

# Leadership Style, Intellectual Capital and Corporate Social Responsibility on Performance, a Comparison Model of Listed Companies in Indonesia

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## ABSTRACT

**Objective** – This paper aims to examine the influence of Leadership Style, Intellectual Capital, and Corporate Social Responsibility on Performance in companies in the sub-sectors of Mining, Pharmacy and Consumption and Household, Basic Industry, Chemical and Infrastructure, Utility and Telecommunication listed on Indonesia Stock Exchange (IDX) 2012-2018.

**Methodology/Technique** – In this research, leadership style is measured transformationally and transactionally. Meanwhile, Intellectual Capital is measured using VAICTM. Furthermore, Corporate Social Responsibility is measured using GRI G4, and Financial Performance is proxied by ROA, ROE, and sales growth. The method used is a saturated sample. The sample in this research was 50 companies in the Basic and Chemical Industry sub-sector, 28 companies in the infrastructure, utilities, and telecommunications sub-sectors, 38 mining sub-sector companies, and 17 companies in the consumer goods sub-sector listed on the Indonesia Stock Exchange (IDX). This research used secondary data taken from financial and annual reports and primary data obtained through questionnaires for leadership style. The analysis method used is simple regression analysis.

**Findings & Novelty** –The results show that the influence of leadership style, intellectual capital, and corporate social responsibility in the four sectors varies with a positive or negative relationship direction. Intellectual capital has a positive significant influence on ROA, ROE and SG in four sectors. Previous research has focused on only one sector. This study compares the influence of leadership style, intellectual capital, and corporate social responsibility in four sectors

**Type of Paper:** Empirical.

**JEL Classification:** M41, M49.

**Keywords:** Comparison; Leadership Style; Intellectual Capital; CSR; Performance

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## 1. Introduction

High level of competition is driven by the economic policies of some countries. Singapore (since 2001) and Malaysia (since 2004), countries of southeast Asian region closest to Indonesia, talked about economic reform from labor-based to knowledge-based economy.

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To create competitive advantages, companies reduce the use of human resources by utilizing technology and information technology in the production to conduct their business activities (Shu-HuiChuang, 2004), (Moustaghfir, 2012), (Herden, 2020). This encourages companies in Indonesia to transform so as not to lose out in competition. Rising numbers of startups and e-commerce companies in Indonesia is a proof of the utilization of information technology. Sales will increase through the use of technology for production and utilization of e-commerce. In addition, some companies such as Tokopedia, Gojek, Dana and others that are growing so fast appear to be fully utilizing information technology as their main business. These reformed companies need human resources that are knowledgeable and able to innovate (Kefela, 2010), (Haytham Abduljawad, 2017), (M. Muzamil Naqshbandi & Jasimuddin, 2019), (Mohammed & Nordin, 2020).

The utilization of knowledge will allow the company to compete to achieve the designed performance. Knowledge-based companies employ those with high skills, expertise, and innovation power. The knowledge and innovation of human resources owned by the company is the capital for the company. Therefore a company that utilizes knowledge will need the capitalization of that knowledge to become an intangible asset in the form of intellectual capital (Volkov & Garanina, 2007), (Garanina, 2009), (Nimtrakoon, 2015), (Ocak & Findik, 2019), (Al-Tal & Emeagwali, 2019), (Xu & Liu, 2020). Capital based on knowledge and technology is called intellectual capital (IC). Intellectual capital was a key factor in value creation (Nassar, 2018) for competitive advantages and sustainability.

The company's sustainability will also depend on the loyalty of its consumers or customers. The company will do its utmost to strengthen consumer loyalty including efforts to get their positive value. Consumers who are satisfied with the product quality and CSR disclosure will increase the value of the company and they will be loyal to the company. The effectiveness of the scientifically proven CSR implementation role is able to play a key role in building and improving consumer satisfaction (Youngran Shin; Vinh V. Thai, 2015). It is related to the disclosure of the company's role in reducing environmental impact as a result of the use of resources. The company will seek to disclose corporate social responsibility (CSR) in its own report. CSR disclosure affects consumer loyalty and will encourage the achievement of the company's goals in achieving financial performance (Stanisavljević, 2017), (van Doorn et al., 2017), (Servera-Francés & Piqueras-Tomás, 2019)

Furthermore, the next issue is about management in achieving its goal of carrying out management functions at various levels. A leader is someone responsible for the work of others in achieving goals. The way leaders impress their subordinates to be cooperative and productive is called leadership style. Leaders should be able to motivate employees to continuously innovate, and to improve employee competency in order to achieve the company's goals (Hasibuan, 2016).

Various research on leadership style has been conducted. Flanigan et al (Flanigan et al., 2013) found that transformational leadership positively affected sales and profits. Further research conducted by Sarra and Belgacem (Sarra Berraies And Belgacem Bchini, 2019) explained that transformational leadership style is a key determinant of exploitative and exploratory innovations and financial performance. Transactional leadership affected the exploitative innovation. Miloloza (Miloloža, 2018) argued that difference style of leadership style impact on performance by market success as a dimension.

The level of VAIC, CSR disclosure and performance (ROA, ROE and SG) of several companies in the mining and infrastructure sector shows that contrary to the description above is as follows:

Table 1. ROE, ROA, SG, VAIC and CSRD Infrastructure and Mining

Code	2016 (%)					2017 (%)				
	ROA	ROE	SG	VAIC	CSRD	ROA	ROE	SG	VAIC	CSRD
<b>Infra</b>										
LAPD	-7.5	-11.4	10.17	6.89	38	-13.7	-22.5	-30.3	11.45	50
CMNP	6.41	10.86	31.62	4.61	22	6.45	12.4	25.83	4.22	22
ISAT	2.51	9	9.03	0.16	72	2.57	8.79	2.54	1.1	72
TLKM	16.2	27.64	13.53	6.09	87	16.48	29.16	10.25	6.46	87
<b>Mining</b>										
BSSR	14.9	21.53	-11.7	5.95	88	39.41	55.62	61.82	8.19	86
ADRO	5.22	9	-8.41	9.22	82	7.87	13.11	30.16	13.37	82
DEWA	0.14	0.24	7.9	11.4	86	0.69	1.22	-6.29	12.25	86
GTBO	-9.4	-10.7	-83.3	10.42	63	0.06	0.07	36.41	10.75	63

VAIC LAPD (Infrastructure Sector) 2016 to 2017 increase 4.56 % (6.89 to 11.45) and CSRD 2016 to 2017 increase 12 % but ROA 2016 to 2017 decrease 6.5 %, ROE 2016 to 2017 decrease 11.1% and SG 2016 to 2017 decrease 40.47%. VAIC DEWA (Mining Sector) 2016 to 2017 increase 0.85% and CSRD 2016 to 2017 constant 86 % , but SG (Sales Growth) 2016 to 2017 decrease 14.19 %. An increase in VAIC of 2.24% and a decrease in CSRD of 2% in BSSR (Infrastructure Sector) had an effect on an increase in ROA of 24.52%, ROE 34.09% and SGE 73.52%, the same conditions in ADRO, VAIC increased 4.12% but ROE, ROA did not increase significantly.

## 2. Literature Review

### 2.1. The Influence of Leadership Style on Performance

Management as managers and leaders to achieve increased performance (Ozgur & Karaca, 2020). A leader is a person and leadership is the process of influencing others to understand how to do and agree what needs to be done, facilitating collective efforts to achieve goals (Yuki, 2012).

Leadership style is a consistent combination of philosophy, skills, traits, and attitudes underlying one's behavior that the leader applies when influencing the performance of his subordinates (Miftah, 2015), because it can affect the performance of its subordinates, the leadership style also affects the financial (Chung, & Yang, 2008), (Sahaya, 2012) and managerial performance (Thi et al., 2017). Increased employee's performance/ productivity is measured through increased revenue, profit, sales growth and expansion development (Kehinde, J. S, Jegede, C. A. and Akinlabi, 2012). Previously, Hersey, Blanchard and Johnson (Hersey & Blanchard, 1969) stated leadership style as consistent behavior when the leader works with subordinates. There are several leadership models, including transformational and transactional leadership.

According to Bass an effective leadership style to drive financial performance and productivity is a transformational and transactional leadership style (B.M Bass, 1990), (Bernard M. Bass, 1997), and Muterera (Muterera, 2012).

- a) Ha1: *There is a positive influence of leadership style on ROA*
- b) Ha2: *There is a positive influence of leadership style on ROE*
- c) Ha3 : *There is a positive influence of leadership style on sales growth*

## 2.2. The Influence of Intellectual Capital on Performance

Resource based theory explains that the company's performance will be optimal if the company has a competitive advantage so as to generate value for the company (Ulum, 2016). Competitive advantage is gained by utilizing and managing its resources well. Penrose (Penrose, 1959) previously stated that the company believes that it is a collection of capabilities in managing those resources. Resources are all that the company owns and controls to be its assets, individual employee capabilities, knowledge of technology, organizational processes, and useful information to implement the company's strategy so as to improve the efficiency and effectiveness of the company (Kull et al., 2016).

Intellectual capital management can create value added that is useful for the company and will affect the performance of the company itself (Alipour, 2012). Some previous researches resulted in intellectual capital positively affecting performance were conducted by Alipour (Alipour, 2012), Al-Musali (Al-Musali & Ismail, 2014), Isanzu (N. Isanzu, 2015), Nuryaman (Nuryaman, 2016), Onyekwelu et al (Onyekwelu et al., 2017), Aslam (Aslam et al., 2018), Rilla (Gantino et al., 2019), and Soetanto dan Liem (Soetanto & Liem, 2019).

d) Ha4: *There is a positive influence of intellectual capital on ROA*

e) Ha5: *There is a positive influence of intellectual capital on ROE*

f) Ha6: *There is a positive influence of intellectual capital on sales growth*

## 2.3. The Influence of Corporate Social Responsibility on Performance

Another variable related to performance is Corporate Social Responsibility (CSR). The implementation of CSR that was initially voluntary to fulfill the company's obligations became a strategic activity related to the achievement of the company's long-term goals (Kotler, Philip, Maon, 2016). The company's image will be better if it can show its responsibility and concern for the external environment.

Corporate Social Responsibility activities can have a positive impact for the company. By conducting CSR activities can indeed compensate for the absence of a strong brand so that the company's reputation also increases and consumers will be loyal to the company's products (van Doorn et al., 2017). Furthermore, it is also explained that the long-term benefits of the company's rising reputation will include increased market share, profitability, and the value of the company.

Research on the influence of corporate social responsibility on performance provides mixed results. The research on CSR which affect the performance was conducted by Amrou (Awaysheh et al., 2020), Cho et al (Cho et al., 2019), Rilla (Gantino et al., 2019), Yan ( Yan et al., 2017), Abraham (Agyemang, Otuo Serebour, 2017), Samuel (Famiyeh, 2017), and Mikolajek dan Magdalena (Mikołajek-Gocejna, 2016).

g) Ha7: *There is a positive influence of corporate social responsibility on ROA*

h) Ha8: *There is a positive influence of corporate social responsibility on ROE*

i) Ha9: *There is a positive influence of corporate social responsibility on sales growth*

## 3. Research Methodology

This research is a causality study. It is a study with characteristic problems in the form of causal relationships, and this study aims to know the relationship and influence of independent variables namely intellectual capital, corporate governance, and corporate social responsibility on dependent variables which in this study is the financial performance of the company

The types of data used in this study are secondary data sourced from the financial statements of mining, pharmaceutical, consumer and household goods sub-sectors, basic industry and chemical and infrastructure, utility and telecommunication in 2012-2018, and primary data through the dissemination of questionnaires to employees of various levels working in companies in those sectors. Intellectual capital measurement using VAICTM (Ulum, 2016) through formula:

$$VAIC^{TM} = VACA + VAHU + STVA \quad (1)$$

The leadership style measurement in this study is transactional and transformational leadership style (Robbins, 2015). The data was obtained through the dissemination of questionnaires to staff or employees of various levels working in sectors as described earlier. Researchers used the transformational questionnaires used by Bass (Bernard & Ronald, 2006) and the transactional used by Bass (Bernard M. Bass, 1997).

CSR measurement uses a dummy variable that is a score of 1 if item 1 is disclosed and a score of 0 if item 1 is not disclosed. Then the entire score of the item revealed by the company is summed up to obtain the total score of the item revealed by the company. In calculating CSR disclosure, by Corporate Social Disclosure Index (CSDI) is used with the following formula:

$$CSDI_j = \frac{\sum X_{ij}}{n_j} \quad (2)$$

In this research, the performance is measured uses ROA, ROE and SG. ROA and ROE will increase if sales growth also increases, therefore this research uses SG as one of the performance indicators. In addition, in 2012 – 2018 the companies listed under these 4 sectors tend to increase its activity with sales growth achieved by these companies.

#### 4. Results

Based on the results of processing the data, the summary is as follows

Table 2. Result Summary

BI&C						
	Adj R2 (%)	Sig			Constanta	Regression Equation
		IC	CSR	LEADs		
ROA	16.6	0.000	0.253	0.836	2.302	ROA = 2.302 + 0.787IC – 0.028CSR – 0.101LEADs
ROE	18.3	0.001	0.116	0.085	-10.325	ROE = -10.325 + 1.014 IC +0.092CSR +2.029LEADs
SG	9.3	0.000	0.073	0.796	0.048	SG = -0.048 + 1.458 IC +0.080CSR – 0.238LEADs
Uji F		0.000	0.000	0.000		
IU&T						
	Adj R2 (%)	Sig			Constanta	Regression Equation
		IC	CSR	LEADs		
ROA	26.2	0.000	0.963	0.087	0.449	ROA = 0.449 + 1.1151LnIC+0.012 LnCSR – 0.768LnLEADs
ROE	8	0.000	0.615	0.859	-0.169	ROE = -0.169 + 1.583LnIC- 0.150 CSR+ 0.092 LnLEADs
SG	19.6	0.000	0.032	0.281	-15.702	SG = -15.702 + 2.490IC + 0.169 CSR+1.843LEADs
Uji F		0.000	0.000	0.000		
Mining						
	Adj R2 (%)	Sig			Constanta	Regression Equation
		IC	CSR	LEADs		
ROA	23.7	0.000	0.038	0.895	3.637	ROA = 3.637 +1.053IC+3.906CSR– 0.091LEADs
ROE	6.1	0.021	0.426	0.000	-12.556	ROE = -12.556 + 0.540IC+ 2.965CSR– 5.001LEADs
SG	34.8	0.000	0.045	0.407	-34.8	SG = -34.800 +4.811IC+ 13.330CSR+2.031LEADs
Uji F		0.000	0.000	0.000		
Cons Good						

	Adj R2 (%)	Sig			Constanta	Regression Equation
		IC	CSR	LEADs		
ROA	44.1	0.000	0.003	0.262	-14.752	ROA = -14.752 +3.615IC+ 20.949CSR+2.430LEADs
ROE	57.8	0.000	0.001	0.731	-39.111	ROE = -39.111 +12.555IC+ 61.215CSR+1.831LEADs
SG	33.9	0.01	0.000	0.049	-32.597	SG = -39.597 +2.052IC+ 34.892CSR+5.363LEADs
Uji F		0.000	0.000	0.000		

On Basic Industry and Chemical only IC had a positive and significant effect on performance. From the regression equation, if the values of LEADs, IC, and CSR are 1 respectively, it can be seen that performance with ROA was 2.96, and the highest IC value was on Sales Growth. Although LEADs have no significant effect on ROE, the largest LEADs value affects ROE, and the IC value affects ROE no 2, the largest is 1.014. The largest CSR value affecting ROE is 0.092, and CSR affects SG by 0.080. It is greater than the constant value of minus 0.048. If all variables are not applied by companies in this sector, the performance value measured by ROE will be minus 10.325.

On Infrastructure, Utility and Transportation the IC has a positive and significant effect on performance. From the regression equation, if the values of LEADs, IC, and CSR are 1 respectively, it appears that performance value with ROE was 1.356, and the highest IC value is on Sales Growth. Although LEADs have no significant effect on SG, the largest LEADs value affects SG and the IC value affects the largest ROE no 2 which is 1.583. The largest LEADs value affecting ROE is 1.843 and CSR affects SG by 0.169. CSR has a negative effect on ROE and has a significant positive effect on SG. If the three variables are not applied by companies incorporated in this sector, then the value of the performance measured by SG will be worth minus 11.2.

On Mining Sector, it can be seen that only IC and CSR have a positive and significant effect on performance with ROA indicators. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively, it appears that the affected performance value with ROA was 8.505, and the highest IC value is on Sales Growth. The implementation of CSR has a huge influence on SG with a value of 13.330. Although LEADs have a significant effect on ROE and the largest LEADs value affects ROE, overall ROE values will decrease if these three variables are not applied. Furthermore, from the regression equation it appears that if these three variables are not applied then the SG is worth minus 34.8. The second largest IC value is on ROA and the largest LEADs value is on ROE.

Furthermore, on Consumer Goods and Household Supplies it can be seen that only IC and CSR have a positive and significant effect on performance with ROA, ROE, and SG indicators. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively, it appears that the affected performance values of the three variables are ROA 12.242, ROE= 36.49, and SG = 2.71. The highest IC value is against ROE which is 12.555. The implementation of CSR has a large effect on SG with a value of 34.892 and on ROE is very large with a value of 61.215. LEADs have a significant effect on SG and the value of the largest LEADs affects SG. Furthermore, from the regression equation it appears that if these three variables are not applied then the SG is worth minus 39.597

Based on result summary, the biggest effect of X simultaneously on Y is on the consumers good sector, especially Y with indicators of ROA and ROE. Although the influence of X on Y with the SG indicator in the mining sector is 34.8%, the effect of LEADs on SG is not significant. It is different with the effect of X on Y with SG as an indicator in the consumers good sector, which is 33.9% lower than the mining sector, but all X variables have a significant positive effect.

Summary of Hypothetical Test Results are as follows:

Table 3. Summary of Hypothetical Test

BI&C			IU&T			Mining			Cons Good		
Accepted/Rejected		+/-	Accepted/Rejected		+/-	Accepted/Rejected		+/-	Accepted/Rejected		+/-
Ha1	Rejected	-	Ha1	Rejected	-	Ha1	Rejected	-	Ha1	Rejected	+
Ha2	Rejected	+	Ha2	Rejected	+	Ha2	Accepted	-	Ha2	Rejected	+
Ha3	Rejected	-	Ha3	Rejected	+	Ha3	Rejected	+	Ha3	Accepted	+
Ha4	Accepted	+	Ha4	Accepted	+	Ha4	Accepted	+	Ha4	Accepted	+
Ha5	Accepted	+	Ha5	Accepted	+	Ha5	Accepted	+	Ha5	Accepted	+
Ha6	Accepted	+	Ha6	Accepted	+	Ha6	Accepted	+	Ha6	Accepted	+
Ha7	Rejected	-	Ha7	Rejected	+	Ha7	Accepted	+	Ha7	Accepted	+
Ha8	Rejected	+	Ha8	Rejected	-	Ha8	Rejected	+	Ha8	Accepted	+
Ha9	Rejected	+	Ha9	Accepted	+	Ha9	Accepted	+	Ha9	Accepted	+

H1, H2 and H3 rejected, this result is contrary to previous studies (Chung, & Yang, 2008),(Sahaya, 2012), (Thi et al., 2017), (Kehinde, J. S, Jegede, C. A. and Akinlabi, 2012), except H3 on consumers good, accepted (positive) and H2 in mining sector accepted, negative significant. H4, H5 and H6 have a significant positive, these results support previous research (Alipour, 2012), (Al-Musali & Ismail, 2014), (N. Isanzu, 2015), (Nuryaman, 2016), (Onyekwelu et al., 2017), (Aslam et al., 2018), (Gantino et al., 2019), (Soetanto & Liem, 2019). The results are more varied in hypotheses 7, 8 and 9. H8 is accepted only in the consumers good sector and H7 is accepted in mining and consumers good sector. Furthermore, H9 is rejected only in the BI&C sector, this result supports previous research (Awaysheh et al., 2020), (Cho et al., 2019), (Gantino et al., 2019), (Yan et al., 2017), (Agyemang, Otuo Serebour, 2017), (Famiyeh, 2017), (Mikołajek-Gocejna, 2016).

## 5. Discussion

Intellectual capital had a positive and significant impact on ROA, ROE and SG in all four sectors. The performance of basic industry and chemical sector is greatly influenced by IC (significant positive effect) because the business characteristics depend on innovations made through research. It also proves that knowledge base affects the company's performance. Companies must also choose a suitable leadership style and better CSR disclosures to gain legitimacy and to increase sales. The mining sector's performance is influenced by the legitimacy of these companies as a result of the implementation of its CSR. Furthermore, the mining sector that needs investment is largely influenced by IC because it needs innovation in conducting processes so as to create efficiency. The agency's efforts are directed to gain legitimacy by CSR disclosure. The role of leadership style is very important in achieving ROE performance. On Infrastructure, Telecommunication and Utility Sector, IC plays a big role in improving performance with indicators SG. CSR and LEADs. Nevertheless, in the equation of regression the constant value is minus so that overall, three variables if applied will reduce SG. Consumer Goods and Household Supplies companies should improve knowledge and competence, the capabilities and innovation, implement and disclose CSR even better. Increasing IC will make the company more efficient in conducting its business activities. Efficiency and better CSR disclosure will make companies more valuable and attractive. Consumers will love environmentally friendly products.

## 6. Managerial Implication and Conclusion

### Conclusion

Based on the previous description, it is concluded that only intellectual capital has a significant positive effect on ROA, ROE and SG in all sectors.

On Basic Industry and Chemical only IC had a positive and significant effect on performance. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively, it can be seen that the affected performance with ROA was 2.96, and the highest IC value was on Sales Growth. If all variables are not applied by companies in this sector, the performance value measured by ROE will be minus 10.325.

On Infrastructure, Utility and Transportation the IC has a positive and significant effect on performance. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively it appears that the affected performance value with ROE 1.356, and the highest IC value is on Sales Growth. Although LEADs have no significant effect on SG, the largest LEADs value affects SG and the IC value affects the largest ROE no 2 which is 1.583. The largest LEADs value affecting ROE is 1.843 and CSR affects SG by 0.169. CSR has a negative effect on ROE and has a significant positive effect on SG. If the three variables are not applied by companies in this sector, then the value of the performance measured by SG will be worth minus 11.2.

On Mining Sector, it can be seen that only IC and CSR have a positive and significant effect on performance with ROA indicators. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively, it appears that the affected performance value with ROA was 8.505, and the highest IC value is on Sales Growth. The implementation of CSR has a huge influence on SG with a value of 13.330. Furthermore, from the regression equation it appears that if these three variables are not applied then the SG is worth 14.628. The second largest IC value is on ROA and the largest LEADs value is on ROE.

On Consumer Goods and Household Supplies it can be seen that only IC and CSR have a positive and significant effect on performance with ROA, ROE, and SG indicators. From the regression equation if the values of LEADs, IC, and CSR are 1 respectively, it appears that the affected performance values of the three variables are ROA 12.242, ROE= 36.49, and SG = 2.71. The highest IC value is against ROE which is 12.555. The implementation of CSR has a large effect on SG with a value of 34.892 and on ROE is very large with a value of 61.215. LEADs have a significant effect on SG and the value of the largest LEADs affects SG. Furthermore, from the regression equation it appears that if these three variables are not applied then the SG is worth 2.71.

Based on the regression equation, it is concluded that company performance in basic industry and chemicals simultaneously influenced by leadership style, intellectual capital and corporate social responsibility with indicators of ROA and ROE. The effect of these three X variables together on SG has R<sup>2</sup> of 33%.

### Managerial Implication

IC has a significant positive effect on all sectors, so companies must increase intellectual capital so that performance increases. It is necessary to continue to improve innovation in producing products or services through the use of the latest technology that can reduce product costs, employee competence through structured workshops. the cost of increasing competence as an investment to improve financial performance.

CSR has a positive and significant effect on performance in the Consumer Goods and Household Supplies sector, therefore management must continue to improve CSR implementation and disclose it to the public through a sustainability report. Consumers in this sector will respond highly to CSR disclosures. Companies need to create CSR programs needed by the community, for example the Health program, environmental improvement and CSR programs in the education sector.



The mining sector has had a major impact on environmental damage. Therefore, management must increase environmental improvement activities. The effect of CSR on ROA and SG performance is a significant positive in the mining sector, therefore companies in this sector must continue to improve their CSR implementation, consumers respond positively, SG and ROA will increase, even though consumers from the mining sector are different from consumers in other sectors. CSR programs should be carried out mainly on the improvement of environmental damage as well as programs that focus on improving health and education communities around the mine site.

Based on the results, the hypothesis of the effect of CSR on performance is all rejected and the effect of LEADs on ROA and SG is also rejected and R<sup>2</sup> is below 20%, so companies in Basic Industry and Chemical need to look for variables other than IC that have an effect on improving performance. Management must continue to improve innovation to produce new products that are needed by consumers at competitive prices. For existing products, the management needs to continue to do research and find ways of producing more efficient so that prices can be competitive.

Management in the Infrastructure sector, Utility and Transportation needs to continue to improve innovation to generate new technology so that the products or services produced can compete. CSR has a significant positive effect on performance; therefore, management needs to increase CSR through programs that are needed by the community. Although consumers in infrastructure are different from consumers in utility and transportation, the impact of CSR activities is that the community will give a positive response.

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