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THE INFLUENCE OF ENVIRONMENTAL PERFORMANCE, ENVIRONMENTAL COSTS AND ISO 14001 ON FINANCIAL PERFORMANCE ON MANUFACTURING COMPANIES

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Abstract

Purpose: This study aims to investigate the impact of environmental performance, environmental costs, and ISO 14001 on the financial performance of manufacturing companies listed on the Indonesia Stock Exchange in the consumer goods sector from 2019 to 2022.

Research Methodology: This quantitative study used data from annual reports, sustainability reports, official company websites, and proper reports published by the Ministry of Environment.

Results: Environmental performance has a significant partial impact on financial performance, environmental costs have no significant partial impact on financial performance, and ISO 14001 has a significant partial impact on financial performance. Environmental performance, environmental costs, and ISO 14001 have a simultaneous effect.

Limitations: The study is limited to the consumer goods manufacturing sector in Indonesia and the period from 2019 to 2022

Contribution: The findings of this study can be useful for companies, investors, and policymakers in understanding the importance of environmental management and its impact on financial performance.

Keywords: *Environmental Performance, Environmental Costs, ISO 14001, Enterprise Performance*



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1. INTRODUCTION

A company as an organization aims not only to generate profits but also to realize stakeholder interests (Isnaeni et al., 2021). Company performance can be measured using financial analysis instruments to determine whether the company's financial performance is good or not (Isnaeni et al., 2021). However, in addition to paying attention to increasing profits

or company performance, companies often do not see the social and environmental impacts resulting from the production process (Rahayudi & Apriwandi, 2023). One of them is a consumer sector manufacturing company, in addition to having to have new product innovations, the company must also manage the waste generated from the production process, (Sasti, Fira; Fauziati, 2021).

There are a number of cases that illustrate manufacturing companies causing environmental damage. In 2021, Indonesia generated B3 waste from the manufacturing sector of up to 60 million tons. Based on data from the Ministry of Environment and Forestry (KLHK), B3 waste last year was produced by 2,897 manufacturing sector industries. The B3 waste is specifically generated from industrial processes (main activities), while other sources come from unexpected sources such as: expired products, leftover packaging, spills, and rejected product waste. From the environmental damage caused, it is hoped that companies will pay more attention to the condition of the surrounding environment during the production process by carrying out social and environmental accountability, (Rahayudi & Apriwandi, 2023).

Accountability from the environmental aspect in a company can be seen from environmental performance. Indonesia's environmental performance is assessed using the Company Performance Rating Assessment Program (PROPER) published by the Ministry of Environment (Rahayudi & Apriwandi, 2023). The government through the Ministry of Environment (KLH) has launched a program since 2002 to assess company performance related to environmental management (Nurudin et al., 2024). PROPER is a measurement of the work performance of those responsible for environmental management businesses. The measurement system and requirements are stated in the Regulation of the Minister of Environment Number 1 of 2021 concerning the Company Performance Rating Assessment Program in Environmental Management (Ministry of Environment and Forestry, 2021). In the last 10 years, PROPER participants have increased by 10%, then in 2023 there will be coaching and evaluation for 3,694 companies. In terms of innovation in 2023, there are 1,193 eco-innovations with savings of up to 158.53 trillion Rupiah/up 23.6% from 2022. The eco-innovations come from energy savings of 554.8 million GJ, GHG emissions decreased by 229.6 million tons of CO₂eq, conventional emissions decreased by 15.8 million tons, B3 waste reduction of 55.4 million tons, water efficiency of 437.32 million m³, polluted water load decreased by 6.02 million tons and efforts to maintain biodiversity with an area of 308 thousand hectares (Ministry of Environment and Forestry (KLHK, 2023). The impact of improving environmental management performance can have a positive impact on society, because through the allocation of environmental management costs, it shows attention to social responsibility so that a good image of the company can be built in the eyes of the community and shows that the company cares about the surrounding environment (Sparta & Reska, 2022).

Environmental costs are costs for prevention, mitigation, and reduction of environmental impacts, but with the disclosure of environmental costs will have an impact on greater expenditure so that company profits can be reduced and reduce company performance (Okprasari & Illahi, 2023). According to (Evita & Syafruddin, 2019) environmental costs are sacrifices to maintain the sustainability of the company, the meaning of the company is an object outside the company such as the natural environment, economy, social, politics, culture. These five objects are mandatory in company management so as not to cause losses.

The existence of environmental problems results in the need for instruments/tools to overcome related problems. The International Organization for Standardization (ISO) is the organization that issues ISO 14001 certificates regarding Environmental Management Systems

(EMS). ISO 14001 is a reference for companies in identifying, prioritizing, and managing risks in environmental management as part of a company's business practices, with the aim of protecting and supporting environmental sustainability, pollution prevention, and social balance (Fitriaty et al., 2021). Currently, the problem includes not all companies being able to and implementing ISO 14001 because it is voluntary and the costs are quite large depending on the characteristics and facilities of each company including routine audit costs and investment costs (Mubasyir et al., 2021). The international standard certification of the ISO 14001 Environmental Management System also social responsibility with the triple bottom line (TBL) concept stipulates that to support company operations, not only pursuing profit, but companies must also contribute to society (people) and be active in protecting the environment (planet) (Fushshilat et al., 2022). Environmental costs are a company's social responsibility which is expected to benefit the community around the company or the wider community, environmental costs are held and calculated for implementation costs without ignoring compliance and obligations (Basar et al., 2023). The results of the study (Amani et al., 2020) stated that environmental work achievements have a significant influence on the company's financial work achievements, this is because companies with good environmental performance will get a good reaction from investors, but in contrast to research (Okprasari & Illahi, 2023) stating that environmental performance has no positive impact on the company's work achievements, because environmental work achievements have no direct influence, it takes a long time to see the benefits of a company's environmental performance.

Research (Meiyana & Aisyah, 2019) and (Okprasari & Illahi, 2023) say that environmental costs do not have a positive impact on financial performance, it shows that if environmental costs increase, company profits decrease and have an impact on company performance. But it is different from the results of research (Suandi & Ruchjana, 2021) where environmental costs have a simultaneous impact on financial performance.

Research (Fitriaty et al., 2021) says that CSR and SML ISO 14001 have a simultaneous impact on the company's financial performance ROA, this is because many investors believe that companies that provide special attention to the environment are considered more sustainable. In contrast to (Ermaya & Mashuri, 2020) who said that ISO 14001 has no impact on financial performance because the influence of ISO 14001 cannot be felt directly by the company.

There are different research outputs so that this study wants to re-examine in order to find out whether environmental performance has a partial impact on Return On Asset (ROA), environmental costs have a partial impact on ROA, and ISO 14001 has a partial impact on ROA and environmental performance, environmental costs and SML ISO 14001 have a simultaneous impact on ROA. This study uses the years 2019-2022. With this study, it is hoped that it can be useful for readers and can be a reference for further research because it uses the latest year.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Literature Review

Triple Bottom Line Theory

In 1997, John Elikington introduced the triple bottom line theory, namely People, Planet, Profit (3P) as the basis for the triple bottom line (Fushshilat et al., 2022). The triple bottom line theory is a theory that views companies as having to pay attention to 3P if they want to survive (Gami, 2020). In addition to pursuing profit, companies must also be involved and pay attention to fulfilling the prosperity of the community (people) and actively participate in supporting the sustainability of the environment (planet), (Fushshilat et al., 2022). Profit, which is a core aspect

of a company's operations by achieving profit, seeking profit and profit is important because it can affect the sustainability of the company, so it is not surprising that the main focus in a business activity is to seek and pursue as much profit as possible. Society or people (people) are aspects that run the business operations of a company and as stakeholders, where a company must be oriented towards social justice and social welfare, therefore the company needs to be committed to being able to strive to benefit the surrounding community.

Environmental Performance

Environmental performance is the company's achievement in creating a good environment so that the environmental management system can be measured (Amani et al., 2020). Environmental performance can be measured by knowing the color ranking of the company's achievements in PROPER (Company Work Rating Assessment Program) from the government through the Ministry of Environment (KLH) (Rahayudi & Apriwandi, 2023). PROPER is an assessment of the work achievements of those responsible for business/activities in the environmental management system sector based on KLH Regulation of the Republic of Indonesia No. 6 of 2021, article 1 (Ministry of Environment and Forestry, 2021). There are 5 color indicators regarding the PROPER ranking system: gold (very good), green (good), blue (moderate), red (bad), black (very bad) (Ministry of Environment and Forestry, 2021).

Environmental Costs

Environmental costs include total real costs (eg waste disposal), uncertainty assessments, environmental costs are usually related to products, systems, processes, and other important facilities in order to make good management decisions (Setiadi, 2021). Environmental costs are costs incurred to overcome damage or pollution due to company activities and there may be poor environmental quality due to the company (Rahayudi & Apriwandi, 2023). Environmental cost accounting is a systematic cost accounting strategy that does not only focus on environmental protection cost accounting, but also considers environmental costs for materials and energy, as well as environmental costs (internal) and waste generation (external) (Okprasari & Illahi, 2023). The three definitions above explain that environmental costs are costs that arise because there is poor environmental quality that occurs or may occur for prevention purposes.

ISO 14001 Environmental Management System

The Environmental Management System is a component of a company's management method in managing a company's environmental performance including organizational structure, company activities, planning, responsibilities, practices, stages and resources for the improvement, application, achievement, assessment and maintenance of environmental policies. ISO 14001 applies the requirements for an environmental management system and can be certified. ISO 14001 is a company/organization framework guide for the establishment of a good environmental management system. Through ISO 14001, an organization can provide assurance to company management, employees and external stakeholders about the possibility of measuring and improving environmental impact results (Ermaya & Mashuri, 2020). ISO 14001 is a voluntary environmental management tool that aims to achieve environmental improvement and management through prioritizing pollution prevention, regulatory compliance and continuous improvement (Fitriaty et al., 2021).

Financial Performance

Financial performance is a reflection of the achievement of a company's financial activities in a certain period (Solikhin & Lubis, 2020). Financial performance is a reflection of the company's operational conditions in the financial aspect, whether there is an increase or decrease, using the provisions and standards in SAK (Financial Accounting Standards) and GAAP (General Accepted Accounting Principle), etc. (Setiadi, 2021). Financial work achievement is the achievement of the company's management results in playing its role in managing the company's assets effectively in a certain period (Onoyi & Windayati, 2021). Measuring financial performance usually uses financial ratio analysis, by assessing and measuring whether or not the company's financial work achievements are good in a certain period (Herrera Villanueva, 2020). Financial performance reports can function as information indicators for investors in analyzing a company's financial work achievements and making investment choices (Konvensional et al., 2024). Based on the description of the theoretical basis, the framework of thought in this writing is described as follows:

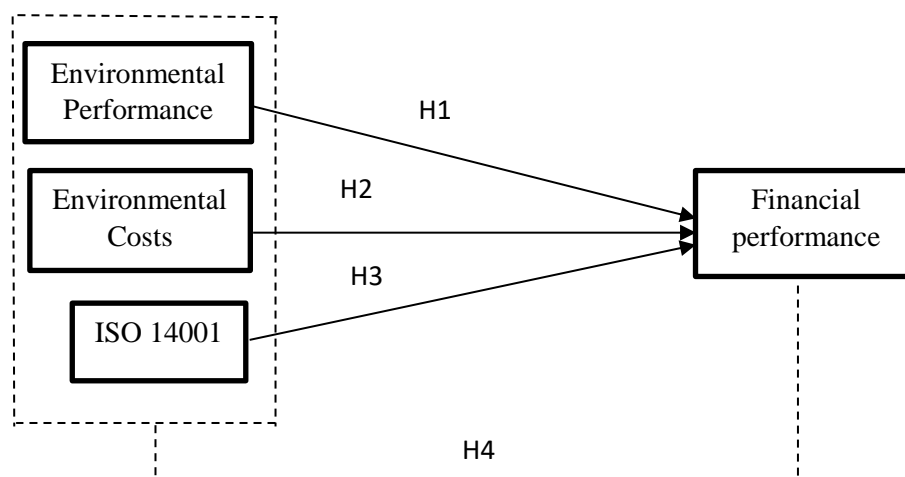


Figure 1. Research framework

Research Hypothesis

H1: Environmental performance has a positive effect on financial performance

H2: Environmental costs have a positive effect on financial performance

H3: ISO 14001 EMS has a positive effect on financial performance

H4: Environmental performance, Environmental Costs and ISO 14001 EMS have a positive effect on financial performance

3. RESEARCH METHODOLOGY

This study uses quantitative methods using statistical/numerical data to examine social phenomena involving measurement and data analysis (Setiadi, 2021). This study uses secondary data, namely the Annual Report, Sustainability Report, and the official website of each company. The population is manufacturing companies in the pharmaceutical, cigarette,

cosmetic and household goods sub-sectors registered on the Indonesia Stock Exchange and have been published in 2019-2022. The sample was selected through purposive sampling based on the following criteria:

1. Manufacturing companies in the consumer goods sector and registered on the IDX for the 2019-2022 period.
2. The company has a complete annual report in 2019-2022.
3. The company participated in the PROPER program of the Ministry of Environment (KLH) in 2019-2022.
4. Manufacturing companies that include environmental costs in 2019-2022

In order to analyze the relationship between independent variables and dependent variables, by processing data such as classical assumption tests, descriptive statistics and multiple linear regression tests.

5. RESULTS AND DISCUSSIONS

5.1. Results

The population of the study is the consumer goods sector manufacturing companies registered with the IDX in 2019-2022. Sample selection with propositional sampling with a selection process as in the table below:

Table 1. Sample Selection Process Table

No	Criteria	Does not meet the criteria	Enter the criteria
1	Manufacturing Companies in the Consumer Goods Sector and Registered with the IDX for the 2019-2022 Period	0	47
2	The Company Has a Complete Annual Report for 2019-2022	(4)	43
3	The Company Participated in the PROPER Program of the Ministry of Environment (KLH) for 2019-2022.	(23)	20
4	Manufacturing Companies That Include Environmental Costs for the 2019-2022 Period	(4)	16
	Number of Samples for Each Period	16	
	Research Period	4	
	Number of Research Samples Before Outliers	64	
	Research Samples Excluded Due to Outliers	(4)	
	Number of Research Samples After Outliers	60	

Source: Processed from various references

Of the total 47 consumer goods sector manufacturing companies registered with the IDX in 2019-2022, there were 16 companies that met the criteria to be samples with 4 research observation periods. The researcher chose to eliminate non-normal distribution/outlier data because there were a number of data with extreme values and were not suitable for interpretation. Therefore, the total number of research samples was 60 samples.

Descriptive Statistical Analysis

Descriptive statistics reflect visible data on mean values, standard deviations, variances, maximums, minimums, sums, ranges, kurtosis and skewness.

Table 1. Descriptive Statistical Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Environmental Performance	60	3	5	3.42	.591
Environmental Costs	60	-.0977	2.3132	.060771	.3016151
ISO 14001	60	0	1	.72	.454
Financial Performance	60	-20.3211	60.7170	12.693001	13.8804661
Valid N (listwise)	60				

Source: Secondary Data Processing Results, 2024

Table 1 shows the analysis output using descriptive statistics. The analysis output on the environmental performance variable shows a minimum value of 3.00 for PT Akasha Wira International Tbk in 2019 and a maximum of 5.00 for PT Industri Jamu & Farmasi Sido Muncul Tbk in 2020, with an average of 3.42 with a standard deviation of 0.591. Environmental performance that shows a positive value means that the average company performance has obtained a fairly good KLKH evaluation score.

The environmental cost variable shows a minimum value of -0.0977 by PT Kalbe Farma Tbk in 2020 and a maximum value of 2.3132 by PT Mustika Ratu Tbk in 2022. For an average value of 0.060771 with a standard deviation of 0.3016.

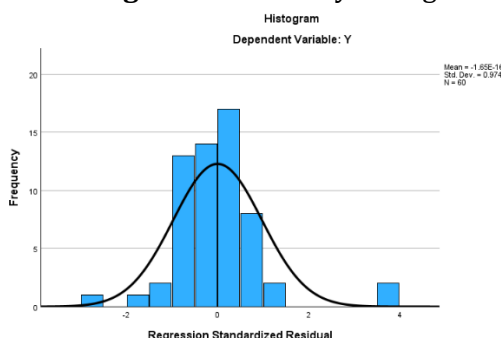
The ISO 14001 variable shows a minimum value of 0.00 by PT Hanjaya Mandala Sampoerna Tbk in 2019 and a maximum value of 1.00 by PT Kino Indonesia Tbk in 2019. For an average figure of 0.72 with a standard deviation of 0.454. The average ISO results that have an average figure >0.50, show that 50% of companies registered on the IDX have obtained ISO 14001 certification from certification bodies.

Financial work achievements measured by return on assets (ROA), show a minimum figure of -20.32 by PT Kino Indonesia Tbk in 2022 and a maximum figure of 60.71 by PT Garudafood Putra Putri Jaya Tbk in 2019. For an average figure of 12.69 with a standard deviation of 13.8804661.

Classical Assumption Test

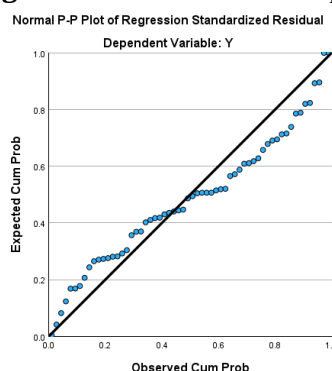
a. Normality Test Results

This study uses a normality test analyzing histogram graphs and normal probability plots as well as statistical tests with the Kolmogorov Smirnov test. Based on the data processing output, the normality test output is obtained, namely:

Figure 2. Normality Histogram

Source: Secondary Data Processing Results, 2024

Referring to the histogram graph in Figure 2, a symmetrical shape is depicted that does not turn (skewness) to the right/left, it is stated that the regression model meets the normality assumption.

Figure 3. Normal P-Plot Graph

Source: Secondary Data Processing Results, 2024

Referring to the normal P-Plot graph in Figure 3, the points are spread around the diagonal line, which means the normal distribution prototype, so the regression model includes the assumption of normality.

b. Multicollinearity Test Results

The multicollinearity test functions to test the existence of a high correlation between independent and independent variables in the regression model. The assumptions of Tolerance and Variance Inflation Factor (VIF) can be stated, $VIF < 10$ and the Tolerance number > 0.10 , there is no multicollinearity. Referring to the data processing output, the multicollinearity test output is obtained, namely:

Table 3. Multicollinearity Test

Model		Collinearity Statistics	
		Tolerance	VIF
1	Environmental Performance	.867	1.154
	Environmental Costs	.940	1.064
	ISO 14001	.907	1.103

Model	Collinearity Statistics	
	Tolerance	VIF
a. <i>Dependent Variable:</i> Financial performance		

Source: Secondary Data Processing Results, 2024

Referring to the multicollinearity test in table 3 above, the environmental work achievement variable has a tolerance value of $0.867 > 0.10$ & a VIF value of $1.154 < 10$, the environmental cost variable has a tolerance value of $0.940 > 0.10$ & a VIF value of $1.064 < 10$, the ISO 14001 variable has a tolerance value of $0.907 > 0.10$ & a VIF value of $1.103 < 10$. All independent variables have a tolerance value of > 0.10 and a VIF value of < 10 , this study is stated to be free or has no multicollinearity.

c. Autocorrelation Test Results

Autocorrelation test to see the existence of a correlation between barrier defects in period t and barrier defects in period t-1 (previous). Decision making through the Asymp. Sig (2-tailed) Run Test is visible. If the Asymp.Sig (2-tailed) number is higher than the significance level of 0.05, there is no autocorrelation. Based on the data processing output, the output of the autocorrelation test with runtest is obtained, namely:

Table 4. Autocorrelation with Runtest Test

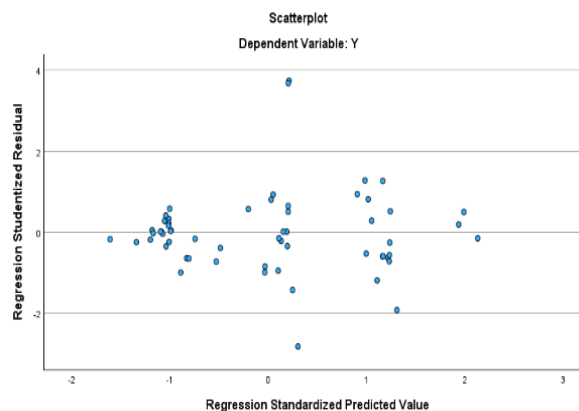
Runs Test	
	Unstandardized Residual
Test Value ^a	-1.59553
Cases < Test Value	30
Cases \geq Test Value	30
Total Cases	60
Number of Runs	24
Z	-1.823
Asymp. Sig. (2-tailed)	.068
a. Median	

Source: Secondary Data Processing Results, 2024

Referring to the output of the autocorrelation test through the runtest table 4, the significance result (pvalue) was 0.068, the result (pvalue) $0.068 > 0.05$, so there are no symptoms/constraints of autocorrelation in this research model.

d. Heteroscedasticity Test Results

The heteroscedasticity test is intended to test whether or not there is inequality in the variance of the residuals between those observed in the regression model. If the variance of the residuals between those observed remains, it can be said to be homoscedasticity and if it is different, it is said to be heteroscedasticity. A good regression model is heteroscedasticity/no homoscedasticity.



Source: Secondary Data Processing Results, 2024

Referring to table 5, the output of the heteroscedasticity test is spread across points so it can be said that the data does not contain heteroscedasticity.

Multiple Linear Regression Analysis

Multiple linear regression analysis is to see the impact of more than one independent variable on one dependent variable. In this study, multiple regression analysis functions to answer the proposed research hypothesis to be able to determine the impact of environmental work achievements, environmental costs and ISO 14001 on financial work achievements. Referring to the data processing output, the output of multiple linear regression analysis is obtained, namely:

Table 6. Multiple Linear Regression Analysis

		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-12.500	9.819		-1.273	.208
	Environmental Performance	6.437	3.013	.274	2.136	.037
	Environmental Costs	-86.334	54.517	-.195	-1.584	.119
	ISO 14001	7.307	3.618	.254	2.020	.048

a. Dependent Variable: Kinerja Keuangan

Source: Secondary Data Processing Results, 2024

Referring to table 6, the output of the multiple linear regression equation is obtained, namely:

$$Y = -12.500 + 6.437KL + (-86.334)BL + 7.307ISO + e$$

Hypothesis Testing

a. Parameter Significance Test Results (t-Test)

Referring to the data processing output, the results of the hypothesis test using the t-test, obtained the following output:

Table 7. t-Test

		Coefficients ^a				
		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
Model		B		Beta		
1	(Constant)	-12.500	9.819		-1.273	.208
	Environmental Performance	6.437	3.013	.274	2.136	.037
	Environmental Costs	-86.334	54.517	-.195	-1.584	.119
	ISO 14001	7.307	3.618	.254	2.020	.048

a. Dependent Variable: Financial performance

Source: Secondary Data Processing Results, 2024

Referring to the output of the t-statistic test in table 7, from the independent variables inputted into the regression model, namely environmental performance has a calculated $t > t_{table}$ ($2.136 > 2.00324$) with a significant value of $0.037 < 0.05$, it can be stated that environmental performance has an effect on financial achievement. Environmental costs have a calculated $t > t_{table}$ ($-1.584 > 2.00324$) with a significant value of $0.119 > 0.05$, environmental costs have no impact on financial performance. ISO 14001 has a calculated $t > t_{table}$ ($2.0200 > 2.00324$) with a significant value of $0.048 < 0.05$, it can be stated that ISO14001 has an impact on financial achievement.

b. Simultaneous Test Results (f Test)

Referring to the output of data processing, the output of the hypothesis test using the f test, the output obtained is:

Table 8. f Test

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2255.531	3	751.844	4.641	.006 ^b
	Residual	9071.172	56	161.985		
	Total	11326.703	59			

a. Dependent Variable: Financial performance

b. Predictors: (Constant), ISO 14001, Environmental Costs, Environmental Performance

Source: Secondary Data Processing Results, 2024

Referring to the output of the t-statistic test in table 8 above, based on the output of the simultaneous test with the f test, the total independent variables, namely financial performance, environmental costs and ISO 14001, have a simultaneous impact on ROA, this can be seen from the calculated f figure of 4.641 and the significance figure (pvalue) obtained sig. < 0.05 ($0.05 > 0.006$).

c. Results of the R2 Determination Coefficient Test

The coefficient of determination (R2) is a tool for measuring the power of the model when explaining the types of dependent variables. The coefficient of determination number is zero

and one. The higher the R2 number (approaching one), the better the regression output because the total independent variables can explain the dependent variable and vice versa, the closer to zero, the worse the regression output, because the total independent variables cannot explain the dependent variable. Referring to the output of data processing, the output of the coefficient of determination is obtained, namely:

Table 9. Determination Coefficient

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.446 ^a	.199	.156	12.7273415
a. Predictors: (Constant), ISO 14001, Environmental Costs, Environmental Performance				
b. Dependent Variable: Environmental Performance				

Source: Secondary Data Processing Results, 2024

Based on table 9 above, the output of the determination coefficient is seen to have an rsquare value of 0.156 or 15.60%, this shows 15.60% contribution of the impact of the independent variables of financial performance, environmental costs and ISO 14001 on the dependent variable of financial performance, and the remaining 84.40% is the contribution of the impact on the dependent variable of financial performance from other variables not included in this study.

5.2. Discussions

The Effect of Environmental Performance on Company Financial Performance

The results of the t-statistic test show that the environmental work achievement variable (X1) has a tcount>ttable (2.136>2.00324) with a significant figure of 0.037<0.05, so that Environmental Performance (X1) has a contribution to Financial Performance (Y). A positive t value shows that the X1 variable is related in the same direction as Y. So it can be said that H1 is accepted, namely that environmental work achievement has a significant positive impact on the company's financial work achievement. Companies with good environmental performance can get positive reactions from investors or stakeholders which will later increase the company's financial work achievement. Companies with large environmental performance will also have large company figures, this is because companies that manage the environment well will increase production quality, a good picture of the company which in the future can increase financial performance. The output of this study is in line with (Amani et al., 2020) which states that environmental performance has a significant impact on the company's financial performance but is inversely proportional to the output of the study (Okprasari & Illahi, 2023) where environmental performance does not have a positive effect on company performance. Environmental performance is how companies integrate environmental concerns through interactions with stakeholders (Okprasari & Illahi, 2023). The company's environmental performance is assessed based on the company's achievements in implementing PROPER as an effort by the Ministry of Environment to motivate corporate governance when managing the environment. PROPER aims to provide control over environmental impacts in increasing the role of companies in environmental conservation programs which are assessed using color indicators (gold, green, blue, red, black). When carrying out corporate social responsibility in the environmental sector, companies carry out various activities related to the environment.

The triple bottom line (3P) theory states that companies do not only pursue profit, but must be involved and actively participate in contributing to preserving the environment (planet) (Fushshilat et al., 2022). Referring to the existing concept and the tests that have been conducted, it is seen that environmental work achievements have an impact on the company's financial work achievements. The research output shows that performance is related in the same direction as financial work achievements.

The Effect of Environmental Costs on Company Financial Performance

The output of the t-statistic test shows that the environmental cost variable (X2) has a $t_{count} > t_{table}$ ($-1.584 > 2.00324$) with a significant figure of $0.119 > 0.05$, so Environmental Costs (X2) do not contribute to Financial Performance (Y). A negative t-number shows that the X2 variable is not related in the same direction as Y, so this hypothesis is rejected. So that H2 environmental costs do not have a significant positive impact on the company's financial performance. The negative regression coefficient value shows that environmental costs are related in the opposite direction to ROA, if environmental costs increase, the company's profit decreases which has an impact on company performance (Return On Asset), therefore the company's environmental cost expenditure is considered additional expenditure by the company. The output of this study is in line with (Meiyana & Aisyah, 2019) and (Okprasari & Illahi, 2023) which state that environmental costs do not have a positive impact on financial performance but differs from the results of the study (Suandi & Ruchjana, 2021) where environmental costs have a simultaneous impact on financial performance.

Environmental costs are company expenditures based on environmental improvement programs for the impact of environmental pollution intentionally or unintentionally by the company (Setiadi, 2021). Costs channeled to the environment are company investments, companies can get social and economic benefits in the short term (Kinasih et al., 2022). In carrying out corporate social responsibility in the environmental sector, companies are active in environmental matters. The triple bottom line theory is a theory that views companies that if they want to survive, they must pay attention to 3P (Gami, 2020). In addition to achieving profits, companies must also be involved and pay attention to the adequacy of community prosperity (people) and be active in contributing to preserving the environment (planet) (Fushshilat et al., 2022).

The Impact of ISO 14001 on Company Financial Performance

The output of the t-statistic test shows that the ISO14001 variable (X3) has a $t_{count} > t_{table}$ ($2.0200 > 2.00324$) with a significant figure of $0.048 < 0.05$, so ISO14001 (X3) has a contribution to Financial Performance (Y). A positive t-number shows that the X1 variable is related in the same direction as Y, so H3 is accepted, namely that ISO 14001 has a significant positive impact on the company's financial performance. Companies that implement ISO 14001 are considered to be able to grow and apply policies that are committed and responsible for the environment, such as resource sustainability, minimizing environmental impacts, etc. Companies that pay special attention to the environment are considered more sustainable than those that do not. The ISO 14001 environmental management system is considered to be able to provide a good picture for companies that can later increase the company's financial performance. The output of this study is in line with (Fitriaty et al., 2021) where CSR and the ISO 14001 Environmental Management System have a significant impact on ROA but are inversely proportional to research (Ermaya & Mashuri, 2020) which states that ISO 14001 has no impact on financial performance.

SML ISO 14001 is part of the company's management method in a company's environmental performance management system including organizational structure, company activities, planning, responsibilities, practices, processes and resources for development, application, achievement, assessment, and maintenance of environmental policies (Ermaya & Mashuri, 2020). ISO 14001 is a voluntary environmental management tool aimed at achieving sustainable environmental improvement and management by prioritizing pollution prevention, complying with regulations and continuous improvement (Fitriaty et al., 2021).

In carrying out corporate social responsibility in the environmental sector, companies are active in the environment. The triple bottom line theory is a theory that provides an overview of companies that if they want to survive, they must pay attention to 3P (Gami, 2020). In addition to achieving profits, companies are also required to be involved and pay attention to ensuring the prosperity of the community (people) and actively contribute to preserving the environment (planet) (Fushshilat et al., 2022).

The Effect of Environmental Performance, Environmental Costs, ISO 14001 on Company Financial Performance

Referring to the simultaneous test output with the f test, the total independent variables, namely environmental work achievements, environmental costs and ISO 14001, have a simultaneous effect on financial work achievements (Return On Assets), this can be seen from the calculated f figure of 4.641 and the significance value (pvalue) obtained sig. <0.05 (0.05> 0.006). This shows that companies that pay special attention to the environment are considered more sustainable than those that do not. The results of this study are in line with (Evita & Syafruddin, 2019) which show that environmental work achievements, environmental costs, ISO 14001 have a simultaneous effect on Return On Assets (ROA).

Environmental performance is a company's achievement in creating a good environment so that it can be measured by an environmental management system (Amani et al., 2020). Environmental performance can be measured by knowing the color ranking of the company's achievements in PROPER (Company Work Rating Assessment Program) issued by the government through the Ministry of Environment (KLH) (Rahayudi & Apriwandi, 2023).

Environmental costs are costs to overcome damage/pollution due to company activities and there may be poor environmental quality due to the company (Rahayudi & Apriwandi, 2023). The ISO 14001 Environmental Management System is part of a company's management method in managing a company's environmental performance including organizational structure, company activities, planning, responsibilities, practices, processes and resources for improving, applying, achieving, reviewing, and maintaining environmental policies. With ISO 14001, an organization can provide assurance to company management along with employees and external stakeholders where the impact of environmental results can be assessed and developed (Ermaya & Mashuri, 2020).

5. CONCLUSION

Referring to the collected data and the test results on the problem through the multiple regression model, it can be concluded that; Partial Environmental Performance has a significant positive impact on ROA. Companies with good environmental performance will get good

reactions from investors or stakeholders which can later improve the company's financial performance. Environmental costs partially do not have a significant impact on financial performance (Return On Asset). The negative regression coefficient value shows that environmental costs have an inverse relationship with Return On Asset (ROA), if environmental costs increase, the company's profit decreases and affects the company's performance, therefore environmental costs are considered additional expenses by the company. ISO 14001 has a significant partial positive impact on financial performance (Return On Asset). This shows that companies with special attention to the environment are considered more sustainable, the ISO 14001 environmental management system is considered to be able to provide a good picture for companies which can later increase the company's financial performance. Environmental Performance, Environmental Costs and ISO 14001 have a significant simultaneous impact on financial performance (Return On Asset). This study is expected to present better output in the future with the addition of owner variables related to financial performance, such as environmental disclosure and company size, and research on financial performance variables using other proxies, such as Sales/MVA. The use of a longer and more recent time period, such as 5 or 7 years, is needed to determine the actual condition of the company. Future research is expected to provide additional coverage of prospective companies studied, such as agricultural and livestock companies registered with the IDX.

LIMITATION AND STUDY FORWARD

Limitations:

1. Scope: The study is limited to the consumer goods manufacturing sector in Indonesia. The findings may not be generalizable to other sectors or industries.
2. Time Period: The study covers the period from 2019 to 2022. Examining a longer time frame could provide more comprehensive insights into the relationships between the variables.
3. Data Sources: The study relies on data from annual reports, sustainability reports, company websites, and reports from the Ministry of Environment. The availability and reliability of data from these sources may be a limitation.
4. Measurement of Variables: The study uses ROA as a measure of financial performance, which may not capture all aspects of a company's financial performance. Other financial metrics could be considered in future studies.
5. Endogeneity Concerns: The study does not address potential endogeneity issues, such as the possibility of reverse causality or omitted variable bias, which could influence the observed relationships.

Suggestions for Future Research:

1. Expand Scope: Future studies could investigate the relationships in other industries or sectors to provide a more comprehensive understanding of the phenomenon.
2. Extend Time Period: Extending the study period to include a larger time frame could help to identify any long-term trends or changes in the relationships between the variables.
3. Incorporate Additional Variables: Future research could consider incorporating other variables, such as firm size, leverage, or industry-specific factors, that may influence the relationships under investigation.

4. Employ Advanced Analytical Techniques: The use of more sophisticated econometric techniques, such as structural equation modeling or panel data analysis, could help to address potential endogeneity issues and provide more robust results.
5. Qualitative Insights: Complementing the quantitative analysis with qualitative insights, such as interviews with industry experts or case studies, could provide a deeper understanding of the underlying mechanisms and contextual factors.
6. Cross-Country Comparisons: Conducting comparative studies across different countries or regions could shed light on the influence of institutional, cultural, or regulatory factors on the relationships between environmental management and financial performance.

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