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## The effects of financial health and company characteristics on Integrated Reporting

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**Abstract**

Integrated Reporting up to now is still prepared voluntarily, so that there are still very few companies that implement it. Using secondary data obtained from published annual financial statements of 20 state owned enterprises (SOE's) from 2012-2018 (140 pooled observations), this study aims to predict the effect of financial health indicators and company characteristics related to company's size, age, and type of industry on the extent of Integrated Reporting disclosure of SOE's listed in the Indonesia Stock Exchange (IDX). Through descriptive and inferential statistic performed, this study provides empirical evidence that indicators of financial health and the size of companies have negative effects on the extent of Integrated Reporting disclosure. Variables of age and type of industry do not affect the extent of Integrated Reporting disclosure. These results indicate that, in line with signaling theory, the lower the level of financial health and the smaller the size of the company, the more likely that the company will try to further increase the extent of disclosure in its Integrated Reporting.

**Abstrak**

*Pelaporan terintegrasi hingga saat ini masih disusun secara sukarela, sehingga masih sangat sedikit perusahaan yang bersedia menerapkannya. Dengan menggunakan data sekunder yang diperoleh dari laporan keuangan tahunan dari 20 Badan Usaha Milik Negara (BUMN) tahun 2012-2018 (140 pol observasi), penelitian ini bertujuan untuk memprediksi pengaruh indikator kesehatan keuangan dan karakteristik perusahaan, terkait ukuran, umur, dan jenis perusahaan/industri, pada luas lingkup pengungkapan Pelaporan Terintegrasi BUMN yang terdaftar di Bursa Efek Indonesia (BEI). Analisis yang dilakukan pada penelitian ini meliputi analisis statistik deskriptif dan analisis inferensial. Penelitian ini memberikan bukti empiris bahwa indikator kesehatan keuangan dan ukuran perusahaan berpengaruh negatif terhadap luas pengungkapan Pelaporan Terintegrasi. Variabel umur dan jenis perusahaan/industri tidak berpengaruh terhadap luas pengungkapan Pelaporan Terintegrasi. Hasil riset ini mengindikasikan bahwa, sejalan dengan teori pensinyalan (signaling theory), semakin rendah tingkat kesehatan keuangan dan semakin kecil ukuran perusahaan, maka perusahaan akan semakin meningkatkan cakupan pengungkapan dalam Pelaporan Terintegrasi dengan tujuan untuk meningkatkan nilai perusahaan.*

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## 1. Introduction

The concept of financial reporting has developed dynamically in the last 20 years. Its development is considered to be faster than its direct impact on stakeholders, the social environment, and even the global environment. Reporting developments are not only focused on financial performance, but also on the delivery of integrated non-financial information (Integrated Reporting). This Integrated Reporting concept emerged after the introduction of triple bottom line and sustainability reporting concepts. The triple bottom line concept was introduced by John Elkington (1988) and includes three main pillars, namely people, planet, and profit. The three pillars are a measure to assess the company's success with three criteria, namely economic, environmental and social. Based on the triple bottom line concept, a company should prioritize the interests of stakeholders rather than shareholders. In this context, companies need to make sustainability reporting as a form of corporate commitment to sustainable economic development by taking into account corporate social responsibility that focuses on balancing economic, environmental and social aspects.

Currently, companies that have implemented sustainability reporting still present their annual and sustainability reports separately. On the one hand, the annual report which is part of financial reporting only focuses on providing information about a company's financial figures and indicators (Singh et al., 2019). On the other hand, Financial Services Authority Regulation (POJK) Number 51/ POJK.03 of 2017 states that a Sustainability Report is a report that is announced to the public that contains economic, financial, social and environmental performances of a Financial Service Institution (LJK), Issuer, and Public Company in running a sustainable business. Thus, the two forms of disclosure have different useful values for decision makers. This separation often confuses users of financial statements (such as investors and creditors) because the

information presented is often deemed unrelated (Berndt et al., 2014). As a result, it is difficult for the users of financial statements to find the required information. Until now, the separation of the two reports still reap pros and cons from various parties (Adriana, 2014). Hence, integration is applied into the financial reporting process (Integrated Reporting). Integrated Reporting seeks to provide information on corporate sustainability and financial performance in an integrated manner to make it more informative and easier to understand (IIRC, 2013; PWC, 2013; Baboukardos & Rimmel, 2016). Price Waterhouse Coopers (2013) explains that through Integrated Reporting, accounting information is expected to be of higher quality when used by interested parties. For example, when investors' attempt to make decisions when determining the allocation of capital, Integrated Reporting is essential in supporting the clarification of the information content of both financial and non-financial information.

Until now, integrated reporting is still done voluntarily and very few companies implement it. The reason for the lack of Integrated Reporting (*IR*) disclosure practices is revealed by Sukhari & de Villiers (2018) who state that *IR* is currently not required in any law around the world yet, but *IR* is often adopted as part of voluntary disclosure in the implementation of corporate governance. This poses the questions of whether the adoption of Integrated Reporting disclosure practices is really needed by stakeholders in decision making, and whether shareholders are willing to pay more for Integrated Reporting (Singh et al., 2019). Wuttichindanon (2017) revealed that there are two types of companies pressured to consider the extent of disclosure that must be presented, which are large companies with great public attention and companies that are in a mature phase. State-Owned Enterprises (SOEs or BUMN) are classified as companies with great public attention, so the pressure to consider the extent of disclosure is quite large. This is because the companies

are expected to be more transparent and committed to improving the quality of life of the community.

Financial statements issued by SOEs aim to see the company's financial condition and provide information about the company's health in order to maintain its existence and competition. The importance of assessing the health level of SOEs is also stated in the Decree of the Minister of State-Owned Enterprises (SOE) No. Kep100/MBUMN/2002 on the provisions and procedures for assessing the health level of SOEs which includes financial, operational and administrative aspects. Most state-owned enterprises have implemented sustainability reporting and are expected to shift to Integrated Reporting. Several SOEs in Indonesia that have started implementing Integrated Reporting include PT. Timah, PT. Telkom, and PT. Pertamina EP.

Not only financial health can affect the extent of Integrated Reporting disclosure, but company characteristics can also affect the extent of the disclosure. The research results by Buitendag et al. (2017) show that the type of industry, the size and profitability of the entity, along with the composition of the audit committee members have an effect on the quality of Integrated Reporting disclosures. Research by Buitendag et al. (2017) still focuses on analyzing the effect of one financial variable as measured by profitability's effect on the quality of Integrated Reporting disclosures. Therefore, this study conducts further analysis on financial performance effect which indicates the overall health level of a company. Previous research regarding the relationship between company characteristics including size, company age and financial performance is still associated with the extent of social responsibility disclosure (Maigness, 2006; Aras et al., 2010; Rouf, 2011; Kansal et al., 2014) and have not tested the relationship between the variables and the extent of Integrated Reporting disclosure.

This study also seeks to provide information for current and prospective investors in order to evaluate the quality level of Integrated Reporting

in SOEs. The evaluation is done through analysis of company characteristics and financial performance as measured by the level of financial soundness. This research has three objectives. First, evaluating financial performance, especially health conditions in the financial aspects of SOEs listed on the IDX. Second, knowing the extent of disclosure based on the Integrated Reporting (IR) index on SOEs listed on the IDX. Third, predicting the influence of SOEs' financial health indicators and company characteristics related to size, age and type of industry on the extent of disclosure of IDX-listed SOEs' Integrated Reporting.

## **2. Hypotheses Development**

### **Financial health and Integrated Reporting disclosure**

Buitendag et al. (2017) reveals that entities with higher growth opportunities tend to disclose more information than entities with lower growth opportunities. This is because entities with better growth certainly have better financial performance. Apart from that, these entities will also require huge resources in the near future. These entities are likely to adopt better governance mechanisms through better and more transparent disclosure practices to protect investors through disclosures of both financial and non-financial performance. Good governance and protection of minority shareholders can lower the cost of capital, so investors are more likely to finance this type of entity. This is in line with agency theory, in which managers as agents are tasked with improving companies' financial performance to maximize firm value received by both shareholders and other stakeholders (Shehata, 2014).

In signaling theory, companies with good performance will be able to provide positive signals for investors. Therefore, company performance, especially financial performance, is a determining factor for the level of disclosure that is presented

by the company. Companies with good financial performance will certainly disclose more relevant, better quality, and more amount of information than companies with poor financial performance. Companies with poor financial performance strive to hide their performance from stakeholders and avoid risks that may jeopardize their position. Al-Sartawi & Reyad (2018) also reveal that signaling theory assumes that companies that are efficient in managing their financial performance tend to provide better and more relevant information to investors in order to obtain capital than companies that are less efficient.

In accordance with agency theory, management as an agent in a company will strive to improve financial performance to increase incentives. One of the ways they do this is by disclosing more detailed information in order to gain the trust of investors. In addition, when the company's financial performance becomes favorable and profitable, the company will be subject to public scrutiny, leading to the requirement of better governance mechanisms implementation. One way to do this is through voluntary disclosure to avoid the potential issuance of external regulation.

The research results of Buitendag et al. (2017) show that entities that are more profitable and displays a high level of cash flow management tend to produce Integrated Reporting of higher quality. However, the relationship between financial performance and the extent of disclosure is still a matter of debate in research in this area. The results of Aras et al. (2010) study reveal that there is no relationship between the company's financial performance and the company's extent of CSR disclosure.

$H_1$ : financial health affects the extent of Integrated Reporting disclosure

### **Company size and Integrated Reporting disclosure**

Buitendag et al. (2017) states that larger entities need to disclose more information because they

receive greater public attention, carry out more activities and make bigger impacts on society and the environment, and therefore need to show greater social responsibility and enhance their corporate image due to their higher visibility. Larger entities also experience more pressure from different stakeholder groups to disclose their social activities. In other words, the size of the entity will affect the extent of corporate social responsibility disclosure, which is part of the integrated report. Several research results indicate that larger entities disclose corporate social responsibility information at a greater level than that of smaller entities (Aras et al., 2010; Kansal et al., 2014). However, Rouf (2011) reveals different results where the firm size does not have a significant effect on the level of corporate social responsibility disclosure.

In addition, the research results of Buitendag et al. (2017) show that the type of industry of the entity, the size and profitability of the entity, and the composition of the audit committee members have an effect on the quality of Integrated Reporting disclosures. On the other hand, Rouf (2011) revealed that managers of large companies are more aware of the benefits of full disclosure of information compared to small companies. Small companies tend to be vigilant when making full disclosures, because they fear that other companies will imitate them and may jeopardize the company's position.

In previous studies, the size of companies' influence on the extent of CSR disclosure were analyzed. Hence, company size is also thought to be related to the extent of disclosure in Integrated Reporting. This is in line with the content in the Integrated Reporting which also includes social aspects and the impact of the entity's policies on the environment and society or other stakeholders. Bigger sized companies have bigger impacts on stakeholders than that of companies with a smaller size. Furthermore, Jamal & Ghani (2016) research states that companies that have a larger size will disclose more information related to Integrated Reporting than that

of small companies. However, there are different results that come from the research of Albitar (2015). The existence of these different research results prevents the implementation of a one-way hypothesis.  $H_2$ : company size affects integrated reporting disclosure

### Company age and Integrated Reporting disclosure

Older companies are more experienced and therefore more likely to include more information in their annual reports to enhance their image and reputation in the market. Older companies are more likely to possess a good position in the industry. The implication of this is that older companies tend to have a competitive advantage both in terms of economy and information disclosure. Kansal et al. (2014) states that the length of time since a company had been established determines the extent of the voluntary disclosure presented by the company to stakeholders. Therefore, companies with an older age are more experienced in responding to the reactions of their stakeholders through the disclosures presented in their reporting from time to time as anticipatory action (Birjandi et al., 2015).

The research results of Magness (2006) reveal that companies that are able to successfully maintain their image in the public eye disclose more information than those that are not. A company's high level of performance in maintaining its image in the public eye, of course, cannot be achieved in a short period of time. It takes a long time for a company to build an image and establish good relationships with its stakeholders. This, of course, has implications on increasing the company's experience from time to time to provide better treatment for its stakeholders through information disclosure. Therefore, companies that have been established for a long time are able to present better quality of Integrated Reporting compared to newly established companies.

$H_3$ : company age affects the extent of integrated reporting disclosure

### Industry type and Integrated Reporting disclosure

The research results of Buitendag et al. (2017) show that an entity's type of industry has an effect on the quality of disclosure in Integrated Reporting. In addition, this study also reveals that companies' business activities that have an impact on the environment will certainly lead to more detailed integrated reports compared to entities whose business activities do not affect the environment. The results of research on the correlation between types of industry and the extent of disclosure were also revealed by Kansal et al. (2014), which states that the relationship between types of industry and the extent of social responsibility disclosure is the result of consumer perceptions and pressure from the government.

$H_4$ : Industry type affects the extent of integrated reporting disclosure

## 3. Method, Data, and Analysis

This research is considered as an explanatory research, in which the explanatory nature carried out in this study is causal explanatory, which intends to explain the influence of an SOE's financial health indicators, size, age, and the type of the SOE's industry on the extent of SOE's Integrated Reporting disclosure. Before explaining this effect, an analysis regarding the health condition of the SOE's financial aspects which refers to the regulation of the Minister of SOE is carried out.

The focus of this research is the financial performance of SOEs in Indonesia. The study population is all state-owned enterprises listed on the IDX, totaling 20 companies. The sampling method used is non-probability sampling with judgment sampling. The judgment sampling method involves choices from subjects who have the most advantageous place or the best position to provide the required information (Sekaran, 2002). The criteria used in sample selection are: (1) SOEs listed on the IDX

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in the 2012-2018 period; (2) SOEs whose annual financial statements and independent auditor reports are completely available on the database of IDX. Based on these criteria, the number of samples used in this study is 20 SOEs in a seven-year period of observation (the total number of observations is 140).

The data used in this research is secondary data, which contain financial data obtained from published annual financial statements of SOEs. This study uses pooling data, a combination of inter-company data (cross-sectional) and time-series data, with an analysis period of 2012–2018. The dependent variable in this study is Integrated Reporting. The scope of Integrated Reporting consists of nine elements: an overview of the organization and the external environment, corporate governance, identification of stakeholders, business models, risks and opportunities, strategy and resource allocation, performance, outlook, and presentation basis, which are added with qualitative characteristics of reports. This criterion is called the Integrated Reporting Checklist issued by the IIRC. The scale used is the ratio scale, which is calculated from the number of disclosures, divided by the total number of criteria.

The independent variable in this study is the health indicators of SOEs. This variable is calculated using ordinal scales, based on the criteria used in the Decree of the Minister of SOE No. Kep100/MBU/2002. The determination of the scale is carried out in two stages, firstly calculating the health assessment based on financial aspects and secondly drawing conclusions regarding the health level of SOE by giving a scale of 1-9 (unhealthy category (C) to healthy category (AAA)). The financial aspects assessed in this study are Return on Equity (ROE), Return on Investment (ROI), Cash Ratio, Current Ratio, Collection Periods, Inventory Turnover, Total Asset Turnover, and Capital Ratio to Total Asset.

In addition, there are also other independent variables, which include size, age and type of in-

dustry. Company size is measured by the size of the SOEs based on the total of assets owned. Company age is calculated based on the length of time from the SOE's establishment until the year of sampling. Type of Industry is the type of the SOEs' business operation, such as the field of natural and non-natural resource management.

The data analysis technique in this study is carried out by analyzing descriptive statistics and inference. Descriptive statistical testing is carried out first to analyze the general description of data related to the health condition of the SOEs, the extent of Integrated Reporting disclosure based on the IIRC index, size, age, and type of SOEs industry. Descriptive statistical analysis was carried out to check the frequency analysis, central tendency and dispersion (Hartono, 2004).

Furthermore, inference statistical testing is carried out to draw conclusions based on research data. The data used in this research is panel data or pooled data. Panel data is data that is combined between cross section data and time series data. In this data, there are several methods that can be used to estimate the regression model, namely pooling least square (Common Effect), fixed effects approach (Fixed Effect), and random effects approach.

The first step of the data analysis is selecting the best model between common effect, fixed effect and random effect. Determination of the best model between common effect and fixed effect is done by the Chow Test, followed by the Hausman Test. The Hausman Test is conducted to select the best model between fixed effect and random effect. Data analysis in this study is assisted by STATA 12 statistical software. After determining the best model for data estimation in this study, hypothesis testing is then conducted. Classic assumption tests on panel data are also carried out, which include autocorrelation and heteroscedasticity tests. Multicollinearity testing is not carried out because panel data usually presents very little collinearity between variables so that there is low possibility of multicollinearity (Gujarati, 2003).

**Table 1.** Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
<i>IR</i>	140	80.00	100.00	94.2857	4.0381
<i>FH</i>	140	4.00	9.00	6.5714	1.2241
<i>SIZE</i>	140	18.53	32.45	25.5656	4.3888
<i>AGE</i>	140	14.00	201.00	72.9000	43.2219
<i>TYPE</i>	140	.00	1.00	.3500	.4786
<i>Valid N</i>	140				

The research model used in this study is described in the figure that shows the influence between research variables. In this study, the research model used to describe the influence of independent variables (financial performance, size, age, and type of industry) on the dependent variables (extent of disclosure of Integrated Reporting) is described in accordance with the research of Kansal et al. (2014), Jamal & Ghani (2016), Buitendag et al. (2017).

The empirical model of this research is formulated as Eq. (1):

$$IR = \beta_0 + \beta_1 FH + \beta_2 SIZE + \beta_3 AGE + \beta_4 TYPE + \varepsilon \dots \quad (1)$$

Note: *IR*= Integrated Reporting Disclosure;  $\beta_0 - \beta_4$  = Regression Coefficient; *FH*= Financial Health; *SIZE*= SOE's Size; *AGE*= SOE's Age; *TYPE* =SOE's Industry Type;  $\varepsilon$ =error term

## 4. Results

### Descriptive statistic

Descriptive statistical testing aims to find a general overview of the data. The carried-out analysis includes analysis of frequency, central tendency and dispersion. Table 1 below presents the result of descriptive statistical analysis.

Based on the table above, it can be seen that the average financial health condition of SOEs is 6.5. This figure indicates that the average financial health condition of the observed SOEs shows a good level of financial health with a conversion value of A, but

based on the minimum value there are still some that experience an unhealthy condition (B) with a value of 4. The average of disclosure level for SOEs' Integrated Reporting is 94 percent. This means that almost all components of Integrated Reporting based on IIRC index have been disclosed by the SOEs. The table also shows that the average age of the SOEs is 72.9 years; the average size is 25.56 (Ln of total assets). Furthermore, by types of industries, there were only 7 companies which operate business related to mining or natural resources management, namely Aneka Tambang (ANTAM), Perusahaan Gas Negara (PGN), Krakatau Steel (KS), Bukit Asam (BA), Semen Baturaja (SB), Semen Indonesia (SI), and PT. Timah (TIMAH). The rests (13 companies) are of non-natural resources business.

### Result of estimation model selection

The data used in this study is panel data, which requires to be analyzed using Chow Test to determine the selection between the utilization of OLS and fixed effects. The following are the results of the Chow Test.

**Table 2.** Chow test result

F-TEST	SIG Value
F(6, 129) = 0.05	0.9995

Based on the table above, it can be seen that the significance value of the F-test is 0.9995. If *P*

Value (Prob> F)> Alpha 0.05 then  $H_0$  is accepted, meaning that the best choice of model for this research data is Ordinary Least Square. Hence, OLS model is selected for further data analysis in this research.

### Hypotheses testing

The panel data used in this study is balanced panel data which indicates that all the SOEs are of the same years of observation. Before regression analysis is done, all classical assumption test thresholds have been met. Regression analysis is performed based on the empirical model specified for each hypothesis. The results of the t test in is presented in Table 3.

## 5. Discussion

### SOE financial health indicators affect the extent of Integrated Reporting disclosure

The results of the regression analysis on the regression model as presented in Table 3 show that the *FH* (Financial Health) has a negative effect on the extent of Integrated Reporting disclosure. This can be seen from the significance and beta values which show negative numbers. Thus, the test results **support the first hypothesis ( $H_1$ )**. Financial health indicators have a negative effect on the extent of Integrated Reporting disclosure. This means that the lower the level of financial health, SOEs will tend to increase the extent of Integrated Reporting disclosure. This is based on signal theory, which implies that a company in a growth phase in terms of financial performance will try to provide a

positive signal to potential investors through higher level of disclosure in Integrated Reporting to create increased corporate value.

This is consistent with signaling theory. The results of this study are in line with the results of the research by Ibrahim (2014) which reveals that the lower the indicators of financial health which are proxied by profitability, the higher the company's efforts to provide voluntary disclosure compared to companies with high profitability. Furthermore, on the other hand, the results of this study also explain that when financial health conditions are getting better, companies will no longer expand the disclosure of Integrated Reporting. In other words, the higher the level of financial soundness, the lower the extent of *IR* disclosure.

This could be due to the improvement of the company's financial health performance. Such companies feel they have a competitive advantage in their industrial sector, so that an increase in the extent of disclosures in *IR* is considered no longer an addition to company value. This is also revealed in the mean difference test graph which displays that the extent of *IR* disclosure increases when an SOE has Unhealthy financial health index (BB), but then decreases when it is in the Healthy criteria (A and AA), and then increases again when the SOE has been at the highest level of Healthy criteria (AAA).

### Company size affects the extent of Integrated Reporting disclosure

Table 3 reveals that the size of an SOE, which is proxied by Ln Asset, has a negative effect on the extent of Integrated Reporting disclosure. Thus,

**Table 3.** Hypotheses testing (t-test)

Variable	BETA	Sig. Value	Conclusion
<i>FH</i> → <i>IR</i>	-0.009	0.001	$H_1$ is accepted
<i>SIZE</i> → <i>IR</i>	-0.002	0.000	$H_2$ is accepted
<i>AGE</i> → <i>IR</i>	-1.140	0.987	$H_3$ is rejected
<i>TYPE</i> → <i>IR</i>	0.001	0.839	$H_4$ is rejected



these results **support the second hypothesis ( $H_2$ )**. This means that the lower the size of an SOE, the SOE will tend to further increase the extent of Integrated Reporting disclosure. This is in line with the results of the previous hypothesis test, and further confirms that in signal theory companies that are in a growing phase in terms of company size will try to provide a positive signal to potential investors through broader disclosure in Integrated Reporting for creating increased corporate value. This is consistent with signalling theory.

The results of this study are in line with the results of Rouf (2011) which revealed that managers of large companies are more likely to realize greater potential benefits from disclosure than smaller companies, which are more likely to feel that full disclosure of information can harm their competitive position. However, the results of this study contradict the results of research by Kansal, et al. (2014) which state that larger entities need to disclose more information because they receive more attention from the general public.

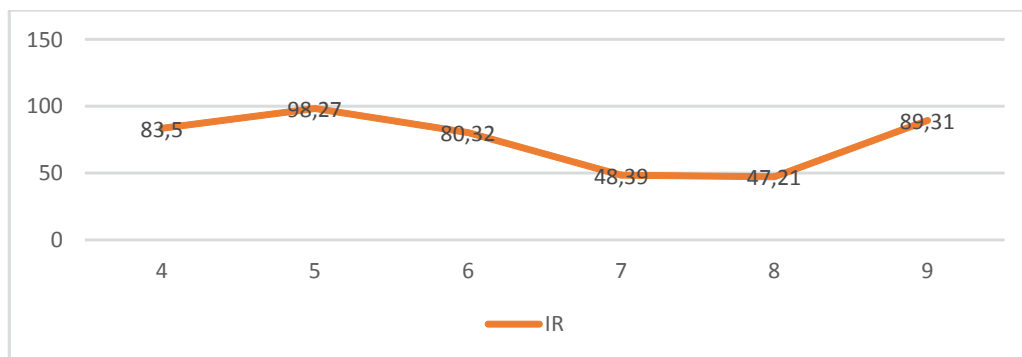
**Company age affects the extent of Integrated Reporting disclosure**

The results of the regression analysis in Table 3 show that the significance value is more than 0.05,

this means that the age of an SOE has no effect on the extent of Integrated Reporting disclosure. Thus, based on these results, it can be concluded that  **$H_3$  is rejected**. The results of this study are in line with the results of research by Alsaeed (2006) which states that company age does not have a significant effect on increasing the extent of disclosure made by the company. Uyar et al. (2013) also revealed the same thing where their research was conducted on companies listed on the Turkish Stock Exchange. The results of the research by Uyar et al. (2013) show that there is no significant correlation between company age and the extent of disclosure made by the company. Companies that have a relatively new listing age, of course, disclose more information to reduce skepticism and high-risk assumptions from potential investors compared to companies that have been listed on the stock exchange for a long time. Therefore, older age of a company does not necessarily increase the extent of company disclosure both in terms of voluntary disclosure and Integrated Reporting.

**The type of industry has an effect on the extent of Integrated Reporting disclosure**

The results of the regression analysis on the regression model as presented in table 3 show a sig-



Note: 4: Less Healthy (B); 5: Less Healthy (BB); 6: Less Healthy (BBB); 7: Healthy (A); 8: Healthy (AA); 9: Healthy (AAA)

**Figure 2.** Financial Health mean difference test with *IR* Disclosure

nificance value of 0.755, indicating no influence of the type of industry on the extent of Integrated Reporting disclosure. Thus, based on these results, it can be concluded that  $H_4$  is rejected.

The results of this study are in line with Alsaeed (2006) which states that the type of industry does not have a significant effect on the extent of company disclosure. The type of industry has no effect on the extent of Integrated Reporting disclosure. It may be due to the absence of regulations or policies that encourage companies to compile Integrated Reporting in certain industrial sectors. Hence, the disclosure of Integrated Reporting that is carried out by most companies in Indonesia is still in the form of voluntary disclosure. The results of this study are in line with An et al. (2011) which reveals that the type of industry does not affect the extent of disclosure and the quality of disclosure made by the company.

According to Roman et al. (2019), the impact of industry on the extent of company disclosure could be influenced by a country's culture related to transparency. When a country places more emphasis on transparency, all companies in all industrial sectors tend to try to show a higher level of disclosure compared to countries that do not emphasize transparency of business information. However, companies with a strong transparency culture, produce information-dense and complex reports but are commonly less understandable and the information presented have low usefulness (Roman et al., 2019).

## 6. Conclusion

This study aims to predict the effect of financial health indicators and company characteristics related to the size, age and type of SOE industry on the extent of Integrated Reporting disclosure of SOEs listed on the IDX. Based on the analysis, the obtained empirical evidence shows that the indicators of financial health and the size of SOEs have a nega-

tive effect on the extent of Integrated Reporting disclosure. Based on these results it can be interpreted that the lower the level of financial health and size of an SOE, the SOE will further increase the extent of Integrated Reporting disclosure. This result supports the signalling theory which states that companies that are in a growing phase will try to provide a positive signal to potential investors through broader disclosure in Integrated Reporting with the aim of creating increased corporate value. However, the age of SOEs and their type of industry do not affect the extent of Integrated Reporting disclosure. This shows that companies that have been listed on IDX for a shorter period disclose more information to reduce scepticism and high risk assumptions from potential investors compared to companies that have been listed for a longer period. The age of a company does not necessarily increase the extent of the company's disclosure, both in terms of voluntary disclosure and Integrated Reporting. Furthermore, the type of industry has no effect on the extent of Integrated Reporting disclosure. This could be due to the absence of policies or regulation on mandatory disclosure that obligates companies to prepare Integrated Reporting.

This study has several limitations. First, the health of SOEs is assessed only from the financial aspect because of limited obtained data. This does not reflect operational and administrative aspects. Further research is, therefore, expected to be able to calculate the health of SOEs by considering other aspects (operational and administrative) as well so that the obtained results will be more comprehensive. Second, this study still measures the extent of Integrated Reporting disclosure based only on quantitative measures, it has not measured the quality of Integrated Reporting. Future research is, therefore, expected to consider this matter by classifying the depth of information obtained in the company's annual report, so that it does not only focus on measuring the existence of disclosure information components.

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