BUMN as a business entity that must be managed based on GCG to generate profits and provide maximum contribution to the national economy. GCG exists as a solution to the problem of differences in interests between shareholders (principals) and management (agents) which is called the agency problem (Jensen & Meckling, 1976). Good GCG will increase the accuracy of CP presentation by management. This study uses 3 (three) internal mechanisms as GCG proxies, namely the proportion of the Independent Commissioners (INDP), the size of the board of directors (BOARD) and the number of meetings of the board of commissioners (MEET). This internal mechanism will ensure that the company follows the existing GCG.

Based on the description above, we can see that GCG has a significant effect on CP. However, previous research discovered inconsistent results. Where INDP has no effect on CP. Studies by Koerniadi & Tourani-Rad (2012), Syed, Rashid & Syed (2014), and Belkhir (2009) explain that MEET has no effect on CP (e.g. Zahra, Pratomo & Dillak, 2016; Hermawan, 2011;

Mardiyati, 2016) and BOARD has no effect on CP (e.g. Romano, Ferretti & Rigolini, 2012; Syed, Rashid & Syed, 2014). This gap is the reason for placing GCG as a moderating variable in the relationship between IC and CSR towards CP. This is under the opinion of Rahadi & Farid (2021), where a moderating variable can be introduced when there is an unexpectedly inconsistent relationship between the independent variable and the results across research studies.

Another reason for choosing GCG as a moderator variable in the relationship between IC and CSR to CP is because previous researchers often use the GCG variable as a moderator variable. However, there have been gaps. This is under the opinion of Rahadi & Farid (2021), where the choice of moderator must be based theoretically and inconsistent findings in previous studies regarding the use of the effect of the same moderating variable. The theory of using GCG as a moderator variable and we will explain the gap as follows. Holland's research (2001), reports that management's compliance with GCG principles will influence the quality of IC, especially human capital. This is because the principles of GCG will direct the company's personnel to run the company with accountability, transparency and integrity. Then this increase in Intellectual Capital will lead to an increase in CP. Companies that implement GCG will find it easier to implement CSR, because both activities are based on the same understanding. GCG concerns the company's responsibility to other interested parties, especially for economic activities and all their effects, while it held CSR to increase the level of community welfare outside of the company's major activities. These two activities will go hand in hand to ensure the sustainability of the company. Effective, transparent and accountable CSR can only be implemented if the company has implemented GCG properly.

BUMN is aware of the importance of GCG, as can be seen from the selection of BUMN as a finalist for the Annual Report Award. This award is an event to give awards to companies for their achievements in implementing GCG. PT Bank BNI (BBNI) is one of the BUMNs that has consistently been a finalist for the 2017-2019 Annual Report Award. This shows that BBNI has implemented GCG well so that it will increase CP through CSR and IC. Implementing increased GCG (proxies by the Board of Commissioners' Meeting) at BBNI increased CSR (proxies by Social Dimensions) and IC (proxies by VACE), but not followed by CP (proxies by ROA).



Figure 3. Graph of ROA, ROE, commissioner meetings, and CSR at BBNI (2018-2020)

Source: The IDX (2021).

Besides contradicting the theory of the effect of GCG on the relationship between IC and CP, the picture also contradicts the results of Hamdan, Buallay & Alareeni (2017) and Wu, Lee &

Wang (2012), which states that GCG significantly moderates (strengthens) the relationship between IC and CP. However, in line with the research results of Hermanto, Lusy & Widyastuti (2021), who found that GCG could not moderate the relationship between IC and CP.

From Fig. 3, we also drawn conclusions which contradict the results of the research by Javeed & Lefen (2019) which states that GCG significantly moderates positively (strengthens) the relationship between CSR and CP. However, in line with the research results of Karim, Manab & Ismail (2020) and Selcuk (2019), which state that GCG does not affect CSR's relationship with CP.

1.2 Problem Statements and Purpose

According to Law No. 19 of 2003 concerning State-Owned Enterprise (BUMN), the companies included in it are not ordinary economic entities. The goal of BUMN is not only to pursue high performance to contribute to the state budget but also to be established intending to be an economic locomotive, agent of development, organizing public benefits, and actively taking part in providing direct help to the community's economy (Sumantyo & Nugrahani, 2017). To carry out this function, enormous assets support BUMN. In 2020, it recorded the total assets of BUMN at Rp. 9100 trillion, with an average growth of 9% over the last 5 years. Ironically, the size of this BUMN's total assets does not guarantee that BUMN companies will get excellent performance either. Based on the Central Government Financial Report (LCPP) during 2017-2020, the number of state-owned enterprises that lost money has increased. If calculated from 2017, the number of state-owned enterprises that suffer losses increases by an average of 18% per year with an average increase in loss of Rp. 6.53 trillion per year.

There are indications of the trend of BUMN performance that are not in line with expectations, causing the existence of BUMN to be worrying (Azis, Hadjaat, Rositawati & Darma, 2020). In fact, the existence of BUMN is very important and has become one of the key entities in the national economic system, so that increasing company performance and the existence of this BUMN company are very important to maintain.

The aim of this study is to investigate the effect of intellectual capital and CSR on performing state-owned companies in Indonesia through the role of GCG. We summarize the research framework into an introduction, literature review, method, findings, discussion, and conclusions.

2. Literature Review

2.1 Stakeholder Theory

In its implementation, stakeholder is a theory that describes which party (especially in the company) is responsible (Freeman & McVea, 2001). This theory states that the company is not an entity that only operates for its own sake, but must provide benefits to all its stakeholders (shareholders, creditors, consumers, suppliers, government, society, analysts, and other parties). This stakeholder theory is also the justification for actualization of CSR by companies, where they need support from their stakeholders, not only for the sake of the company's current performance, but also for the existence of the company.

2.2 Legitimacy Theory

O'Donovan (2002) illustrates that legitimacy theory is because in order to continue to operate successfully, companies must act within the limits of what society identifies as socially acceptable behavior. This theory has also become the basis for implementing CSR by companies, where strong legitimacy will emerge when the management of the company is carried out with an orientation towards community support.

2.3 Resource Based Theory

Wernerfelt's (1984) explanation reveals that, according to resource-based theory, companies will excel in business competition and get outstanding performance by owning, controlling, and using important strategic assets (tangible and intangible assets). Then Bontis (1998) stated that IC has been identified as a set of intangibles (resources, capabilities and competencies) that drive organizational performance and value creation. The existence of intellectual capital based on this theory also contributes to the increase in CP.

2.4 Agency Theory

According to Jensen & Meckling (1976), agency theory talks about a contract where the "principal" hires the "agent" to contribute to their interests by giving some decision-making authority to the agent. In their research, Jensen & Smith (1985) stated that the conflict of interest between the principal (owner/shareholder) and agent (management) causes agency problems.

The GCG mechanism is believed to minimize the possibility of agency problems that will occur. Similarity of interests or harmony will arise when there is transparency between company owners and management and fairness to other stakeholders, where this will be guaranteed towards GCG principles.

2.5 Company Performance

In the industrial context, performance is a reference process and a measure to measure the efficiency of actions and effectiveness in the company (Neely, Gregory & Platts, 2005). With the concept of performance, companies can measure the results that have been achieved through corporate governance in various aspects. In their research, Inoue & Lee (2011) stated that there are two dimensions of CP, namely the dimension of short-term profitability and the dimension of market evaluation related to future profitability. The dimension of short-term profitability is proxied by the ratio of Return on Assets (ROA) and Return on Equity (ROE). Meanwhile, the market dimension is proxied by the value of Tobin's Q (Brigham & Houston, 2009: 96). The formulas for ROA, ROE, and Tobin's Q are:

$$ROA = \text{net income} / \text{total assets} \quad (1)$$

$$ROE = \text{net profit} / \text{capital} \quad (2)$$

$$MVA = (MVE + BVA) - BE \quad (3)$$

$$\text{Tobin's } Q = MVA / BE \quad (4)$$

Where: MVA = Market Value of Assets, MVE = market capitalization (number of shares x share price), BVA = total assets, and BE = capital.

2.6 Intellectual Capital

Stewart (2010) defines intellectual capital as intellectual material, namely knowledge, information, intellectual property, experience that is used to create prosperity. We calculate intellectual Capital according to the model used by Pulic (1998), namely the Value Added Intellectual Coefficient (VAICTM). Concretely, VAICTM measures intellectual capital with three separate indicators, namely Value Added Human Capital (VAHC), Value Added Capital Employed (VACE), and Structural Capital Value Added (SCVA). Ulu (2009) assumes the following calculations on VAHC, VACE, and SCVA:

$$VAHC = VA / HC \quad (5)$$

$$VACE = VA / CE \quad (6)$$

$$SCVA = SC / VA \quad (7)$$

Where: VA = OUT – IN, OUT = Total sales and other income, IN = Other expenses and expenses (except Employee Expenses), HC = Employee expenses, CE = Available funds (equity, net income), and SC = VA – HC.

2.7 The CSR

Dahlsrud (2008) termed Corporate Social Responsibility (CSR) as a concept in which the company integrates social and environmental concerns in the company's operations and the company's interactions with stakeholders in their daily life. In addition, they can also interpret CSR as an action taken by a company to meet the demands of society, and of course, the company takes this action to achieve company goals (Moir, 2001). CSR is proxies based on the 2020 version of the Global Report Initiative (GRI), comprising three dimensions, namely the economic dimension (ECO), the environmental dimension (ENV) and the social dimension (SOC). The formula for measuring CSR in economic, social, and environmental dimensions, according to Shobirin (2012) is:

$$CSR_{Dimensions} = X_{Dimension} / n_{Dimension} \quad (8)$$

Where: X_{dimensions} = ECO/SOC/ENV dimension items disclosed, and n_{Dimensions} = Total item dimensions Economic (9 aspects), Social (40 aspects), Environmental (30 aspects).

2.8 The GCG

The earliest definition of Good Corporate Governance emerged from the Cadbury Committee, where GCG is mentioned as a set of rules governing the relationship between shareholders, managers, creditors, government, employees, and other interested parties both internally and externally related their rights and obligations (Cadbury, 1992). Meanwhile, according to Brigham & Erhardt (2014), corporate governance is defined as a set of rules and procedures that guarantee managers to apply the principles of value-based management.

Internal control tools are needed to ensure the company follows the existing set of GCG rules, which is called the internal GCG mechanism. The internal GCG mechanism used in this study

comprises the size of the Board of Directors, Independent Commissioners, and Board of Commissioners Meetings. Beiner, Drobetz & Schmid (2004) measure the performance of the board of directors:

$$BOARD = \text{Number of Company's Board of Directors} \quad (9)$$

Meanwhile, the Independent Commissioners and the number of Board of Directors meetings are reviewed with the following formula (El-Charaani, 2014; Hermawan, 2011):

$$INDP = \text{Independent Commissioners} / \text{Commissioners} \times 100\% \quad (10)$$

$$MEET = \text{Board of Commissioners Meetings} \quad (11)$$

2.9 Hypothesis Development

With optimal IC, companies will use company resources efficiently, economically and effectively, therefore intellectual capital will contribute to CP (Harrison & Sullivan, 2000). Studies by Maheran & Ismail (2009), Sutanto & Siswantaya (2014), Bontis (1998), and Chen, Bontis, Wu, Cheng & Hwang (2005) illustrates that IC has a significant and positive effect on CP. Responding to this, Firer & Williams (2003), Santosa (2012), Boekestein (2012) and Ramdani, Enas & Darna (2019) presented that there was no significant correlation between IC and CP. The first hypothesis is formulated as follows:

H1: The increase in IC has a significant effect on CP.

Through the maximum implementation of CSR, the company will get a stake in the stakeholders, not only for outstanding performance but also for the company's sustainability. With CSR, companies will try to gain social legitimacy because CP requires good social performance to ensure the company's sustainability. In addition, optimal CSR can affect the company's image and in the end will affect overall CP consumers well known because of the company's products, so that their loyalty will increase. This applies to the studies of Bai & Chang (2015), Nugroho & Rahardjo (2014), and Ariantini, Yuniarta & Sujana (2017). On the one hand, this is in contrast to studies by Alexander & Buchholz (1978), Kusuma & Aryani (2020), and Hackston & Milne (1996). Where the researchers stated that there was no significant correlation between CSR and CP. It is logical to design the following second hypothesis:

H2: The increase in CSR has a significant effect on CP.

Holland (2001) reports that the quality of IC, especially human capital, will be influenced by management's compliance with GCG principles. This is because the principles of GCG will direct the company's personnel to run the company with accountability, transparency and integrity. Then this increase in Intellectual Capital will lead to an increase in CP. As is well known, a recent study by Hamdan, Buallay & Alareeni (2017) and Wu, Lee & Wang (2012) found that GCG significantly moderated (reinforced) the relationship between IC and CP. However, contrary to the research of Hermanto, Lusy & Widyastuti (2021) who found that GCG could not moderate the relationship between IC and CP. Furthermore, it makes sense to conceptualize the following hypothesis:

H3: The increase in GCG strengthens the relationship between IC and CP.

Companies that practice GCG will find it easier to implement CSR, because both activities are based on the same understanding. The GCG concerns the company's responsibility to other interested parties, especially for economic activities and all their affects, while it held CSR to increase the level of community welfare outside of the company's principal activities. These two activities will go hand in hand to ensure the sustainability of the company. Effective, transparent, and accountable CSR can only be implemented if the company has implemented GCG properly (Javeed & Lefen, 2019). Karim, Manab & Ismail (2020) and Selcuk (2019), actually conclude that GCG does not affect the relationship between CSR and CP. The inspiration for the fourth hypothesis is as follows:

H4: The increase in GCG strengthens the relationship between CSR and CP.

2.10 Conceptual Framework

Fig. 4 displays the framework of the study referring to a theoretical review and an empirical review of the relationship between variables. The suitability of the causative model focuses on four hypotheses, where IC and CSR reflect CP. Then, GCG will be calculated how big its effect is in moderating the relationship between CSR and IC on CP. The symbol “X” is the independent variable, while “Y” and “M” functions as a dependent variable and the moderating variable.

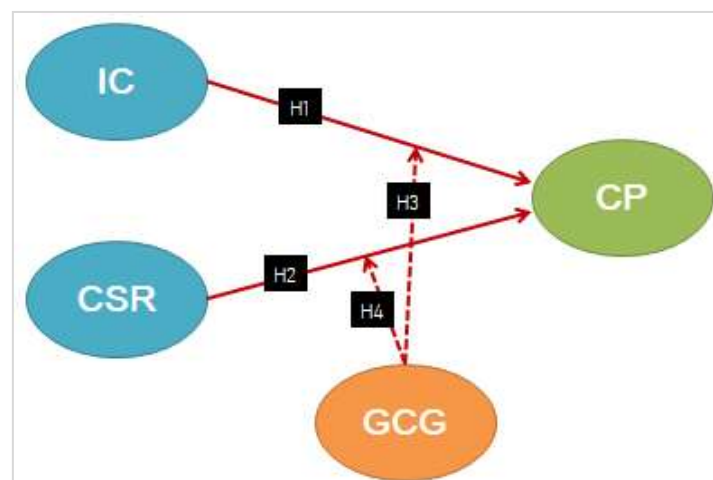


Figure 4. Proposed model

Source: own.

3. Research Method

3.1 Samples

The sample was collected from all state-owned companies licensed on the Indonesia Stock Exchange (IDX). There are twenty companies for prediction during 2012-2020. We set sampling through purposive sampling technique. The motive refers to the basis for considering the suitability of the data with the characteristics required as a sample (Latan, 2014). We got the sample criteria from state-owned companies officially registered on the

IDX that publish financial reports, do not experience losses, and have a motive for sustainability reports, all of which must be complete for investigation. Of these, only thirteen objects matched the criteria. The total data unit is 117 samples ($N = 17$) based on 9 time-series multiplied by 13 companies.

3.2 Analysis Techniques

The stages of data interpretation were arranged by two analyzes (descriptive statistics and inferential statistics). Descriptive analysis is a statistical section that functions to describe empirically or summarize the data collected in research (Ferdinand, 2014). The analysis is useful for explaining the characteristics of the object of study, especially in relation to variables. Irwansyah, Paminto, Ilmi, Darma & Ulfah (2022) asserted that inferential statistics are useful for testing the conception of hypotheses. The inferential model describes the calculation conditions through Partial Least Square (PLS). With the SmartPLS application, it will answer the proposed hypothesis empirically. According to Abdillah & Jogiyo (2015), PLS implements measurement model testing (outer model), structural model testing (inner model), and explains the construct between latent variables.

4. Result and Discussion

4.1 Descriptive Statistics

The overall average of indicators for IC reached 1.77. The highest average is VAHC of 4.34 and the lowest is VACE, with a value of 0.26. For comparison, the average of all CSR indicators is 0.47. The highest average is ECO, with a value of 0.57. On the one hand, the lowest average came from ENV, which only got 0.40. The average of all indicators on GCG is 9.46. Interestingly, the highest average is MEET with a score of 20.6, while the lowest is INDP with a score of 0.41. The average overall indicator of the IC is 6.70. For ROE, the average is 14.1, where the lowest is TOBIN because the value is only around 1.34.

4.2 PLS: Outer

The outer model test aims to ensure that the measurement model used is “workable” to be used as a measurement (valid and reliable). In addition, this analysis is important to verify the relationship between latent variables and their indicators. Two criteria in validity testing (convergent and validity). Convergent validity measures the PLS and is evaluated based on the loading factor and Average Variance Extracted (AVE). Table 1 concludes that the overall loading factor is above the conditions ($LF > 0.6$) and the AVE value of all variables is above the conditions ($AVE > 0.5$). This study model represented it is “valid”.

Table 1. Summary of loading factor and AVE

Variables	AVE	Items	Loading Factor
IC	0.666	VACE	0.735
		VAHC	0.859
		SCVA	0.847
		SOC	0.660
CSR	0.570	ECO	0.819
		ENV	0.778
		BOARD	0.842
GCG	0.730		

CP	0.810	INDP	0.953
		MEET	0.757
		ROA	0.929
		ROE	0.889
		Tobin	0.881

Source: SmartPLS outputs.

Discriminant validity is used to see the extent to which a construct differs completely from another construct by empirical standards. Discriminant validity in the PLS measurement model, calculated based on the cross loading and the root value of the AVE. From *Table 2*, we can see that all cross loading gains show discriminant validity, which is classified as “strong” because the value is above the statistical requirement ($CL > 0.7$).

Table 2. Summary of cross loading

Items	X1	X2	M	Y
VACE	0.735	0.102	0.226	0.745
VAHC	0.859	0.180	-0.410	0.689
SCVA	0.847	0.024	-0.428	0.573
SOC	0.080	0.760	0.072	0.144
ECO	0.118	0.819	0.091	0.229
ENV	0.096	0.778	-0.261	0.238
BOARD	-0.158	-0.103	0.842	-0.103
INDP	-0.228	-0.003	0.953	-0.215
MEET	-0.161	-0.117	0.757	-0.123
ROA	0.732	0.339	-0.341	0.929
ROE	0.858	0.184	0.070	0.889
Tobin	0.636	0.232	-0.279	0.881

Source: SmartPLS outputs.

Table 3. AVE root

Variables	M	X1	X2	Y
M	0.854			
X1	-0.221	0.835		
X2	-0.067	0.131	0.755	
Y	-0.187	0.816	0.278	0.900

Source: SmartPLS outputs.

Impressively, the determination between the square root of AVE and the correlation value of a latent construct with other constructs also becomes the PLS standard. Thus, it is concluded that all indicators in this model are considered “valid” (see *Table 3*).

Table 4. Measurement model reliability

Variables	CA	CR
X1	0.748	0.856
X2	0.631	0.798
M	0.816	0.889
Y	0.884	0.928

Source: SmartPLS outputs.

The reliability test of a construct, along with its reflexive indicators, was applied through Cronbach's Alpha (CA) and Composite Reliability (CR). *Table 4* confirms that the achievement of CA and CR is over 60% ($CA > 0.60$ and $CR > 0.60$) meaning that all indicators have reliability in the "good" classification.

4.3 PLS: Inner

At this stage, the goal of evaluating the structural model is to predict the relationship between latent constructs. In evaluating the performance of the PLS, there are several sections that support the provisions, including the coefficient of determination (R^2), effect size (f^2), predictive relevance (Q^2), and model feasibility (goodness of fit).

Table 5. Summary of R^2

Construct	R^2
CP	0.735

Source: SmartPLS outputs.

The value of R square is used to review the strength of the effect of endogenous variables that reflect exogenous variables. The calculation results show the amount of R^2 , the CP variable reaches 0.735 (strong determination). This shows that 73.5% of CP is influenced by IC, CSR, GCG, as well as the moderating effect of GCG on the relationship between IC and CP, as well as the moderating effect of GCG on the relationship between CSR and CP of 26.5% were other factors not investigated in this study (see *Table 5*).

Table 6. f^2 test

Linkages	CP
X1 (IC)	1.925
X2 (CSR)	0.081
M (GCG)	0.002
M1 (X1*M)	0.021
M2 (X2*M)	0.007

Source: SmartPLS outputs.

Then, to examine the strength of the influence or effect of each endogenous in the structural

model, it is applied with f-square. As a result, *Table 6* shows that the relationship between IC and CP has a “big” effect, the effect of CSR on CP has a “moderate” effect, and successively the moderating effect of GCG on the relationship between IC and CP and the moderating effect of GCG on the relationship between CSR and CP is a “low” effect.

Table 7. Q^2 test

Linkages	SSO	SSE	$Q^2 (1 - SSE / SSO)$
M (GCG)	351	351	-
M1 (X1*M)	117	117	-
M2 (X2*M)	117	117	-
X1 (IC)	234	234	-
X2 (CSR)	351	351	-
Y (CP)	351	212	0.396

Source: SmartPLS outputs.

The Q^2 aspect is useful for validating the ability to predict the fit of the model on endogenous constructs that have reflective indicators. Referring to *Table 7*, it is known that the magnitude of Q^2 is 0.396. The gain is over 0 ($0.396 > 0$). Therefore, the applied model is concluded to have “relevant predictive value”.

Table 8. Goodness of fit

Variables	Com	R^2
X1 (IC)	0.542	-
X2 (CSR)	0.154	-
M (GCG)	0.464	-
M1 (X1*M)	1	-
M2 (X2*M)	1	-
Y (CP)	0.585	0.735
Average	0.624	0.735
GoF	0.677	
Remark	“Great GoF”	

Source: SmartPLS outputs.

The Goodness of Fit (GoF) is to identify the feasibility of PLS, where this test applies to simultaneously validate the model by combining the inner and outer models. Based on *Table 8*, we concluded that the overall fit of the model is 0.677. The model formed has a “high degree” or “very fit” in explaining the data.

4.4 Hypothesis Test

In the substance of hypothesis testing, probabilities (t-statistics and p-values) become attributes to examine the effect between variables and the moderator variable to determine whether the effect is on the relationship between directive variables or vice versa. The original sample size also implied the relationship path. Positive values show a supportive/reinforcing influence and vice versa. If the t-statistic is greater than 1.96 ($t > 1.96$) and the p-value is less

than 5% ($p < 0.05$), ensure a significant effect. Hypothesis testing between constructs in PLS, supported by the re-sampling bootstrapping method (Ghozali & Latan, 2015).

Table 9. Hypothesis path

Components	Orig. Sample	T-Statistics	Prob.	Remarks
<i>Direct Effect</i>				
X1 (IC) -> Y (CP)	0.784	22.574	0.000	Significant-positive
X2 (CSR) -> Y (CP)	0.155	2.562	0.011	Significant-positive
M (GCG) -> Y (CP)	-0.026	0.618	0.537	Not significant-negative
<i>Moderation Effect</i>				
M1 (X1*M) -> Y (CP)	-0.106	1.779	0.076	Not significant-negative
M2 (X2*M) -> Y (CP)	-0.055	0.934	0.351	Not significant-negative

Source: SmartPLS outputs.

The following is the path of achievement of T-statistics, p-values, and the original sample. Referring to Table 9, only two hypotheses were accepted, namely IC towards CP ($t = 22.574$ and $p = 0.000$) and CSR to CP ($t = 2.526$ and $p = 0.011$). In addition, the other three relationships, such as GCG to CP, IC to CP through GCG and CSR to CP through GCG, were proven not to be significant with negative coefficients because $t < 1.96$ and $p > 0.05$.

Table 10. Determination of the type of moderation

Path	M (GCG) -> Y	(X1*M) -> Y	(X2*M) -> Y	Conclusion
(X1*M) -> Y	Not significant	Not significant	-	Moderation potential
(X2*M) -> Y	Not significant	-	Not significant	Moderation potential

Source: SmartPLS outputs.

Therefore, the above test needs to be identified in more detail regarding the function of the moderating variable with the determination in Table 10. It confirmed the moderating variable in this study to be included in the potential moderation. Rahadi & Farid (2021) assume that when the moderating variable does not have a significant effect directly or through its interaction, then the variable is only a potential moderator.

4.5. Discussion

IC has a significant and positive effect on CP. When the IC, which includes VAHC, VACE, and SCVA, increases, it can increase CP, which includes ROE, ROA, and Tobin's Q. The most dominant factor in increasing CP through IC is the VAHC factor because it has the highest loading factor value of 0.86 and average The highest average is 4.34. That fact is because good intellectual capital can manage and optimize tangible assets for the company's performance and existence in the new economic era, namely the knowledge-based economy. This study is consistent with publications by Maheran & Ismail (2009), Sutanto & Siswantaya (2014), Bontis (1998), and Chen, Bontis, Wu, Cheng & Hwang (2005).

CSR has a significant and positive effect on CP. It represented this when the CSR comprising

ECO, SOC, and ENV is increasing, thus increasing the CP. The most dominant factor in increasing CP through CSR is the ECO factor because it has the highest loading factor value of 0.82 and the highest average is 0.57. Implementing the company's CSR will gain social legitimacy to ensure the sustainability of the company and increase the company's image because the company's products are well known by consumers, so that their loyalty will also increase. Thus, it is relevant to the publications reviewed by Bai & Chang (2015), Nugroho & Rahardjo (2014), and Ariantini, Yuniarta & Sujana (2017).

GCG has no effect on the relationship between IC and CP. This is because the supervisory function in GCG does not work well because INDP often loses votes with other commissioners in deciding. In addition, the internal GCG mechanism actually slows down the decision-making process because there are too many BOARDS and too many MEETs which cause the inefficiency of the supervisory function. It proved the proposed third hypothesis to be in line with Hermanto, Lusy & Widyastuti (2021).

GCG has no effect on the relationship between CSR and CP. The existence of obstacles in making CSR decisions by the board of directors and the board of commissioners due to problems with internal GCG mechanisms such as INP, actually hinders and often loses votes. BOARD has stifled communication, coordination, and too frequent MEETs have led to the inefficiency of the supervisory function. These results also complement the study published by Karim, Manab & Ismail (2020) and Selcuk (2019), where GCG is proven to negatively moderate the relationship between CSR and CP.

6. Conclusions

6.1 Resume

This study has the ambition to examine the contribution of intellectual capital (IC) and corporate social responsibility (CSR) to corporate performance (CP) through the role of good corporate governance (GCG) which focuses on state-owned companies in Indonesia. Statistical testing for the period 2012-2020 found that IC had a positive effect on CP. The dominant factor in increasing CP through IC is VAHC. CSR has a positive effect on CP, where the dominant aspect of increasing CP through CSR is ECO. Then, GCG has no effect on the relationship between IC and CSR on CP.

6.2 Managerial Implications and Future Studies

Practical and theoretical contributions in managerial attributes need to recommend several things. Company management should evaluate policies related to IC and CSR because they have a positive influence on CP. It can start this part through VAHC, which is the dominant factor for IC, and through ECO as a factor that reflects CSR. For corporate investors, it is advisable to consider the IC level, especially the VAHC and ECO levels. Ideally, company managers should not concentrate on internal GCG mechanisms including INDP, BOARD, and MEET because they do not affect the level of IC and CSR on CP. Investors can expect internal GCG mechanisms such as INDP, BOARD, and MEET percentages. Future research agenda deserves to be discussed. The addition of indicators outside of IC, CSR, and GCG can be expanded. Please note, there are still 26.5% dimensions outside of the factors that impact on CP, so constructive reviews allow development.

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