

**The Analysis of Factors Affecting Human Capital Disclosure**

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**Abstrak**

*Tujuan penelitian ini untuk mengetahui pengaruh ukuran perusahaan, profitabilitas, umur perusahaan, tipe auditor, investasi pada human capital terhadap pengungkapan human capital. Populasi penelitian ini adalah seluruh perusahaan high IC intensive menurut GICS yang terdaftar di Bursa Efek Indonesia (BEI) pada tahun 2014. Pemilihan sampel yang digunakan dalam penelitian adalah metode purposive sampling yang menghasilkan sampel sebanyak 134 observasi. Metode analisis data yang digunakan dalam penelitian ini adalah analisis regresi berganda. Hasil penelitian ini menunjukkan bahwa hanya variabel ukuran perusahaan dan kepemilikan manajerial yang berpengaruh positif terhadap pengungkapan human capital sedangkan variabel lainnya tidak berpengaruh terhadap pengungkapan human capital. Saran untuk penelitian selanjutnya bisa menggunakan populasi perusahaan High IC Intensive menurut GICS dan Low IC Intensive menurut GICS.*

**Abstract**

The purpose of this study is to determine the effect of corporate firm, profitability, company's age, type of auditor, investment on human capital on human capital disclosure. The population of this study is all high ic intensive companies by GICS listed on Indonesia Stock Exchange in 2014. Selection of the sample used in this study was purposive sampling method that produced a sample of 134 observations. The method of data analysis used was multiple regression analysis. The result of this study showed that company size and investment on human capital had positive effects on human capital disclosure while other variable had no effect on human capital disclosure. Recommendation for further study can use the population of High IC Intensive companies according to GICS and Low IC Intensive according to GICS.

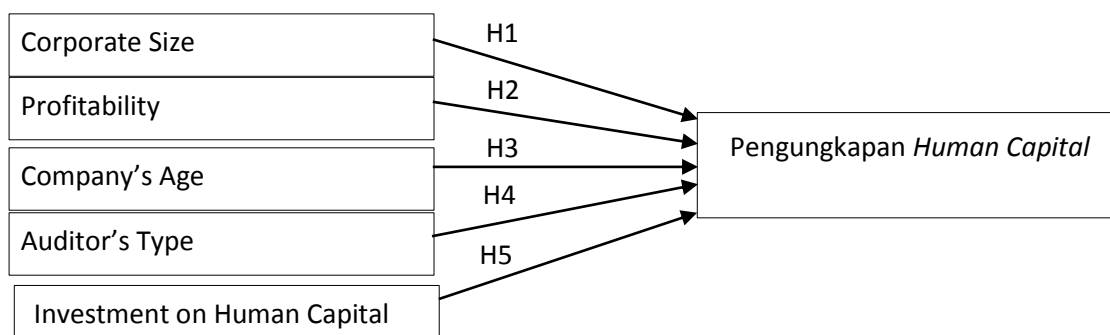
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## INTRODUCTION

Managers in decision-making are influenced by how much the quality of corporate disclosure is disclosed through Annual Reports in order to the information presented in the financial statements can be understood and does not result in misinterpretation. Openness and complete annual financial statements are reflected in mandatory and non-mandatory disclosure. Non-mandatory disclosure is a voluntary disclosure done by a company. Disclosure of human capital is included in the voluntary disclosure. Guthrie (2001) argues that disclosure of human capital allows organizations to allocate resources more effectively. According to the opinion of Amalia (2005), one effective way that can be done to reduce information asymmetry and agency costs is by making voluntary disclosure. The agency theory shows that the higher the level of disclosure, the greater the benefit to reduce agency costs (Fernando and Clea (2011). Disclosure of human capital more completely in the annual report can also provide views for stakeholders and management to assess corporate capabilities in the future (Fernando and Clea, 2011).

The fact in the field according to Purnomosidhi (2006) disclosure of human capital in Indonesia is found still rare. The studies that have been conducted show still low human capital exploitation on annual reports of companies especially in developing country. The results from several previous studies state that disclosure of human capital in annual reports of companies in various countries is still limited to 50%. Especially research conducted in Indonesia indicates the disclosure of human capital in the annual report is only 48%. Based on the background above, the researcher is interested in conducting research again about company size, profitability, company age, auditor type, and investment in human capital to human capital disclosure. The results of this study are expected to contribute to academics in developing research in the future, and this research can be used as a reference material, especially in the field of accounting about the disclosure of human capital.



**Figure 1.** Theoretical Thinking Framework

Agency theory can explain the significant relationship between company size and human capital disclosure in the annual report. Jensen and Meckling (1976) explain that agency theory when there is a separation between owner as a principal and manager as an agent that runs the company will emerge the problem of agency because each party will always try to maximize its utility functions. Large companies have more parties associated with corporate activities that encourage management to report more complete disclosures in annual reports to overcome agency problems

and information asymmetries. Ningsih (2012) indicates that company size has a positive effect on the disclosure of human capital because the larger the size of the company, the greater the resources owned and having influence on the economy, resulting in greater demand for corporate information disclosure.

H1: The larger the size of the company, the more complete the disclosure of human capital in the corporate annual report.

Profitability affects on the disclosure of human capital. According to Agus (2010), that profitability ratio is the ability of companies to earn profits in relation to sales, total assets and own capital. Watts and Zimmerman (1986) describe companies with greater profits are vulnerable on rule intervention and hence they can reveal more detailed information in annual reports to show their financial performance. Signalling theory can explain why companies have a drive to provide information to external parties (Nuswandari, 2009). Companies which have the ability to earn high profit will encourage management to give positive signals to stakeholders by disclosing more complete information in the annual report. Management wants to show to the public and stakeholders that the company has a high level of profitability compared to other companies.

H2: The greater the profitability ratio, the more complete the disclosure of human capital in the corporate annual report.

The age of the company affects management in how big disclosure of human capital in the annual report. Owusu-Ansah (1998) asserts that corporate disclosure level may be affected by age, where age is a proxy for the development and growth stages of the company. Agency theory assumes that shareholders (principals) do not have sufficient information about management performance (agency). Long-standing companies are growing and can maintain their existence certainly have many shareholders and definitely susceptible to agency conflict. The large number of shareholders enables the stakeholders to encourage management to disclose more complete information on annual reports to reduce agency conflict and information asymmetry. Uyar (2013) says that older companies, managers may be more aware of the value of human resources in the company.

H3: The longer the age of the company, the more complete the disclosure of human capital in the corporate annual report.

The type of auditor who audits companies also significantly affects the disclosure of corporate annual report. Big 4 Public Accounting Firms (KAP) have been known to many people have a good reputation and more experienced in auditing corporate annual financial statements than non big 4 KAP. Oliveira, et al (2006) explains that companies that are audited by big 4 KAP affiliated in Indonesia can encourage their clients to disclose additional voluntary information which is more complete because they want to maintain their reputation and develop their expertise (Woodcock and Whiting, 2009). Meanwhile, non big 4 KAP has lack of authority in influencing their clients to disclose voluntary information more completely. Uyar and Kilic's findings (2013) signal that the big 4 KAP not only audits their customers for financial reporting purposes, but they also guide on the corporate non-financial reporting practices which are better and more comprehensive.

H4: Corporate annual financial statements audited by Big KAP 4, then it will be more complete the disclosure of human capital in the corporate annual report.

Investment in human capital is a corporate expenditure on a certain amount of money or capital in order to investment to improve the quality of human resources. High quality human resources will benefit the company. High-quality human resources enable the company to disclose complete voluntary disclosure of human capital in the financial statements in order to shareholders know how the quality of human resources the company has. According to Jindal and Kuar (2012), the cost of corporate employees is included in the majority of operating expenses. Companies that

disclose more complete human capital information are companies that incur higher employee costs, the costs used by companies for training and development of the employees.

H5: The more companies investing in human capital, the greater the disclosure of human capital in the corporate annual report.

## METHODS

The population of this study was all high IC intensive companies according to GICS listed in Indonesia Stock Exchange (IDX) in 2014. The sample selection used in this study was purposive sampling method that resulted in samples amounted to 134 observations. The dependent variable in this research was the disclosure of human capital in the annual report. Disclosure of human capital was a voluntary disclosure, one of which revealed the human capital of the company in its annual report. This variable was measured using the index of human capital disclosure conducted by Jindal and Kumar (2012) in India and has been re-examined in Indonesia by Ningsih (2012). This index consisted of 12 items as a measurement of human capital. Content analysis method was used to measure the amount of disclosure of human capital by reading corporate annual report whether there were items included in the index of human capital disclosure such as research conducted by Jindal and Kumar (2012). If the specified item was disclosed in the corporate annual report, it would be scored 1. However, if the specified item was not disclosed in the corporate annual report, it would be scored 0. The assessment of this human capital item used the formula:

$$\text{Score} = \frac{\sum di \times 100\%}{M}$$

Note:

di = The number of disclose

M= total items measured

The variables in this study were company size, profitability, age of company, and type of investment auditor in human capital. The size of the company is the big small description of a company. Company size could be expressed in total assets, sales, and market capitalization (Sudarmadji and Sularto, 2007). These researchers used natural log of total assets as a proxy of company size such as research conducted by Fernando and Clea (2011). Profitability is the ability of a company to earn profits in relationship with the sales of total assets and own capital (Sugiyarso and Winami, 2005). This study used ROE as a proxy of profitability measurement such as research conducted by Fernando and Clea (2011). The age of the company is the length of a company standing up and surviving. This study measured the age of the company by the number of years since the company stand up to the annual report was taken its data such as research conducted by Ningsih (2012). Auditor type is the auditor who audited company. Auditor's type in this study was a dummy variable. This study measured auditor's type in a way, if the company was audited by big 4 KAP was given score 1 and if not given score 0 as research conducted by Jindal and Kumar (2012). Investment in human capital was where companies spent a sum of money or capital in order to invest to improve the quality of corporate human resources. This study used the burden of employees divided by the total operating expenses as a measure of investment in human capital such as research conducted by Ningsih (2012).

## RESULTS AND DISCUSSIONS

**Table 1.** The Result of Descriptive Statistical Test

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
HCD	134	16.67	66.67	37.8731	10.35177
SIZE	134	25	34	29.19	1.970
PROFIT	134	.03	84.60	13.9502	11.37268
AGE	134	6	130	34.93	17.132
AUDITOR	134	0	1	.41	.494
INVS	134	.03	.89	.4822	.16097
Valid N (listwise)	134				

Source: Output of SPSS 2016

Based on the descriptive analysis with the samples numbered 134 observations could be obtained the results for the disclosure of human capital (HCD), the minimum value was 16.67, the maximum value was 66.67, the mean value was 37.8731 and the standard deviation was 10.35177. The results of descriptive analysis for company size (SIZE) obtained the minimum value of 25, the maximum value of 34, the mean value of 29.19 and the standard deviation of 1.970. The results of descriptive analysis for profitability (PROFIT) obtained the minimum value of 0.03, maximum of 84.60, the mean value of 13.9502 and the standard deviation of 11.37268. The results of descriptive analysis for company's age obtained the result of minimum value equal to 6, the maximum value equal to 130, the mean value equal to 34.93 and the standard deviation equal to 17.132. The results of descriptive analysis for investment in human capital obtained the minimum value of 0.03, the maximum value of 0.89, the mean value of 0.4822 and the standard deviation of 0.16097.

**Table 2.** Frequency of Auditor's Type on High IC Intensive Companies according to GICS in 2014.  
AUDITOR

	Frequency	Percent	Valid Percent	Cumulative Percent
0	79	59.0	59.0	59.0
Valid 1	55	41.0	41.0	100.0
Total	134	100.0	100.0	

Source: Output of SPSS 2016

Auditor's type was a dummy variable. The frequency table of auditor's type above showed that the total number of companies audited by big four KAP was 55 companies with percentage of 41% and audited by non 4 big KAP was 79 companies with percentage of 59%. Before conducting the hypothesis test, it was necessary to conduct classical assumption test. Normality test obtained the results of kolmogorov-smirnov (K-S) significance value of 0.488 and significant at  $0.971 > 0.05$  this meant that the data in this study was residuals normally distributed. Multicollinearity test obtained none of the independent variables having tolerance values less than 0.10 meant there was no correlation between the independent variables which value was more than 95% (Ghozali, 2011). Heteroscedasticity test obtained the result that all independent variables significance more than 5%. Then, it could be concluded that the regression model used in this study did not occur heteroscedasticity.

This study used multiple regression analysis. Hypothesis test of this research included partial regression coefficient test (t test), coefficient of determination (test of adjusted R square), and test of

simultaneous regression coefficient (F test). Here was the results of simultaneous test (F statistical test):

**Table 3.** The Result of Partial Test and Multiple Regression Equation Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-38.753	13.978		-2.772	.006
SIZE	2.469	.485	.470	5.086	.000
PROFIT	-.106	.071	-.116	-1.495	.137
AGE	.035	.051	.057	.674	.502
AUDITOR	-1.710	1.882	-.082	-.909	.365
INVS	11.493	5.013	.179	2.293	.023

Source: Secondary data processed, 2016

Table 3 showed the results of company size variable (size) statistically showed significant result at  $\alpha = 0.05$  namely equal to 0.000 with t value of 5.086 stated with positive sign then the relationship was positive. It could be concluded that H1 in this study was accepted. The agency theory explained that in large companies there were more parties associated with the corporate activities. The number of stakeholders in the corporate activities was vulnerable to the problems of huge agency costs and information asymmetry between agents and principals. Management was encouraged to report more complete disclosure in the annual report not only as a manifestation of management accountability to stakeholders but also to overcome agency issues and information asymmetry. Table 3 showed profitability variable statistically showed insignificant result at  $\alpha = 0.05$  namely 0.137. This could be seen from the significance of more than 0.05 ( $0.137 > 0.05$ ). It could be concluded that H2 in the study was rejected.

**Table 4.** Cross Tabulation of Profitability and Human Capital Disclosure on High IC intensive Companies according to GICS in 2014.

Category of\_PROFIT \* Category of\_HCD Cross tabulation

		Category of_HCD				Total	
		Very Low	Low	Adequate	High		
Category of_PROFI T	Inadequate	Count	11	22	9	1	43
		% of Total	8.2%	16.4%	6.7%	0.7%	32.1%
	Less Adequate	Count	3	15	11	0	29
		% of Total	2.2%	11.2%	8.2%	0.0%	21.6%
	Adequate	Count	6	11	6	0	23
		% of Total	4.5%	8.2%	4.5%	0.0%	17.2%
	Enough	Count	4	14	1	0	19
		% of Total	3.0%	10.4%	0.7%	0.0%	14.2%
	Very Adequate	Count	1	17	2	0	20
		% of Total	0.7%	12.7%	1.5%	0.0%	14.9%
Total		Count	25	79	29	1	134
		% of Total	18.7%	59.0%	21.6%	0.7%	100.0%

Source: Output of SPSS 2016

Table 4 cross tabulation of profitability and human capital disclosure showed no pattern. Most of the companies with inadequate profitability category had low human capital disclosure amounted to 22 companies or 16.4% whereas, most of the companies with very adequate profitability category are categorized into low human capital disclosure category but only 17 companies or 12.7% .There were two reasons why it could happen. First, the attention of investors and creditors tends to profitability, however, a high profitability ratio did not guarantee more complete voluntary human capital disclosure. The reason was that companies had view that information that describes the financial capability of companies tend to had a higher appeal so that disclosure of human capital was considered not to affect investors' decisions. Second, the characteristics of each different company could be the next reason why profitability did not affect more complete disclosure of human capital. As the results of research conducted by Ali (2013) which mentioned the absence of profitability effect on human capital disclosure due to the direction of unstable effect. The food sector showed a negative influence while in the chemical sector showed a positive influence. This study was also not concentrated on one type of company but several types of companies in accordance with the classification of High IC Intensive companies according to GICS. Table 3 showed the variable of company's age statistically showed insignificant result at  $\alpha = 0.05$  namely 0.502. This could be seen from the significance of more than 0.05 ( $0.502 > 0.05$ ). It could be concluded that H3 in the study was rejected.

**Table 5.** Cross Tabulation of Company's Age and Human Capital Disclosure on High IC intensive companies according to GICS in 2014

Category of \_AGE \* Category of \_HCD Cross Tabulation

		Category of _HCD				Total	
		Very Low	Low	Adequate	High		
Category of _AGE	New	Count	24	67	22	0	113
		% of Total	17.9%	50.0%	16.4%	0.0%	84.3%
	Mediu m	Count	1	11	6	1	19
		% of Total	0.7%	8.2%	4.5%	0.7%	14.2%
	Old	Count	0	1	1	0	2
		% of Total	0.0%	0.7%	0.7%	0.0%	1.5%
Total		Count	25	79	29	1	134
		% of Total	18.7%	59.0%	21.6%	0.7%	100.0%

Source: Output of SPSS 2016

The reason why H3 was rejected due to older companies tend to only revealed more about their financial information than their human resources information. Meanwhile, new companies tried to reveal more complete human capital information about its human resource assets with the aim of attracting investors to put shares in the company. The reasons could be clarified from Table 5 cross tabulation of company age and human capital disclosure. Table 4 showed that most of the corporate age with new categories had a low category of human capital disclosure amounted to 67 companies or 50%, whereas, old corporate age had a low level of human capital disclosure but only one company or 0.7%. Table 3 showed the variable of auditor's type statistically showed insignificant result at  $\alpha = 0.05$ , that was equal to 0.365. This could be seen from the significance of more than 0.05 ( $0.365 > 0.05$ ). It could be concluded that H4 in the study was rejected.

**Table 6.** Cross Tabulation of Auditor's Type and Human Capital Disclosure on High IC intensive companies according to GICS in 2014

Category of\_Auditor's Type\* Category of\_HCD Cross tabulation

			Category of_HCD				Total
			Very Low	Low	Medium	High	
Category of_Auditor's type	Non Big 4 KAP	Count	17	49	13	0	79
		% of Total	12.7%	36.6%	9.7%	0.0%	59.0%
pe	Big 4 KAP	Count	8	30	16	1	55
		% of Total	6.0%	22.4%	11.9%	0.7%	41.0%
Total		Count	25	79	29	1	134
		% of Total	18.7%	59.0%	21.6%	0.7%	100.0%

Source: Output of SPSS 2016

Not influencing the type of auditor with the disclosure of human capital, because of the requirements of mandatory disclosure for human capital information made by BAPEPAM for public companies in Indonesia such provisions indicated that the type of auditor did not play a role in the disclosure of human capital made by the company. The reasons could be clarified from Table 6 cross tabulation of auditor type and human capital disclosure which showed no pattern. Most of the companies audited by non-big 4 KAP had a low level of human capital disclosure numbered 49 companies or 36.6% whereas, most of the companies audited by big 4 KAP had low level of human capital disclosure but only 30 or 22.4% only.

Table 3 showed the variable of investment in human capital statistically showed significant result at  $\alpha = 0.05$ , that was 0.023 with t value equal to 2.293 stated with positive sign hence the relationship was positive. It could be concluded that H5 in the study was accepted. Companies that had high-quality employees, encourage management to provide positive signals by disclosing more complete human capital information on the corporate annual report. The goal was that management wanted to show the public and investors that the company had high-quality human resources. Based on table 3, it could be formulated regression equation as follows:

$$\text{HCD} = -38.753 + 2.469 \text{ SIZE} - 0.106 \text{ PROFIT} + 0.035 \text{ AGE} - 1.710 \text{ AUDITOR} + 11.493 \text{ INVS} + e$$

**Table 7.** The Result of Simultaneous Effect Test ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3385.820	5	677.164	7.977	.000 <sup>b</sup>
	Residual	10866.356	128	84.893		
	Total	14252.177	133			

Source: Secondary data processed, 2016

Table 7 above showed the amount of F count value was 7.977 stated with a positive sign then the direction of the relationship was positive. The value statistically showed a significant result at  $\alpha = 0.05$ , that was 0.000 meaning the significance value of 0.000 < 0.05. This showed that simultaneously (together) independent variables had a positive significant effect on the dependent variable.



**Table 8.** The Coefficient of Determination

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.487 <sup>a</sup>	.238	.208	9.21376

Source: Secondary data processed, 2016

Table 8 showed the Adjusted R Square value of 0.208, which meant that 20.8% of human capital disclosure variable could be explained by the variables of company size (SIZE), profitability (PROFIT), company's age (AGE), auditor's type (AUDITOR), and investment in human capital (INVS) while the remaining 79.2% was explained by other variables outside the regression model.

## CONCLUSIONS

The conclusions of this research are the result of simultaneous test shows that company size, profitability, company's age, auditor's type, and investment in human capital together have positive effect on human capital disclosure. The result of partial test shows that company size and investment in human capital that positively affect the disclosure of human capital, while other variables do not affect the disclosure of human capital. This research only uses the population of all High IC Intensive companies according to GICS. Further research can use the population of High IC Intensive companies according to GICS and Low IC Intensive according to GICS. This research is limited to the one-year study sample taken on the Indonesia Stock Exchange. Further research can use a time span of two years or more. Factors affecting the disclosure of human capital in this study are still limited to five independent variables. Further research is expected to be able to add another independent variable affecting the disclosure of human capital.

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