

THE EFFECT OF APPLYING BALANCED SCORECARDS ENVIRONMENTAL PERFORMANCE

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Abstract: The low number of company participants are participating in the implementation of corporate social responsibility (CSR) disclosures in Indonesia is due to several factors. The first factor is that companies consider implementing CSR to increase costs. Second, the lack of impact that is felt directly by the company. Third, the government has so far not conducted evaluations and monitoring in encouraging the implementation of CSR. Thus, this study examines the environmental perspectives in measuring company performance using a balanced scorecard perspective can change the company's mindset in CSR disclosure. So this research examines and tests the company's environmental performance using a balanced scorecard perspective. The sample used in this study amounted to 10 companies that met the purposive sampling criteria. This test uses path Analysis using the Smart-PLS application program in the data processing. The results showed that learning and growth perspective performance did not affect the performance of internal business process perspectives, internal business process perspective performance had a significant effect on consumer perspective performance, consumer perspective performance has a significant impact on financial perspective performance (income), consumer perspective performance has no impact on financial perspective performance (CFOA), consumer perspective performance has a significant effect on financial perspective performance (ROA), financial perspective performance (income) is having a significant impact on environmental perspective performance (implementation of CSR), financial perspective performance (CFOA) does not affect environmental perspective performance (CSR implementation), financial perspective performance (ROA) significantly influences environmental perspective performance (CSR implementation).

Key words: environmental performance, financial performance, corporate social responsibility, balanced scorecard perspective.

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Introduction

In the implementation of the Corporate Responsibility Report in Indonesia, the Ministry of Environment also made a strategic movement. Based on PROPER data from the Ministry of Environment in 2015, it was said that there was an increase in the number of proper participants from year to year. In the 2014/2015 period, there were 2076 PROPER participants, only 12 (0.58%) had received gold, for the green category there were 108 (5.20%), for the blue category there were 1406 (67.73%), for the red category 529 (25.48%). The black category there were 21 (1.01%). From the company data, there are still companies that are reluctant to implement CSR, because there is a mindset that applies corporate social responsibility to the environment to increase "company costs". In the implementation that does not carry out the duties carried out with awareness (Purnamasari & Baskara, 2019).

As organizations strive for a more sustainable future, it is increasingly important that organizations have appropriate managerial tools to help track and improve their managerial performance capabilities (Cycyota, Ferrante, & Schroeder, 2016). Therefore, a corporate sustainability model needs to improve the competitive position of an organization and implement the strategy (A. M. Kaplan & Haenlein, 2010). Likewise, the sustainability balanced scorecard must also include the steps needed to instil awareness of the sustainability of the entire organization, so that members of the organization will act in accordance with their functions in corporate social responsibility (Bodur, Gao, & Grohmann, 2014). (Zhou et al., 2010) prefers an approach based on the perspective of the traditional balanced scorecard, in which corporate sustainability is seen using a separate environmental perspective. Environmental perspectives are probably best incorporated in the existing balanced scorecard; as a result perspective (Kartalis, Velentzas, & Broni, 2013). The balanced scorecard model of the company becomes more comprehensive that can measure company performance better. Linking CSR with financial and non-financial aspects of the company as an indicator of performance measurement can make stakeholders and stockholders get a complete picture of overall company performance which is one effective way to improve the implementation of CSR by companies (Purnamasari & Baskara, 2019).

In this study plan, the aim is to test the environmental performance of the company using another perspective performance approach in the BSC, namely learning and growth; internal business processes; customers and finance. Linking CSR with the Balanced Scorecard aspect (financial and non-financial aspects) as a performance measure has implications for stakeholders.

Literature review

Referring to stakeholder theory: this theory is closely related to the theory of legitimacy. This theory emphasizes the importance of considering the interests, needs and influence of parties related to company policies and operations, especially in terms of corporate decision making (Nurainy, Nurcahyo, A, & Sugiharti, 2013). Thus it is expected that the company can satisfy stakeholders to a certain extent, at least most of them; hence the central point of CSR is stakeholder management (Lavrinenko, Ignatjeva, Ohotina, Rybalkin, & Lazdans, 2019).

At present, this sustainability report is voluntary and reported separately from the annual reporting company states that sustainability reports are largely not integrated with conventional economic reports. Theories that support managers and also focuses on environmental issues and is less focused on social problems (Hubbard, 2009).

In this era of globalization profit maximization is not the primary goal of the company. The company's goals have begun to change towards the achievement of sustainable performance, including social and environmental needs. The company's orientation towards sustainability results in the emergence of corporate responsibility towards different stakeholders and adopts activities and methods that enable improved social and environmental performance (Skačkauskienė, Ślusarczyk, Baryń, Kot, & Navickas, 2019).

The Balanced Scorecard is based on stakeholder theory, which connects the particular interests of all parties involved with the company (Hubbard, 2009). This impulse is derived from the process of translating corporate strategies that are carried out explicitly and strictly into various real goals and measures (Robert S. Kaplan, 1996).

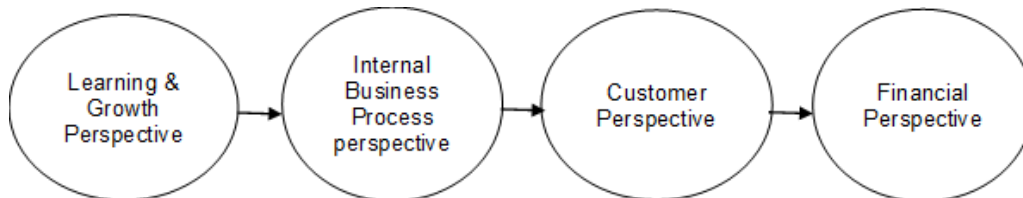


Figure 1: Relationship between BSC perspectives

According to (A. M. Kaplan & Haenlein, 2010) that a corporate sustainability model needs to be considered to improve an organization's competitive position and strategy implementation (Purnamasari & Baskara, 2019). Thus, if a company considers environmental and social aspects into performance measurement using the BSC, it will realize the Sustainable Balanced Scorecard (SBSC). According to (Schuitema & de

Groot, 2015) revealed that companies must also improve living standards in a favorable external environment by involving companies in actions involving community welfare such as developing a local partnership system to create a business climate based on conformity with shared interests and increasing competitiveness for the long term.

The measurement of the success of an environmental perspective can be seen from the company's CSR disclosure. CSR, according to the World Business Council for Sustainable Development, is the company's commitment to implementing behavioral ethics (behavioral ethics) to improve the quality of life (Purnamasari & Baskara, 2019).

A study by (Kumar & Nayak, 2014) with the title research on the Implementation of Sustainable Balanced Scorecard in Mining and Mining Services Companies. The results showed that the IBP perspective harmed the LG perspective. LG's perspective has a positive effect on consumer perspectives. Consumer perspective has a positive effect on financial perspective (income). Consumer perspective harms the financial perspective (ROA). Consumer perspective harms the financial perspective (CFOA). CSR has a negative effect on the IBP perspective. CSR has a negative impact on the consumer perspective. CSR has a negative impact on the financial perspective (income). CSR has a negative effect on the financial perspective (ROA). CSR has a positive effect on financial perspective (CFOA).

According to the (Purnamasari & Baskara, 2019) with the title Environmental Perspective study: A New Perspective in Balanced Scorecard. The results showed that the LG perspective has a positive effect on the consumer perspective.

In addition, a study by (Hawraz Ahmad & Rashid, 2016) and the results showed that the financial perspective had a significant effect on CSR implementation, LG's perspective had a significant effect on CSR implementation, the internal business process perspective had a significant effect on CSR implementation, the consumer perspective had a significant effect on CSR implementation.

The research model with the conceptual sustainability balanced scorecard with environmental performance variables is as follows:

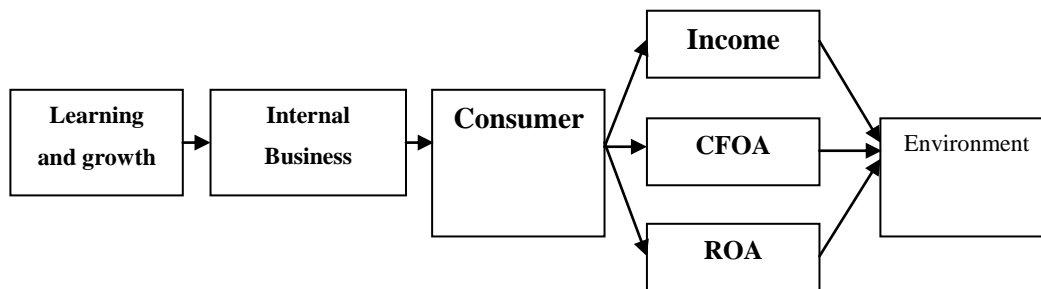


Figure 2: Sustainability balanced scorecard model with environmental performance variables

So hypotheses 1-3 can be formulated as follows:

H1: Learning and growth perspective performance has a positive effect on the performance of internal business process perspectives.

H2: Internal business process perspective performance has a positive effect on consumer perspective performance.

H3a: The performance of the consumer's perspective has a positive effect on the performance of the financial perspective (income).

H3b: Consumer perspective performance has a positive effect on financial perspective performance (CFOA).

H3c: The performance of the consumer perspective has a positive effect on the performance of the financial perspective (ROA).

H4a: Performance of financial perspective (income) has a positive effect on the performance of an environmental perspective.

H4b: Financial perspective performance (CFOA) has a positive effect on environmental perspective performance.

H4c: Financial perspective performance (ROA) has a positive effect on environmental perspective performance.

Research methodology

This research is a formal study because it aims to test the hypothesis in answering the research questions raised. And the method of data collection in this study, researchers collected data by observation. Observations were made on the company's annual report, which was published from the company that became the research sample.

The type of data used in this research project is secondary data. Where to take data on published annual company reports. The population in this study are mining, energy, chemical, and pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) during the period 2011-2018. The data collection method used is the documentation of the company's annual report (annual report), PROPER assessment report by the government and news about the environment both from national newspapers published online and from other online news portals from 2011 to 2018. The sample of this study was taken by purposive sampling which is a method in which the selection of samples on population characteristics that have been known before, with predetermined criteria can be seen in the following table:

Table 1: Sample determination criteria

| Criteria | Not Included Criteria | Sample |
|--|-----------------------|--------|
| Companies listed on the IDX in 2018 | - | 519 |
| High-profile companies engaged in mining, energy, chemical, pharmaceutical, in 2018 | (454) | 65 |
| High-profile companies that publish social responsibility reports related to the environment both in the annual report | (33) | 32 |
| Companies that consistently participate in PROPER 2011-2018 | (21) | 11 |
| Have complete data related to research variables | (1) | 10 |
| Unit of Analysis | - | 50 |

Associated with this study, researchers included an environmental perspective as part of the BSC in measuring company performance. In its measurement, researchers used CSR disclosure indicators implemented by companies to meet the PROPER criteria set by the Ministry of Environment.

Study results

Path analysis (path analysis) used in this study aims to test the hypothesis because the model in this study is a model formed simultaneously through more than one dependent variable. The results of testing between variables can be seen in the following table:

Table 2: Regression testing results

| | Standard Deviation... | T Statistics (O/STDEV) | P Values |
|--------------|-----------------------|--------------------------|----------|
| CFOA -> UNV | 0.094 | 0.314 | 0.754 |
| CUST -> CFOA | 0.192 | 0.565 | 0.572 |
| CUST -> REV | 0.169 | 3.343 | 0.001 |
| CUST -> ROA_ | 0.050 | 5.084 | 0.000 |
| IBP -> CFOA | 0.181 | 0.339 | 0.734 |
| IBP -> CUST | 0.093 | 6.077 | 0.000 |
| IBP -> REV | 0.175 | 1.087 | 0.278 |
| IBP -> ROA_ | 0.062 | 15.749 | 0.000 |
| LG -> CFOA | 0.125 | 2.000 | 0.046 |
| LG -> CUST | 0.091 | 0.801 | 0.423 |
| LG -> IBP | 0.130 | 0.666 | 0.506 |
| LG -> REV | 0.112 | 0.002 | 0.999 |
| LG -> ROA_ | 0.094 | 3.102 | 0.002 |
| REV -> UNV | 0.094 | 3.997 | 0.000 |
| ROA_ -> UNV | 0.136 | 2.068 | 0.039 |

From the table above shows that the relationship between learning perspective performance and growth on the performance perspective of the internal business processes (sig: 0.506) and customers on finance (CFOA) (sig: 0.572) is not significant, it can be said that hypotheses H1 and H3b are rejected, second This hypothesis is supported by the results of research by (Purnamasari & Baskara, 2019). While the relationship between the performance perspective of internal business processes on the performance of consumers' perspectives (sig: 0,000) is significant, it shows that the H2 hypothesis is accepted in line with the results of (Purnamasari & Baskara, 2019). Furthermore, the relationship between the performance of the consumer's perspective on the performance of the financial perspective, which is only a significant indicator of income and ROA, which is equal to 0.001 and 0,000, this shows the hypothesis H3a and H3c accepted, this result is supported by the results of research by (M. F. Ahmad, Abdullah, Tamam, & Bolong, 2013; Purnamasari & Baskara, 2019). The results of testing for the performance of financial perspectives on environmental perspectives using CSR indicators show that income (sig: 0,000) influences the disclosure of CSR implementation. This indicates that the H4a hypothesis is accepted; this result is supported by Purnamasari (2019) research. And ROA (sig: 0.039) affect the disclosure of CSR implementation that the hypothesis H4c is accepted. Meanwhile, the CFOA indicator on disclosure of CSR implementation was not significant (sig: 0.754), so the H4b hypothesis was rejected.

In this study, the researcher also tested the indicators of the balanced scorecard. From the results of these tests, researchers made model 2. Model 2 is only made by directly linking the variables or indicators of the balanced scorecard to the intermediate variables and the implementation of the company's CSR (corporate social responsibility) (Purnamasari, 2019). The form of model 2 can be seen in the following figure 3:

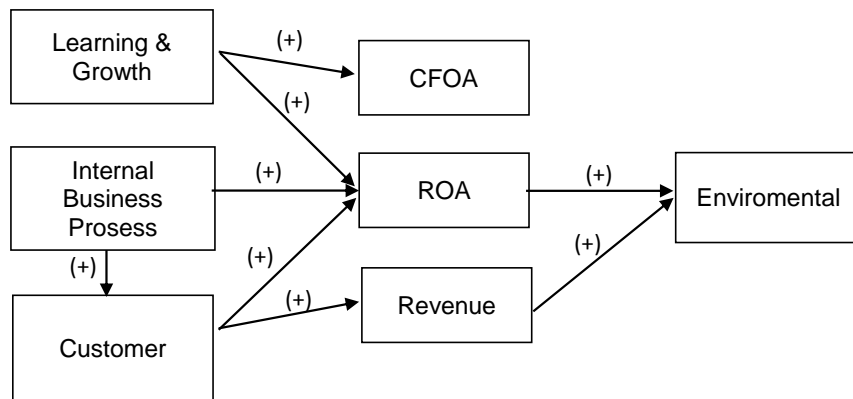


Figure 3: Alternate models - with significant structural paths using environmental performance as the dependent variable

Discussions

The rationale used to explain model 2 is that the perspective of financial performance is an important factor in achieving financial stability from companies that will be able to provide companies to pay more attention to the environment. Other aspects of balanced scorecard performance. And related to the impact on the environmental perspective, the results can be seen in the table above where income and ROA correlate with the ecological perspective (each has a p-value of 0,000 and 0.039). These results indicate that environmental and community awareness carried out by the company if the company has excellent financial performance, especially if the company earns positive income and returns on assets this can encourage the implementation of corporate CSR, these results are supported by Purnamasari (2019) and (H. Ahmad & Rashid, 2016). However, given that CFOA does not influence the environmental perspective, it can be said that if the company has poor financial performance, especially if the operating cash flow is inadequate where the low or minus value results in greater cash spent by a company to fund activities its operations will have an impact on the implementation of corporate CSR, so it is concluded that both large and small operating cash flow values, will have an impact on the company's CSR implementation.

Overall it can be said that if a company considers both environmental and social aspects into performance measurement using the BSC approach, it will realize the

Sustainable Balanced Scorecard (SBSC). Based on the conceptual framework by (Hubbard, 2009), the SBSC formulation process must meet several basic requirements such as the process must lead to value-based management of environmental and social aspects, to ensure the management of their value-based ecological and social aspects must be integrated with the management system company general. SBSC concepts that meet the specific characteristics and requirements of the strategy and environmental and social aspects of the business unit do not have to be public. Therefore, in the process, it must ensure that SBSC is formulated as a specific business unit.

This study is helpful for the prospective studies while studying in this area in future. In addition, this study is suitable for policymakers while formulating policies regarding environmental and social aspects. This study also suitable for the managers while implementing the balanced scorecard in the organization for the improvement of firm performance.

Conclusions

Based on the results of the analysis above, it seems that environmental-sensitive performance is not influenced by learning and growth perspectives, internal business processes and customers. However, the performance of the environmental perspective is influenced by the performance of the financial perspective. Learning and growth perspectives can directly affect financial perspectives (CFOA and ROA). Internal business process perspectives directly affect consumers, and then consumer perspectives affect financial perspectives (ROA and Revenue). This study recommended the policymakers that they should enhance the focus on the environmental and social aspects of the organization that improve firm performance. In addition, this study also recommended to the managers and other representatives that they should enhance the focus on the implementation of balanced scorecard in the organization that enhances the firm performance. This study some limitations, such as researchers using only a small scope of research that only uses ten companies that meet the sample category. And the use of research indicators that are still lacking as it is known that the BSC with its four perspectives has indicators of success that can be seen for measuring its performance than for further research can add indicators or use other measurement indicators in each perspective to get maximum test results. Considering that this research only analyzes environmental aspects, further research can add social aspects and environmental aspects in the measurement of company performance.

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PERSPEKTYWY ŚRODOWISKOWE W MIERZENIU FIRMY ZA POMOCĄ ZRÓWNOWAŻONEJ KARTY WYNIKÓW

Streszczenie: Niska liczba uczestników firmy bierze udział w realizacji ujawnień dotyczących społecznej odpowiedzialności biznesu (CSR) w Indonezji z powodu kilku czynników. Pierwszym czynnikiem jest to, że firmy rozważają wdrożenie CSR w celu zwiększenia kosztów. Po drugie, brak wpływu odczuwany bezpośrednio przez firmę. Po trzecie, rząd do tej pory nie przeprowadził ocen i monitorowania w celu zachęcania do wdrażania CSR. W związku z tym niniejsze badanie analizuje perspektywy środowiskowe w mierzeniu wyników firmy za pomocą zrównoważonej perspektywy karty wyników, może zmienić sposób myślenia firmy w zakresie ujawniania CSR. Dlatego te badania sprawdzają i testują wyniki środowiskowe firmy przy użyciu zrównoważonej perspektywy karty wyników. Próba zastosowana w tym badaniu wyniosła 10 firm, które spełniły kryteria celowego doboru próby. W tym teście wykorzystywana jest analiza ścieżki przy użyciu aplikacji Smart-PLS do przetwarzania danych. Wyniki pokazały, że wyniki perspektywy uczenia się i wzrostu nie wpłynęły na wyniki wewnętrznych procesów biznesowych, wyniki wewnętrznych procesów biznesowych miały znaczący wpływ na wyniki perspektywy konsumenta, wyniki perspektywy konsumenta miały znaczący wpływ na wyniki perspektywy finansowej (dochód), konsumenta wyniki w perspektywie nie mają wpływu na wyniki w perspektywie finansowej (CFOA), wyniki w perspektywie konsumenta mają znaczący wpływ na wyniki w perspektywie finansowej (ROA), wyniki w perspektywie finansowej (dochód) mają znaczący wpływ na wyniki w perspektywie środowiskowej (wdrożenie CSR), finansowe wyniki w perspektywie (CFOA) nie wpływają na wyniki w perspektywie środowiskowej (wdrożenie CSR), wyniki w perspektywie finansowej (ROA) znacząco wpływają na wyniki w perspektywie środowiskowej (wdrożenie CSR).

Słowa kluczowe: efektywność środowiskowa, efektywność finansowa, społeczna odpowiedzialność biznesu, perspektywa zrównoważonej karty wyników.

应用平衡计分卡的效果 环保性能

摘要:在印度尼西亚,参与公司社会责任(CSR)披露实施的公司参与者较少,这是由于多种因素造成的。第一个因素是公司考虑实施CSR以增加成本。第二,缺乏公司直接感受到的影响。第三,迄今为止,政府尚未进行鼓励和鼓励企业社会责任实施的评估和监督。因此,本研究使用平衡记分卡的观点来考察衡量公司绩效的环境观点,这可以改变公司在企业社会责任披露方面的观念。因此,本研究使用平衡记分卡的角度检查和测试了公司的环境绩效。本研究中使用的样本共有10个符合目标抽样标准的公司。该测试在数据处理中使用Smart-

PLS应用程序使用路径分析结果表明,学习和增长视角绩效未影响内部业务流程视角绩效,内部业务流程视角绩效对消费者视角绩效有显著影响,消费者视角绩效对财务视角绩效(收入),消费者有显著影响透视绩效对财务透视绩效(CFOA)没有影响,消费者透视绩效对财务透视绩效(ROA)有重大影响,财务透视绩效(收入)对环境透视绩效(CSR的实施),财务有重大影响透视绩效(CFOA)不会影响环境透视绩效(CSR实施),财务透视绩效(ROA)会显著影响环境透视绩效(CSR实施)

关键词:环境绩效,财务绩效,企业社会责任,平衡计分卡视角