THE INFLUENCE OF THE IMPLEMENTATION OF ISO 9000: 2008 AND ENVIRONMENTAL ACCOUNTING ON COMPANY PERFORMANCE WITH PROFITABILITY AS A MODERATING VARIABLE IN THE INDONESIAN CHEMICAL SECTOR FROM 2017 TO 2020

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Abstract

This research aims to prove the influence of the application of ISO 9000 empirically: 2008 and Environmental Accounting on company performance in chemical sector companies from 2017 to 2020. The quantitative descriptive method was used as the research method. We took the research data from the Indonesia Stock Exchange (IDX) in annual reports from 2017 to 2020 using the purposive sampling technique. Juran's theory, Crosby's theory, legitimacy theory, and social contract theory were used as theoretical foundations in this study. Multiple regression analysis was employed to test the research hypothesis as dummy measurements were used for the independent variables. This study utilized SPSS version 21 software. The results of this study are beneficial to stakeholders, governments, and future researchers because the implementation of ISO 9000: 2008 is vital in improving company performance and can assist companies that are required to carry out their social and environmental responsibilities by Government Regulation No. 47 of 2012.

In contrast, the environmental accounting variable did not have an important role in company performance. The results showed that the variables ISO 9000:2008 and environmental accounting have a positive and significant effect on company performance. However, the research results found that the simultaneous application of ISO 9000: 2008 and Environmental Accounting positively affects company performance in the chemical sector.

Keywords: ISO 9000, environmental accounting, green accounting, company performance.

JEL Classification: G32, M41

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INTRODUCTION

The Asian Economic Community (AEC) current era requires industry players to continuously improve their companies to compete with foreign industry players. In the business world, it is very common if there is often competition between several companies because every company wants to achieve maximum success and profit. Local companies' efforts to compete with foreign companies must consider a number of factors that contribute to the industry's success, one of which is winning the market competition. Factors that drive success in winning the industrial competition include paying attention to the products created, which must be of high quality and cost-effective. Another critical factor is that the company must pay close attention to the production environment. Public awareness of the environment has prompted industry players to adopt environmentally friendly business practices. Demands for environmental friendliness in business are driven by a large amount of natural damage, hazardous and toxic production waste, which can threaten the sustainability of ecosystems, sustainable environmental pollution, and human survival.

In addition, environmentally-friendly industrial practices must also adhere to the standards. The International Organization for Standardization (ISO) sets the standards to follow in a corporate setting. The ISO family of standards has gained worldwide acceptance and adoption (Blessner et al., 2013). "The objectives of the ISO series standards were to define a set of requirements and practices that could be applied to organizations, regardless of the products or services they produce," according to Blessner et al., (2013).

In Indonesia, Government Regulation No. 47 of 2012 concerning corporate social and environmental responsibility explains that companies whose business activities are in or are related to natural resources are required to carry out social and environmental responsibilities. The goal of issuing this regulation is to achieve sustainable economic development that will improve people's quality of life while also benefitting the environment. Of course, the enactment of Government Regulation No. 47 of 2012 is expected to be a milestone in the consistency and commitment of all limited liability companies (PT) in implementing environmental accounting or green accounting. According to Maya et al. (2018), "Green accounting is the disclosure of financial use data related to the environment." The use of corporate finance for social activities will help minimize the risk of damage to nature and the environment caused by waste generated during the manufacturing process.

Prior to this regulation, the fact that the field is concerned about the environment is evidenced by the large number of industry participants who have engaged in social activities to mitigate environmental damage caused by the manufacturing process. There has been a growing awareness of the interactions between businesses and the environments in which they operate in recent years. This awareness has been heightened by concerns about resource depletion, scarcity, and environmental degradation and the activities of companies that consequently lead to the lack of the ozone layer and created imbalances in the environmental system (Adediran & Alade, 2013). The obligation of industry players to voluntarily recognize their contribution to overcoming environmental damage by instilling a sense of concern will be a strategy that attracts public interest while also enhancing the company's image.

Concern for the environment is a top priority for all companies in building and expanding their business to prevent environmental damage due to company activities.
When the company protects the environment, it will certainly give birth to company awareness of the importance of reducing environmental damage to publish the results of efforts to prevent environmental damage in the annual report. Companies in Indonesia have only just reached the stage of awareness or, if even further up to the stage of involvement in the environment. According to (Fauzi & Chandra, 2016), improving environmental performance and disclosing the impact of corporate environmental performance on company value, economic performance, financial performance, and market reaction should encourage companies to be more receptive to improving their environmental social responsibility and expanding disclosure of environmental and social performance in the company's annual report.

In light of the above discussion, this research will explore the application of green accounting and quality management and possible obstacles encountered in its application. It will view it from the government’s perspective as policymakers and industry players as stipulated in Government Regulation No. 29 of 2018.

Following implementing a quality system in ISO standards, industry players should focus on accounting practices, specifically environmental accounting or green accounting. Government Regulation No. 29 of 2018 concerning Industrial Empowerment explains that the green accounting industry is an industry that prioritizes efforts to efficiently and effectively use resources sustainably in its production process. It can harmonise industrial development with the preservation of environmental functions that can benefit the community. Environmental accounting practices require industrial practitioners to consider and include production costs associated with preserving and protecting the environment. The costs incurred to preserve the environment of the production site will certainly have a huge impact on customer satisfaction. As consumers and investors, the public will undoubtedly favour companies that pay attention to environmental accounting over companies that feel indifferent to environmental conditions. All of these efforts will assist in achieving optimal profits and aid in increasing product sales, which are environmentally friendly.

A few of the assessments used to measure a company's credibility and performance include its application of ISO standards and its efforts to improve green industry practices. Performance is the sum of a company's accomplishments over a given period. The performance results will be able to assist in determining a company's long-term sustainability. This study will benefit stakeholders, government, and researchers in the future by presenting the most recent research findings on the influence of ISO 9000: 2008 and accounting practices for environmental accounting on company performance in Indonesia. Therefore, this study is interested in examining "The influence of the implementation of ISO 9000: 2008 and environmental accounting on company performance with profitability as a moderating variable in the Indonesian chemical sector from 2017 to 2020."

LITERATURE REVIEW

Jensen & Meckling (1976) introduced the concept of agency theory, which explains the relationship between the principal and the agent. In this case, the relationship between management as principal and stakeholders as the agent will experience agency problems due to their distorted interests. Thus, it is essential to study the perspectives of various stakeholder groups, as this is the only way for businesses to understand better
how to respond to different stakeholder groups' information needs (Maama & Appiah, 2018).

Different interest objectives will impact a company's future performance, one of which is that the company will not survive and can be declared bankrupt because it loses the trust of the public and shareholders. This distortion usually occurs because the principal aims to profit from sales by minimizing the costs incurred without considering the impact on the public, the environment, investors, and other interested parties. Meanwhile, the agent wants the company to be transparent in publishing its financial and annual reports.

In this study, agency theory will play a role in resolving the agency problem by establishing common ground and increasing public trust by considering profits and environmental factors that will impact society as a result of the production process. The contingency theory, in addition to agency theory, provides a theoretical foundation for this research. Because an organization's ultimate goal is to survive and grow, gain public trust, and generate profits, contingency theory emphasizes the importance of focusing on change (Suryati Adelina, 2016).

Operating a business requires a high level of interaction and communication between the company and its community, which is supported by legitimacy theory. Legitimacy theory is used to determine whether a company complies with societal regulations and norms when conducting business. One of these norms is to minimize the waste produced by the manufacturing process in people's lives. Deegan & Rankin (1996) applied legitimacy theory “to scrutinize green and social disclosure practices among companies”. Community support is critical for a company's long-term sustainability, survival, growth, and image (Maama & Appiah, 2018). Legitimacy theory implies that to exist, a corporation is required to be accountable for people, planet, and profit or CSR reporting (Lu & Taylor, 2018). Legitimacy theory is in direct agreement with the concept of the social contract, which focuses on how a company or organization cares about the environment around it, specifically the impact of waste from the manufacturing process.

Every industry has been required to apply the concept of environmental accounting and incorporate it as part of a company's social responsibility to society. Environmental accounting is a type of accounting in which companies include costs for environmental preservation, also known as environmental costs, in their operating expenses (Dewi & I Putu, 2020). Environmental accounting is a comprehensive tool for incorporating environmental factors into business decisions (Rounaghi, 2019).

Environmental accounting is a contemporary review that encourages industries to care for the surrounding environment by quantifying and measuring long term environmental conditions. The general public demands that companies worldwide take responsibility for their actions (Wingard & Vorster, 2001).

When examined further, the concept of environmental accounting has an excellent impact on a company's concerns as environmental actions will help save production costs, allowing the company to reduce and save on operations. The company's efforts in maximizing environmental care will certainly increase public trust because people are increasingly aware of the importance of protecting the environment. Lu and Taylor posit that firms in industries with higher environmental compliance costs (such as paper and pulp manufacturing) face a competitive disadvantage because compliance costs associated with production activities exceed the value added to the firm (Lu & Taylor, 2018).
A company's efforts and hard work in incorporating the concept of the environmental care movement into its agenda will not be in vain as the company will gain high public trust. It will automatically affect the level of sales and profits that it can achieve. Furthermore, through the Ministry of Environment, the Indonesian government uses the International Organization for Standardization (ISO) 9000 award in its assessment program for company performance ratings in environmental management. ISO 9000 is a certificate or award bestowed by an independent organization to recognise a company's environmental performance.

Environmental quality standards, which are packaged in the ISO 9000 certificate, require businesses to implement and comply with a number of quality management system requirements to improve continuously. ISO 9000 represents an international consensus on environmental quality management practices that it can apply in various industrial sectors.

Similarly, profitability is regarded as the most important factor in assessing a company's development to fulfill financial performance, which is a component of a company's performance. Profitability is an indicator used to measure a company's financial performance to be used as a reference for assessing the company (Dewi & I Putu, 2020). Investors will evaluate a company's profitability because it depicts its ability to generate profits and determine its performance in ensuring prospects.

Return on equity (ROE), return on assets (ROA), return on investment (ROI), and return on sales (ROS) are all indicators used to evaluate a company’s ability to generate profit. ROE accounts for corporate profitability by indicating the amount of profit produced with funds invested by corporate shareholders. ROA is a ratio used to calculate a company’s return on assets. ROI is normally derived by dividing the financial benefit of an investment by the cost of the investment. ROS is the ratio used to obtain the proportion of profits acquired from sales (Ganda, 2018).

The following is the research framework in this study:

The Effect of International Organization for Standardization (ISO) on Company Performance

ISO will always be inextricably linked to the quality of a product and the performance of a company. ISO is a global quality management standard; the organization itself has issued approximately 150 standards. Companies require ISO as a reliable and efficient system. ISO 9001 is a global quality management system and a key
management framework for all types of businesses worldwide (Fonseca & Domingues, 2017).

ISO 9000 is a standard that defines a quality management system that enables businesses or organizations to operate more efficiently and with a higher level of customer satisfaction (ISO Central Secretariat, 2008). ISO standards are beneficial in assisting businesses in ensuring their performance in terms of operational activities, production, and an environment that affects the product's quality.

The relationship between ISO 9000 and corporate performance asserts a link between quality improvement and firm profitability. Quality improvement can boost profitability in two ways: increasing client demand and reducing costs. Improving product quality can result in increased customer or customer satisfaction, resulting in long-term profit increases and the ability of the business to continue operating. Customers want high-quality products at relatively affordable prices where employees will receive job satisfaction and where suppliers can maintain their business. Meanwhile, investors benefit from high returns. It benefits all stakeholders, as they benefit from an increase in quality associated with an excellent ISO 9000 value.

Companies anticipate that implementing ISO 9000 will increase performance. The effectiveness of deploying a system is contingent upon the system's fit for the environment that it will apply. Along with the system of environmental differences, the elements encountered will result in variances in the use of competitive or competitive strategies. Companies operating in a stable environment will commonly incorporate techniques to enhance their performance.

ISO will explain and evaluate a company's performance outcomes regarding the quality of products produced over a specified period. Superior quality will attract the interest of consumers and investors in the company's products. According to research conducted by Fonseca & Domingues (2017), "ISO certification can originate both internal and external benefits for an organization." Internal benefits include operational management improvements (productivity, efficiency, and cost reduction), improved process and product quality, and organizational effectiveness (internal control, quality financial reporting, and organizational effectiveness).

H1: The application of ISO 9000 has a positive effect on company performance.

The Effect of Environmental Accounting on Company Performance

Green industry practices are implemented through the application of eco-efficiency in management and green accounting in accounting. Green accounting is a type of accounting in which businesses account for costs associated with environmental preservation or the welfare of the surrounding environment, which are frequently referred to as environmental costs. When people are acutely aware of the value of environmental preservation, the industry's use of green accounting can be a unique selling point for consumers. Nowadays, consumers will gravitate toward products manufactured by companies that practice green manufacturing or green accounting. Naturally, this will result in a beneficial development for industries, such as increased sales followed by increased profits, increased business continuity, and increased the industry's sale worth in the eyes of investors.

Since 2010, the Indonesian government has been encouraging industries to adopt green business practices. One way the government is assisting is by awarding industries that implement environmentally friendly business practices. This increase in the number of industries that have voluntarily participated in government-led green industry
assessments has continued year after year. Between 2010 and 2014, 209 enterprises participated in the valuation of the green industry, which is highly positive, but pales in comparison to the total number of registered industries in Indonesia, which stands at 23,370 (Ministry of Industry of the Republic of Indonesia, 2015). The industry's low awareness regarding green business practices through green accounting can be viewed from two perspectives.

On the one hand, it will benefit the industry, yet, on the other hand, it appears as though it will result in greater expenditures due to environmental costs. This is why so few businesses practice green accounting. However, upon further examination and over a longer period, the implementation of green accounting will prove to be highly beneficial to all parties, including entrepreneurs, consumers, and other stakeholders (investors, communities). The sacrifices made by companies in terms of environmental expenses might help avoid future expenditures on higher costs, such as the cost of community demands for environmental damage caused by industry, the danger of business closure owing to government fines, and so on. (Setiawan, 2020) said Companies that do environmental accounting can manage their finances better for environmental activities that require a lot of costs and companies that pay attention to high agency costs will have better manager performance which causes the company's performance to improve.

Environmental accounting, or more commonly referred to as green accounting, is an important component of corporate accounting processes that contributes to the company's long-term sustainability. Environmental accounting, or green accounting, is thus viewed as a crucial instrument for establishing and understanding the roles of business enterprises within an economy in terms of environmental protection and citizen welfare (Maama & Appiah, 2018). Environmental accounting practices are defined in Article 33 of Government Regulation No. 29 of 2018. They include the processing of raw materials, auxiliary materials, energy, production processes, products, business management, and waste management.

According to 2018 statistics, 143 businesses received green industry assessments, indicating that they adhered to green industry standards based on ISO and financial reports on environmental costs and the awarding of green industry certificates. Industrial actors in the business world must surely consider the impact of their products to be consistently environmentally responsible as there have been numerous repercussions reported by industry players thus far, both in terms of waste management, which some companies disregard, and the usage of raw materials that are not yet environmentally friendly. All of these repercussions must be addressed quickly by companies that have not adopted green industry standards. According to Maama & Appiah (2018), “Green accounting also provides data, spotlighting the contribution of business enterprises to economic well-being, the costs imposed in the form of pollution or resources degradation, and the contribution to the society”.

Environmental accounting, as defined in these guidelines, consists of three distinct components: environmental conservation cost (monetary value), environmental conservation benefit (physical units), and economic benefit associated with environmental conservation activities (monetary value) (Georg & Justesen, 2017). Business continuity must consider financial factors and non-financial aspects, one of which is the environment. Companies that pursue and implement green industry standards eventually incur environmental costs if they wish to develop environmentally acceptable products. Numerous companies disregard environmental concerns because
they can have a significant impact on their operating expenses. However, the costs associated with developing environmentally friendly products will have a positive effect on additional consumers. Consumers will increasingly value excellent quality products, ecologically friendly and reasonably priced, automatically boosting sales and maximizing profitability.

H2: The application of environmental accounting has a positive effect on company performance

The Effect Profitability as a Moderator on International Organization for Standardization (ISO) towards Company Performance

The conflicting interests of the firm and the agent create a variety of complications, one of which is how the objectives to be accomplished are aligned. The community is conscious of the impact of a company’s waste on people’s lives; this public awareness causes several parties, such as investors, shareholders, and others, to understand the environmental conditions, which causes these interested parties. The community has invested their capital or funds in desiring that the company adhere to the community’s aspirations.

The management of a business frequently thinks exclusively in terms of profits, oblivious to the fact that other factors can affect the profit level. Indeed, if a company considers the public’s concerns about the negative effects of industrial waste and then addresses them in a variety of ways through an environmental care movement, it will undoubtedly increase public trust and sales of the company’s products.

Profitability is, of course, the main consideration for businesses, as the company wishes to minimize costs and maximize profits. Additionally, manufacturers argue that profit is determined by balancing revenue against the costs associated with each business substance for it to survive in a generally turbulent market (Matar & Eneizan, 2018).

Companies have started to recognize the importance of maintaining public trust; after several years of observation, companies have realized that by doing so, they can also increase their profit from sales. Suppose shareholders, investors, and other interested parties see that a company has disclosed its financial statements and received an ISO 9001 certification during that year. In that case, it will maximize the company's profitability and assess the company's performance. An ISO 9001 certificate will award the company’s commitment to environmental stewardship by paying close attention to waste products generated during the manufacturing process, adhering to community standards, and making efforts to comply with environmental quality management requirements.

An affiliation's execution is evaluated in three ways: premium on effectiveness, profitability, and business segment (Matar & Eneizan, 2018). Profitability, production capacity, sales growth, and the effective use of capital and financial resources are indicators of a company’s performance. According to Matar & Eneizan (2018), “profitability can strengthen the company’s influence in fulfilling the quality management system within the company.”

H3: Profitability strengthens the effect of ISO 9000 on company performance.

The Effect of Profitability as a Moderator on Environmental Accounting towards Company Performance
There is a negative relationship between socially responsible employee management, company performance, and financial performance (Dong et al., 2020). Social responsibility is still considered insignificant in terms of increasing company profitability. It is incorrect thinking since if the company can increase its profitability, it will almost certainly protect the existing environment.

Companies often hide or are not transparent in disclosing social factors in their financial and annual reports, leading interested parties such as investors and shareholders to believe that the company is unable and unwilling to contribute to achieving common goals. Legitimacy theory will assist and encourage businesses to be transparent, contributive, and relevant in their efforts to disclose social responsibility resulting from waste. Because most large corporations compete in a global economy, environmental sustainability practices have become a competitive strategy for company success, impacting profitability and equity value (Lu & Taylor, 2018).

H₄: Profitability strengthens the effect of environmental accounting on company performance.

METHODS

This study employed descriptive verification with a quantitative approach. This method is useful for resolving a problem by providing a description or a complete description of the application of ISO 9000 and environmental accounting on company performance in 2008.

This study examined chemical sector companies listed on the Indonesia Stock Exchange (IDX) over three years, from 2017 to 2020, using a population of financial companies for four years.

Based on the study's nature, quantitative data was used as the primary focus of data management. In contrast, we used qualitative data to supplement quantitative data in scientific literature and reference sources. The data source in this study is secondary. The financial statements of financial companies listed on the Indonesia Stock Exchange (IDX) from 2017 to 2020 were used as secondary data in this study. ISO 9000: 2008, Environmental Accounting, and Company Performance are the variables used in this study.

<table>
<thead>
<tr>
<th>Table 1. Definition of Variables</th>
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<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>ISO 9000: 2008</td>
</tr>
<tr>
<td>Environmental Accounting</td>
</tr>
<tr>
<td>Profitability</td>
</tr>
</tbody>
</table>

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Company Performance

Profitability is an indicator to measure a company's ability to generate profits and profitability. Profitability is proxied by return on equity (ROE).

Company performance is measured by earnings, where earnings are the company's net profit (Zulhaimi, 2015). The notation is as follows:

\[ \Delta E_{j,t} = E_{j,t} - E_{j,t-1} \]

Where : \( E_{j,t} \) = earning company j period t, \( E_{j,t-1} \) = earning company j period t-1

RESULTS

The study sampled nine (nine) chemical sector companies listed on the Indonesia Stock Exchange (IDX) over four years, from 2017 to 2020. As a result, 36 (thirty-six) observations were made.

A classic assumption test consisting of heteroscedasticity test, normality test, multicollinearity test, and autocorrelation test were carried out based on the data collected.

**Table 2. Descriptive Statistics Test**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Descriptive Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO</td>
<td>36</td>
</tr>
<tr>
<td>Env_Acc</td>
<td>36</td>
</tr>
<tr>
<td>Profit</td>
<td>36</td>
</tr>
<tr>
<td>Comp_Perf</td>
<td>36</td>
</tr>
<tr>
<td>ISO*Profit</td>
<td>36</td>
</tr>
<tr>
<td>Env_Acc*Profit</td>
<td>36</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>36</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS V.21, 2021

The descriptive statistics test table explains how many descriptive statistical values consist of minimum, maximum, average, and standard deviation values for free and bound variables. The following explains:

1. ISO variable has a minimum value of 2 and a maximum value of 4 (based on the total index disclosure in the form of indicators). The mean value of 3.13 is the average value produced in 9 chemical companies.

2. The environmental accounting variable (Env_Acc) has a minimum value of 0 (dummy) and a maximum value of 1 (due to dummy). The mean value of 0.778 is the average value produced in 9 chemical companies.

3. Profitability as a moderating variable (Profit) has a minimum value of -186.86 from PT Polychem Indonesia Tbk in 2018. The maximum value of 691.77 was from PT Tridomain Performance Material Tbk in 2018. The mean value is 26.86.
4. The company performance variable (Comp_Perfrm) has a minimum value of 0.00 from PT Unggul Indah Cahaya Tbk in 2020. The maximum value of 89.30 comes from PT Tridomain Performance Material Tbk in 2017. The mean value of 5.468 illustrates that the average achievement for company performance is 16.94.

![Figure 2. P-Plot graphic](image)

*Figure 2. P-Plot graphic*
*Source: Data processed by SPSS V.21, 2021*

P-plot graphs depict the normal distribution of data, where data is considered normal if the data points are not left or right but spread around the diagonal line. Figure 2 shows that the points in this study are not too leaning left or right, indicating that the data is normally distributed.

![Figure 3. Scatterplot](image)

*Figure 3. Scatterplot*
*Source: Data processed by SPSS V.21, 2021*

The heteroscedasticity test can be viewed as a scatterplot graph between SRESID and ZPRED, with the predicted Y-axis as the Y-axis and the residual as the X-axis. The heteroscedasticity test in Figure 3 indicates that the pattern in the image is relatively diffuse and not too congested in one location. It indicates that there is no heteroscedasticity in this study.
The multicollinearity test can be seen and explained as follows:

1. ISO where the tolerance value is 0.358 and the variance inflation factor (VIF) is 2.796 means that 0.358 < 1 and 2.796 < 10, and so it can be concluded that there is no multicollinearity.

2. Env_Acc, where the tolerance value is 0.394, and the variance inflation factor (VIF) is 2.536, means that 0.394 < 1 and 2.536 < 10, so it can be concluded that there is no multicollinearity.

3. ISO*Profit where the tolerance value is 0.018 and the variance inflation factor (VIF) is 6.043 means that 0.018 < 1 and 6.043 < 10, so it can be concluded that there is no multicollinearity.

4. Env_Acc*Profit where the tolerance value is 0.001 and the variance inflation factor (VIF) is 6.192 means that 0.001 < 1 and 6.192 < 10, and so it can be concluded that there is no multicollinearity.

The autocorrelation test results in Table 4 indicate a Durbin Watson (DW) value of 2.071. It compared the calculated DW results to DW tables, and the values of Durbin lower (DL) = 0.5948 and Durbin upper (DU) = 1.9280 were obtained with n / T = 9 and k = 3. This indicates that (4-DW count)> DU is 4 – 2.072 = 3.245 > 1.9280, indicating that no autocorrelation symptoms exist.

### Table 3. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.358</td>
<td>2.796</td>
</tr>
<tr>
<td>ISO</td>
<td>0.394</td>
<td>2.536</td>
</tr>
<tr>
<td>Env_Acc</td>
<td>0.002</td>
<td>10.149</td>
</tr>
<tr>
<td>Profit</td>
<td>0.002</td>
<td>6.043</td>
</tr>
<tr>
<td>ISO*Profit</td>
<td>0.001</td>
<td>6.192</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS V.21, 2021

### Table 4. Autocorrelation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression Model</td>
<td>2.072</td>
</tr>
</tbody>
</table>

Source: Data processed by SPSS V.21, 2021

The autocorrelation test results in Table 4 indicate a Durbin Watson (DW) value of 2.071. It compared the calculated DW results to DW tables, and the values of Durbin lower (DL) = 0.5948 and Durbin upper (DU) = 1.9280 were obtained with n / T = 9 and k = 3. This indicates that (4-DW count)> DU is 4 – 2.072 = 3.245 > 1.9280, indicating that no autocorrelation symptoms exist.

### Table 5. Hypotheses Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Prediction</th>
<th>Coefficient</th>
<th>t-Statistics</th>
<th>Sig. (two-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-7.894</td>
<td>-0.820</td>
<td>0.418</td>
<td></td>
</tr>
<tr>
<td>ISO</td>
<td>+</td>
<td>3.279</td>
<td>0.945</td>
<td>0.050**</td>
</tr>
<tr>
<td>Env_Acc</td>
<td>+</td>
<td>1.982</td>
<td>-0.350</td>
<td>0.019**</td>
</tr>
<tr>
<td>ISO*Profit</td>
<td>+</td>
<td>0.318</td>
<td>1.051</td>
<td>0.002**</td>
</tr>
<tr>
<td>Env_Acc*Profit</td>
<td>+</td>
<td>-0.263</td>
<td>-1.703</td>
<td>0.049**</td>
</tr>
</tbody>
</table>
As shown in Table 5, the value of $f_{count}$ is 0.873 with a significance level of 0.000. Because the probability is the significance of $0.000 < 0.05$ and that $f_{count} > f_{table}$ is $21.08 > 19.49$, overall, the ISO and environmental accounting variables simultaneously influence the company's performance, with profitability as a moderating variable. R-value is 0.765 or 76.5%, which indicates that the independent variable can explain the dependent variable by 76.5%. The results of the table are obtained by using a research equation model examining the effect of regional income and capital expenditure on the human development index, explained as follows:

**Comp_Pfprm** = 3,279 ISO – 1,982 Env_Acc + 0,657 Profit + 0,318 ISO*Profit – 0,263 Env_Acc*Profit + e

We can analyze the regression equation as follows:
1. A constant of -7,894 states that if the independent variable is considered constant, then the value of the human development index is 24.742.
2. ISO variable is significantly positive, with a value of $0.050 \leq 0.05$ towards company performance.
3. The environmental accounting variable is significantly positive, with a value of $0.019$ towards company performance.
4. ISO*Profit variable is significantly positive, with $0.002 \leq 0.05$ strengthening the effect towards company performance.
5. Env_Acc*Profit variable is significantly positive, with $0.049 \leq 0.05$ strengthening the effect towards company performance.

**DISCUSSION**

The ISO 9000: 2008 variable shows a coefficient (b) positive of 72.921 with a significance level (p) of 0.039. Because the significance level (p) is smaller than $\alpha = 5\%$, the second hypothesis successfully supports the disclosure of ISO 9000: 2008. The second variable research succeeded in proving that ISO 9000: 2008 affects company performance. The results of this study are supported by previous research conducted by Suryati Adelina (2016).

Based on these findings, ISO 9000: 2008 as a quality standard for products and services can be applied to all businesses, large and small, in any field. ISO 9000: 2008 certification can assist all entrepreneurs in resolving issues regarding practitioners and business performance. ISO 9000: 2008 will help companies maintain their image and viability over an extended period. ISO 9000: 2008 will describe the quality of the products sold to customers; good quality and affordability can be an attractive feature for consumers or customers when purchasing the goods sold. ISO 9000:2008 is a best practice recognized internationally and is simple to implement, which establishes its standards as a benchmark for assessing a company's future performance.
This second variable research succeeded in proving that environmental accounting influences company performance. The environmental accounting variable shows a negative coefficient (b) of -1.982 with a significant level (p) of 0.019. Because the significance level (p) is greater than \( \alpha = 5\% \), the second hypothesis does not support the disclosure of environmental accounting.

Based on these results, environmental accounting as an accounting practice that incorporates environmental costs into a company's burden has no impact on assessing a company's performance because assessing a company's performance has a very broad scope. Therefore, the practice of environmental accounting is being discussed to increase sales through consumer attraction. Costs incurred by a business in connection with environmental accounting practices help companies overcome environmental pollution issues that cause consumers to lose interest in purchasing and result in a decline in sales. Though sales are an important factor in a business's operations, a decline in sales results in a decline in the company's performance.

CONCLUSION

Based on the findings of this research, the following is a description of the effect of ISO 9000: 2008 and environmental accounting on company performance:
1. The research results on ISO variables indicate that they positively and significantly affect company performance in chemical sector companies.
2. Environmental accounting variables have a positive and significant company performance in chemical sector companies.
3. The research results show that using ISO*Profit as a moderating variable has a positive and significant strengthening effect on company performance in chemical sector companies.
4. The results of research on Env_Acc*Profit as a moderating variable has a positive and significant strengthening effect on company performance in chemical sector companies.
5. The research results on the influence of ISO and environmental accounting simultaneously influence the performance of companies in the chemical sector companies.

Based on data analysis and testing results for all of the above variables, these findings are interpreted in terms of theoretical implications. They will increase and expand awareness of the critical nature of starting a business or business. It would help if you had a plan to deal with the results of operational production activities in the era of globalization, which is essential to do today. In addition, the theoretical impact of this research serves as a reference and benchmark for the establishment of more concrete regulations governing voluntary disclosures that all companies should be able to make in their annual and financial reports. When considering the implications of established environmental regulatory policies, the policies should have prompted and encouraged businesses to comply with these mandatory regulations to manage a category of B3 waste and manage these wastes efficiently.

Voluntary disclosures such as the costs incurred for carrying out environmental awareness movements were very limited, and companies' efforts to tackle waste were not explained in detail. The number of chemical companies that ignore voluntary disclosures outside of mandatory disclosures limits the scope of the study. Additionally, based on observations, a dummy was not used to assess environmental quality management.
standards, but total disclosure was investigated. Therefore, future researchers can further explore this research through the following suggestions: conducting a direct survey of each company, including adding control variables such as CSR and expanding the research period.

REFERENCES


