

# Does Sustainability (Reporting and Three Bottom Lines) matter: The Facts from Energy Sector Companies Listed on The Indonesian Stock Exchange 2017-2021

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**Abstract.** Investors and other stakeholders request more comprehensive information about the company's possibilities for long-term value creation and their broader social impact to comprehend long-term success and future creation opportunities better. This study aims to ascertain the impact of sustainability reporting, which includes economic, environmental, and social disclosures, on corporate performance as measured by the market value dimension using Tobin's Q. Purposive sampling was used in this study to collect secondary data from each company's annual reports and sustainability reports. In this study, the Ordinary Least Squares approach is employed. According to the findings, Social Disclosure greatly impacted firm performance, while Environmental Disclosure and Sustainability Reporting had no significant positive impact. Based on the result, it can be concluded that if the activities performed cannot be regarded as firm assets, investment in this disclosure instrument has not significantly increased the company's worth. However, Economic Disclosure had a considerable favourable impact.

## 1 Introduction

The view of the linear economic model is changing towards a more circular one. This is due to the massive increase in awareness of environmental, social and sustainable development issues. In a linear economic system, goods are produced, used, and disposed of, where the flow has a clear beginning and end. Meanwhile, the circular economy works in a very different way. The production process of a product in a circular economy is designed in a way that allows materials that have been processed to be reused. Currently, a linear economy has a significant and wide-ranging negative impact on the environment. Based on the report of UNEP in 2021, resource extraction has increased threefold since 1970 and is expected to increase by another 70% by 2050, with the effects of climate change, biodiversity loss, and pollution being seen on a global scale.

The only focus on making money ultimately results in substantial losses for all parties involved, including the corporation, the government, investors, and clients. The ecological system will deteriorate due to greenhouse gas emissions, which will result in more extreme weather, natural disasters, and even drought. As a result, the government, financial authorities, and even stock exchanges give organizational performance more consideration as compared to its non-financial effects. In order to meet the expectations of stakeholders and the general public, sustainable growth, which calls for disclosure of not just financial but also social and

environmental issues, becomes a responsibility. Therefore, in order to provide stakeholders and society with social benefits, businesses must restructure their business processes (Ehsan et al., 2018).

As a result, the public is paying more attention to how businesses interact with society, and reporting requirements are growing. Investors and other stakeholders are requesting more comprehensive information about the company's possibilities for long-term value creation and their broader social impact, to better comprehend long-term success and future creation opportunities. Based on John Elkington's Triple Bottom Line Theory, a business idea that mandates organizations measure their social and environmental effect rather than putting all of their attention on maximizing profits. Profit, People, and Planet are the "Three Ps" that Elkington boils it down into. Simply put, profit is a factor in how the business makes money. Companies may positively influence social life both within and externally by focusing on people. world is the last element of how the commercial operations of the organization can benefit our planet.

There is mounting proof that how well a firm manages environmental, social, and governance (ESG) challenges and other non-financial issues is correlated with its financial performance. Investors nowadays are concerned with whether executives are managing their companies with these concerns in mind. When businesses report on their ESG-related actions, they typically maintain a long-standing practice that entails creating large sustainability

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reports and completing mountains of questionnaires: they address the varied interests of their numerous stakeholders.

## 2. Literature Review

### 2.1 Triple Bottom Line

Elkington's concept of the "triple bottom line," which he coined in 1997 and stands for "People, Planet, and Profit," has gained traction across the globe. The terms "TBL" and "sustainability" are frequently used in the literature to refer to similar topics. This approach, which is based on three crucial aspects of sustainable development—environmental quality, social fairness, and economic benefits—is the foundation of a long-term plan for businesses making the switch to sustainability. Furthermore, the overlapping of these three aspects may be shown in the case of TBL and sustainability. To put it another way, a company's whole performance must be evaluated using the total contribution of economic wellbeing, profit, environmental quality (of the planet), and social capital (of the people) (Zak., 2015).

The following aspects of its scope will help you comprehend the dimensions of TBL in a thorough and thorough manner: First, dimensions Beyond the organization's financial performance and financial notions like sales growth, cash flow, shareholder value, etc., the economic dimension (profit) focuses on the value the organization creates (Correia, M., 2019). Additionally, this aspect must be viewed within the context of sustainability as a financial gain that the neighbourhood can benefit from. Because it only includes the internal revenues generated by the business or organization, this is frequently misunderstood. As a result, social benefits cannot be excluded from a typical definition of a company's financial success (Onyali, C., 2014). 2) The social component (people) considers how the business affects community welfare, including the welfare of its workers and the community, as well as how well it can deal with issues like community or educational support (Correia, M., 2019). Deeper still, TBL companies create a social structure where employee wellbeing, company success, and shareholder interests are all intertwined.

Companies using TBL aim to help a variety of stakeholders without damaging or exploiting any one of them. (Onyali, C., 2014) and 3) The environmental dimension (Planet) pertains to organizational initiatives to reduce ecological effect through minimizing environmental consequences, including energy use and waste production (Correia, M., 2019). TBL-enabled businesses will make an effort to avoid creating harmful or hazardous items, such as guns, toxic chemicals, or batteries that contain hazardous heavy metals (Onyali, C., 2014).

### 2.2 Corporate Social Responsibility

In one of its publications, the World Business Council for Sustainable Development (WBCSD) defines corporate social responsibility (CSR) as a business commitment to

continue acting ethically, operating legally, and contributing to economic growth, as well as improving the quality of life for employees and local and global communities. In accordance with Howard Bowen's (Hamidu, et al., 2015) explanation of the first and most well-known definition of CSR, which asserts that employers have a duty to take actions or make decisions that are consistent with societal aims and values. According to (Kotler & Lee., 2004) CSR is a commitment to improve the welfare of society through free business practices and the contribution of company resources. According to Porter and Kramer in (Latapí, et al., 2019) CSR is an important step in business evolution and defines it as operating policies and practices that increase a company's competitive advantage while advancing economic and social conditions in the community where the company operates. The creation of shared values focuses on identifying and expanding the relationship between social and economic progress. CSR is, in essence, the idea of accomplishing human development in a way that is inclusive, thorough, and secure. CSR cannot be viewed as a voluntary contribution to society, not even in its implementation. For sustainable development to continue, businesses must contribute to society. The Law of the Republic of Indonesia Number 40 of 2007 concerning Limited Liability Companies, which defines Social and Environmental Responsibility (CSR) as the Company's commitment to participate in sustainable economic development in order to improve the quality of life and a beneficial environment, for the Company itself, the local community, and society at large, includes CSR. This is the first time that CSR has been included in a law in Indonesia.

### 2.3 Sustainability Report

A company's practice of transparently exposing its environmental, social, and economic implications is known as sustainability reporting. This practice allows for both good and negative impacts to be seen on the sustainable development agenda. A sustainability report includes both financial and non-financial information that is just as reliable as financial information, according to John Elkington in (Susanto, Y. K., & Tarigan, 2013). This data includes social and environmental initiatives that support business growth while upholding CSR ideals. The Financial Services Authority laws, namely POJK Number 51 of 2017, say that the Sustainability Report is essentially a requirement for financial services organizations, issuers, and public enterprises. The business now owes obligations to the law and its constituents. According to (Sari, N. 2014), a sustainability report is a summary of the initiatives that businesses have undertaken to address concerns of social and environmental impact. The report is a crucial component of the annual report, which is presented by the directors to the shareholders' general meeting (GMS).

### 2.3.1 Sustainability Report Standard

There is no single benchmark used to measure a sustainability report's effectiveness. Assessment frameworks were developed by several organizations, each having their own traits. The International Organization for Standardization (ISO), the Sustainability Accounting Standards Board (SASB), the Principles for Responsible Investment (PRI), the Global Reporting Initiative (GRI), and the UN Global Compact are five standards that are frequently used. However, it is possible for businesses to use two or more standards concurrently. The GRI reporting guidelines are by far the most frequently utilized standards. The GRI G3 Guidelines, which are now in effect, are used by the majority of businesses to create their sustainability reports (Sari, N. 2014). Environmental Reporting Organizations can reveal both their good and negative impacts on the environment, society, and the economy by using the GRI Standards as a reporting platform. These guidelines are intended to be globally relevant to all companies of all sizes and in all industries.

### 2.3.2 Principles of Sustainability Reporting

The Global Report Initiative's most recent set of standards, the GRI G4 standards, which were released in 2013, includes a summary of its guiding principles. Companies must follow these reporting guidelines while creating their sustainability reporting in order to attain sustainability transparency. These ideas are split into two categories: (1) Report Content Definition Principles and (2) Report Quality Definition Principles.

## 2.4 Sustainability Report Disclosures

The product of the sustainability report, according to (Girón, A. et al. 2021), is the disclosure of three primary dimensions in compliance with the GRI G4 Guidelines specified in the book GRI 101 Foundation, namely:

### 1. Economic

Economic indicators offer information on the impact of various corporate actions on the financial health of stakeholders at different levels. This component focuses on demonstrating the company's positive and negative impact on local, national, and international economic 2. 2. Environment

Environmental indicators cover the impact of various business practices on ecosystems in the soil, water, and air as well as the surrounding environment. This indicator focuses on analyzing outputs such as solid waste, water waste, and emissions as well as performance linked to inputs used, such as energy, water, and materials.

### 3. Social

The different effects of the company's operations on the community in the region where the company operates are disclosed as social indicators. In addition to the outside world, this indicator concentrates on internal business practices such employee interactions, training and education, equal opportunity, and workplace diversity.

## 2.5 Energy Sector

The energy sector, according to Morgan Stanley Capital International's definition of it in the 2020 Global Industry Classification Standard (GICS), is any industry involved in the provision or production of energy. Companies involved in oil and gas drilling, refining, and exploration and development are part of the energy sector or industry. The broad term "energy sector" refers to the intricately intertwined network of businesses that are either directly or indirectly engaged in the production and distribution of the energy required to fuel the nation's economy and support its means of production and transportation. Companies in the energy sector work with a variety of energy sources. Energy suppliers are typically divided into two categories: (1) Non-Renewable, which includes petroleum products, natural gas, gasoline, diesel, heating oil, and nuclear; and (2) Renewable, which includes hydroelectric power, biofuels like ethanol, wind power, and solar power.

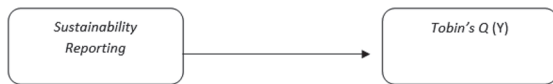
## 2.6 Company Performance

Economically speaking, a company's performance measures how well it can employ both human and material resources to meet its goals. Firm performance is an important dimension and is frequently used as the dependent variable in research on strategic management. Although they are important, there is hardly any agreement on their definition, dimensions, and measurement, which hinders research progress (Selvam et al., 2016).

To gauge a company's performance, however, a number of factors might be considered. (Mihaela, 2017) claims that profitability, growth, market value, return on shareholders, economic value-added, customer happiness, and stakeholder expectations may all be used to define and measure a company's performance. In accordance with (Selvam, et al., 2016), who developed a dimension table with multiple indicators for each dimension that can be used to assess corporate performance.

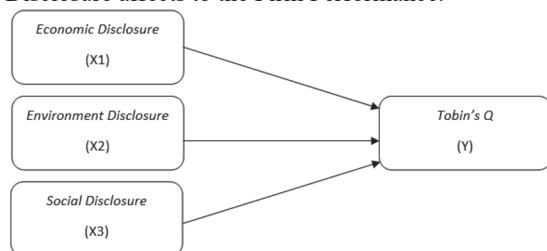
The impact of sustainability reporting on the company performance of 50 public businesses that were registered on the Pakistan Stock Exchange from 2013 to 2017 was investigated by Hongming, et al. (2020) based on the previous studies. The two research models employed in this study. First, it is important to look at the overall impact of sustainability reporting, which uses environmental, health & safety, and social indicators, on firm performance. The study's findings demonstrate that sustainability reporting significantly improves corporate performance. Similar to (Akbulut, D. H., & Kaya, I. 2019), who looked at 155 automakers from 20 different nations. The independent variable in this study is the GRI Index, and the dependent variable is Tobin's Q. The findings of this study show that sustainability reporting has a sizable positive impact on firm performance. According to research (Puspitandari, J., & Septiani, A. 2017) looking at Indonesian banking organizations, utilizing a proxy return on assets (ROA) has a beneficial impact on firm performance. According to research by (N. Burhan, A. H. & Rahmanti, W. 2012) that looked at 32

businesses listed on the IDX and found that sustainability reporting has a beneficial impact on company performance (which is also reflected by the return on asset (ROA) indicator. Another study by (Felita, A. & Faisal, 2021), which used the Tobin's Q indicator to analyze the banking industry listed on the IDX between 2016–2019, demonstrates that sustainability reporting has a favorable impact on business performance. Research hypothesis therefore can be depicted in the following figure (H<sub>1</sub>):



**Fig. 1.** Hypothetical Model

Sustainability Report affects to the Firm Performance. According to research from Puspitandari, J., & Septiani, A. (2017), there is a beneficial correlation between economic indices and corporate performance. According to Wijayanti, Rita (2016) and Sitepu (2009), economic indicators have an impact on firm performance. Comparable to (Dura, et al., 2021) but slightly different in that it demonstrates a positive association between economic indicators and firm performance but a negative relationship with firm value. Research hypothesis (H<sub>2</sub>): According to research by Hongming et al. (2020), environmental indicators have a favorable impact on corporate performance. Additionally, it was found by (Puspitandari, J., & Septiani, A. 2017) that environmental indicators have an impact on firm performance. In the meantime, (Wijayanti, 2016) also produced findings that supported the notion that environmental factors affect corporate performance. Additionally consistent with (Dura, et al. 2021), which demonstrates how environmental indicators affect the performance and valuation of firms. Research hypothesis (H<sub>3</sub>): Environmental Disclosure affects the Firm Performance. Research from the past has shown that social indices in general have an impact on business performance. It is indicated in (Hongming et al., 2020) that social indicators, which also employ the GRI index, have a favorable impact on company performance. The same may be said for studies by (Puspitandari, J., & Septiani, A. 2017) and (Lesmana & Tarigan, 2020) that carefully examine businesses that are listed on the IDX. According to the study, social factors have a favourable but insignificant impact. Companies with stronger financial success may have greater financial resources available to invest in corporate social performance, according to Lopez et al.'s (2007) explanation. Research hypothesis (H<sub>4</sub>): Social Disclosure affects to the Firm Performance.



**Fig. 2.** Research Framework

### 3. Methods

The measurement of the independent variables and the dependent variable in this study is based on the latest Global Report Initiatives (GRI) standards issued in 2013, namely the G4 Specific Standard Disclosures Overview which includes three dimensions and one dimension of the dependent variable which each dimension has a variety of different indicators and aspects as independent variables, consist of:

Economic Dimension (X<sub>1</sub>): 4 Aspect, 9 Indicator.

$$EcDI = \frac{K}{n} \quad (1)$$

Environment Dimension (X<sub>2</sub>): 11 Aspect, 33 Indicator

$$EnDI = \frac{K}{n} \quad (2)$$

Sosial Dimension (X<sub>3</sub>): 6 Aspect, 13 Indicator

$$SoDI = \frac{K}{n} \quad (3)$$

Meanwhile the dependent variable is the *Firm Performance* (Y) using measurement of *Profitability Performance* Tobin's Q.

$$Tobin's\ Q = \frac{Market\ Value\ Equity + Book\ Value\ of\ Total\ Debt}{Total\ Asset} \quad (4)$$

Quantitative research is conducted using secondary data sources from journals, websites pertaining to subjects and businesses included on the IDX in 2021, the G4 Guidelines of the Global Reporting Initiative, and firm annual reports in 2021. Companies in the energy sector that will be listed on the Indonesian Securities Stock Exchange in 2021 make up the research population.

Purposive sampling was used, and the following standards were used: From 2017 through 2021, companies in the energy sector will list on the Indonesia Stock Exchange. There are 18 issuers in the energy industry that fall within the Main Board company category and that publish sustainability reports or are mentioned in annual reports period of 2017–2021.

To test the hypothesis, the analytical technique builds a model out of panel data using both time-series and cross-section observations. Multiple linear regression was used to test the hypothesis in this study since it only uses the energy sector as a sample and tries to assess the impact of the independent factors on the dependent variable. The equation for multiple linear regression is written as follows:

$$Model\ 1: Y = \alpha + \beta_1.SRI_1 + \epsilon \quad (5)$$

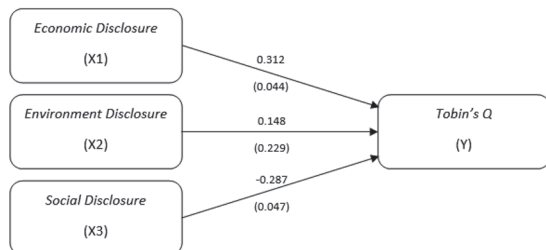
$$Model\ 2: Y = \alpha + \beta_1.X_1 + \beta_2.X_2 + \beta_3.X_3 + \epsilon \quad (6)$$

### 4. Result and Discussion

The results of data processing using the Ordinary Least Square method can be presented as follows.



**Fig 3.** The result of data processing using OLS



**Fig. 4.** The result of data processing using OLS

**Table 1.** The conclusions of partial test result (t)

The Influence btn Variables	Coefficients	Sig. Value	Result test
SRI against Tobin's Q	-0.748	0.164	No significant effect
X <sub>1</sub> against Y	0.312	0.044	Significant effect
X <sub>2</sub> against Y	0.148	0.229	No significant effect
X <sub>3</sub> against Y	-0.287	0.047	Significant effect

**Table 2.** The conclusions of simultaneous test result (t)

The Influence btn Variables	F Value	Sig. Value	Test result
SRI, ROA, and SIZE against Tobin's Q	<b>42.615</b>	<b>0.000</b>	Significant effect
Economic, Environment, and Social Disclosure against Tobin's Q	<b>2.890</b>	<b>0.040</b>	Significant effect

The discussion of the outcomes of this study's ramifications is broken down into two categories: theoretical implications and practical consequences.

## 4.1 Theoretical Implications

### 4.1.1. Sustainability Reporting against Tobin's Q (Y)

The analysis's findings indicate that Tobin's Q is not significantly affected by sustainability reporting, which includes components of economic, environmental, and social transparency.

This study's findings contradict a study by Felita and Faisal (2021), which found that sustainability reporting significantly improved the financial performance of mining companies listed on the IDX. These findings, however, are consistent with (Febriyanti., 2021), which

claims that social index disclosure and sustainability reporting have little impact on corporate value.

The analysis's findings support other studies that found environmental and social indicators to be the primary culprits behind SRI's negligible impact on Tobin's Q scores. Due to the fact that many businesses continue to include sustainability reports in their financial reports rather than independently, this lack of influence is caused. This suggests that the majority of Indonesian energy sector enterprises do not yet view this report as relevant or as a sign of their success. This situation also illustrates how investors, in particular, continue to assess energy industry companies based on their financial data rather than non-financial data.

### 4.1.2. Economic Disclosure Index (X<sub>1</sub>) against Tobin's Q (Y)

This study demonstrates a strong impact of the Economic Disclosure Index (X<sub>1</sub>) on Tobin's Q (Y) value. These findings are consistent with research by Dura et al. (2021), which looked at how economic disclosures affected the performance and value of companies. Manufacturing companies listed on the Indonesia Stock Exchange between 2017 and 2019 served as the study's samples. Purposive sampling was utilized in earlier study, with a total sample size of 171. According to the study's findings, a company's worth will rise in proportion to the amount of economic disclosure index disclosures made by the company.

According to the research data, only one business, PT Bukit Asam Tbk in Indonesia, fully discloses all indicators. On the other hand, PT Wintermar Offshore Marine Tbk declared the least economic index in 2018. As can be seen, one of the companies that suffered the worst losses in 2018 was WINS (company code), which had a Return on Assets loss of -13% in that year. Disclosure of economic indexes will result in complete information transparency, boost stakeholder confidence, uphold reputation, and support capital.

### 4.1.3. Environment Disclosure Index (X<sub>2</sub>) against Tobin's Q (Y)

The study utilizing the regression approach yielded data with a Sig. value of 0.229, which is higher than 0.05. Additionally, the ttab value is 1.98729 and the thit value is 1.211. H<sub>0</sub> is thus approved whereas H<sub>a</sub> is disapproved. This score indicates that there is no relationship between Tobin's Q and corporate valuation and the Environment Disclosure Index. In other words, the value of the company will not be impacted by the publication of environmental indexes by enterprises operating in the energy industry. PT Bukit Asam Tbk revealed the highest environmental index in 2021, and PT Wintermar Offshore Marine declared the lowest index in 2017.

These findings refute the findings of a study by Hongming et al. (2020), which found that the environmental disclosure index significantly increases firm value. This outcome is consistent with (Hsu, H. 2017), which investigates the financial and non-financial

effects of environmental index disclosure. According to this study, the numerous financial performances under review are unaffected by the disclosure of environmental metrics.

Additionally, companies in the Indonesian energy sector disclose less information about the sub-indicators of the environmental index in the GRI Standard, which includes crucial data like emission levels, waste management, water management, and biodiversity. This explains why there is little impact on the value of the company.

These findings show that the energy sector's disclosure of environmental issues is still in the early stages of development because it hasn't been able to benefit the company financially.

#### 4.1.4. Social Disclosure Index against Tobin's Q

The analysis's results, which used the regression approach, yielded a Sig. value of 0.047, which is higher than 0.05. Additionally, the tcount value is -2.012, which is greater than the ttable value of 1.98729 when expressed as an absolute value. Then,  $H_a$  is approved while  $H_0$  is denied. According to this finding, the Social Disclosure Index significantly lowers the value of Tobin's Q. In other words, revealing the social index will eventually lower the company's worth.

These findings disapprove studies (Dura, et al. 2021) that examine the impact of social index disclosure on financial performance and corporate value. According to earlier research, the social index has a sizable beneficial impact on financial performance while having no negative effects on business value. The analysis of companies listed on the IDX that reveal sustainability reporting from 2019 to 2011 by Lesmana & Tarigan (2020) is indirectly in accordance with this, though. Because social interaction is not regarded as an asset, the study claims that the social component has a positive but insignificant impact.

These findings eventually suggest that publicizing the social index will only have a negative impact, particularly in the energy sector, because social activities are not viewed as assets but rather as operational expenses.

Additionally, there are six sub-components in the social index, including employment, labor relations, occupational health and safety, diversity and equal opportunity, and equal compensation. Even though the public and stakeholder pressure is more concentrated on issues like equality, women's rights, and so forth, the average disclosure that includes equal opportunity and salary is the sub-component that is the least disclosed. In other words, the level of disclosure on this issue has not yet met the standards set by the general public, which ultimately does not benefit enterprises in the energy industry financially.

## 4.2. Practical Implications

### 4.2.1. Sustainability Reporting

A company's effort to enhance its reputation in the hopes of adding economic value to the company's finances is the sustainability report disclosure strategy. The findings of this study suggest that there is still some doubt regarding this instrument's return on investment. In general, developing nations—which still require extractive economic techniques to escape the middle-income trap—see these disclosures as having little influence. Additionally, companies in the energy sector in Indonesia continue to concentrate their disclosure on parts or subparts that, in general, do not significantly affect stakeholder perceptions. The average result is 55%, or 30 indicators, from a total of 55 indicators from the GRI standard. Disclosure is focused on elements from this value that don't differ significantly from prior years. This suggests that sustainability disclosures do not ultimately have a significant impact on performance or corporate value.

#### 4.1.2. Economic Disclosure

The disclosure of the economic index is a financial information disclosure that includes sub-components like direct and indirect economic consequences, the number of local suppliers, government financial assistance, and procurement. The average value of businesses in the energy sector is 52%, or 5 indications, of the 9 indicators in the GRI standard. This demonstrates that the energy industry's businesses are still not fully revealing the economic disclosure index. Data processing results show that economic value has a very good impact on raising business value. In order to increase corporate performance or worth, companies in the energy sector need to reveal more ideal economic indexes.

#### 4.1.3. Environment Disclosure

The environmental index disclosure is a non-financial disclosure that includes information about the company's operational activities' potential environmental impacts. There are sub-components in this index for things like emissions, water use, waste disposal, biodiversity, energy use, materials, and compliance. The average value of businesses in the energy sector is 53%, or 17 indications, of the 33 indicators in the GRI standard. This suggests that energy sector businesses have not made the most of their environmental index disclosure, performance, or value. The analysis of the data shows that environmental values do increase business value, however this effect is not very strong. This beneficial effect does not imply that it won't be significant if all indicators are fully disclosed annually. Although it hasn't yet had a big effect, this also suggests that stakeholders' faith in energy sector corporations has increased. Additionally, particularly in Indonesia, environmental activities that are regarded as intangible investments have not received widespread recognition. Only immaterial assets, like patents, goodwill, and copyrights, have been acknowledged. Investment in this instrument may eventually have a substantial impact on raising company value over time.

#### 4.1.4. Social Disclosure

A social index disclosure is one that includes non-financial information, particularly in the context of the company's social initiatives. There are sub-components in this index for things like labor relations, pay, employment opportunities, and training and education. The average value of businesses in the energy sector is 60% or 8 of the 13 indicators according to the GRI standard. The analysis of the data reveals that the social disclosure index significantly lowers the value of Tobin's Q. This implies that every social disclosure or activity by businesses in the energy sector in Indonesia has a negative effect on the business. These findings suggest that the company will eventually incur operational costs as a result of this kind of disclosure. Equal pay is not consistent with the assurance of rising firm value, nor is it consistent with the disclosure of employment prospects or labor relations, which are not forms of spending that can be viewed as assets or investment instruments. Companies in the energy sector must ultimately reassess if their involvement in socially relevant activities has a clear economic benefit.

#### 4.1.5. Tobin's Q

One of the variables included in the Market Value Performance dimension, Tobin's Q value, considered as a determinant of firm performance. This number compares the company's book value to its market value. According to the research, the average score is 1.29, with the highest score being 4.57 (overvalued) and the lowest being 0.51 (undervalued). These findings suggest that Indonesia's energy industry as a whole does reasonably well in terms of asset management. Before index disclosure can be considered an activity that can be recognized as a firm asset and has a significant impact on the financial performance of companies in Indonesia's energy industry, it still needs to undergo significant systemic development, especially in the areas of environmental and social disclosure. The quality of the disclosures made therein must also be re-evaluated by Indonesian energy sector businesses to determine if they are steps that unquestionably enhance the company's financial performance.

## 5. Conclusions & Recommendations

### 5.1. Conclusions

The findings of the study lead to the following conclusions:

1. The value of Tobin's Q is significantly increased through Economic Disclosure.
2. The impact of environmental disclosure on the Tobin's Q value is negligible.
3. Social Disclosure has a large detrimental impact on Tobin's Q value.
4. The Tobin's Q value is significantly positively impacted by sustainability reporting.

5. If the activities performed cannot be regarded as firm assets, investment in this disclosure instrument as a whole has not significantly increased the worth of the company.

### 5.2 Suggestions

The following recommendations can be made based on the research findings are as follows:

1. For the Business
  - Indonesian energy sector corporations need to re-evaluate, particularly the calibre of these disclosures in the environmental and social indices. Energy industry firms also need to make efforts so that public pressure on this disclosure may be used as a definite advantage rather than merely a promotional expense to maintain reputation. Firms need to look more closely at which indicators can bring value to the company.
2. For further researchers
  - Expand the research sample by including the industry or year under consideration, since the tendency of GRI index disclosure has grown steadily over time.
  - Using a different GRI index to provide a broader and more thorough view of how disclosure rules affect corporate value.

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