Financial Performance Determinant: Evidence On Energy And Mineral Sector

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Abstract: Financial performance is essential to the company because financial performance indicates company health. This study intends to present simultaneous and partial empirical evidence on the effect of environmental management systems, asset management, and capital structure on financial performance in the energy and mineral sectors listed on the Indonesia Stock Exchange from 2018 to 2021. The number of samples can be obtained is 50, totalling 200 observations. Hypothesis testing in this study is used descriptive statistics with panel data regression analysis. The results showed that environmental management systems, asset management, and capital structure simultaneously affect financial performance. Partially, the environmental management system does not involve financial performance; asset management positively affects financial performance, and capital structure negatively affects financial performance.
Keywords: Financial Performance; Environmental Management System; Asset Management; Capital Structure.

Abstrak: Kinerja keuangan merupakan aspek penting dalam perusahaan karena kinerja keuangan merupakan indikator kesehatan perusahaan. Penelitian ini bermaksud untuk menyajikan bukti empiris secara simultan maupun parsial mengenai pengaruh sistem manajemen lingkungan, manajemen aset, dan struktur modal terhadap kinerja keuangan pada perusahaan sektor energi dan minerba yang terdaftar di Bursa Efek Indonesia tahun 2018 sampai 2021. Adapun jumlah sampel yang dapat diperoleh sebanyak 50 dengan total 200 observasi. Pengujian hipotesis dalam penelitian ini menggunakan statistik deskriptif dengan analisis regresi data panel. Hasil penelitian menunjukkan secara simultan sistem manajemen lingkungan, manajemen aset, dan struktur modal memiliki pengaruh terhadap kinerja keuangan. Secara parsial sistem manajemen lingkungan tidak berpengaruh terhadap kinerja keuangan, manajemen aset berpengaruh secara positif terhadap kinerja keuangan, dan struktur modal secara negatif berpengaruh terhadap kinerja keuangan.
Kata Kunci: Kinerja Keuangan; Sistem Manajemen Lingkungan; Manajemen Aset; Struktur Modal.

INTRODUCTION

A company is established to generate a profit, which each company will achieve when it optimally utilizes its resources. The achievement of optimal company activities is supported by good financial performance. Financial performance is an index to describe a company's condition in using its resources to generate profits. Financial performance can also indicate whether a company is in good or bad condition (Purba and Bimantara, 2020). A company has better financial performance characterized by higher profits that can be generated by the company, where profits are used to fund the company's activities (Purba and Bimantara, 2020). Therefore, every company will try to improve its financial performance conditions so that operational activities can work adequately and company targets can be achieved.

This study uses the object of energy and mineral sector companies. Energy and mineral sector companies are a procurement activity comprising exploration, extraction,

transformation, transmission, and distribution of non-renewable and renewable natural resources (Sari, 2020; Supriyanto et al., 2021). The energy and mineral sector has several main activities: (1) energy and mineral exploration activities aimed to obtain information about the social and environmental environment and also available natural resources, (2) extraction or exploration activities of energy and mineral resources in the form of materials, (3) producing activities consisting of construction, mining, processing, refining, and transportation of energy and mineral resources, (4) processing and transforming activities of resources into final energy in the form of primary energy and alternative energy, and (5) transport and sale of the processing results of energy and mineral resources (*Menteri ESDM, 2018*; Sari, 2020).

Natural resources in Indonesia are one of the business opportunities that energy and mineral sector companies can utilize. In addition to being a business opportunity, using natural resources can support and propel other sectors. According to Ichwan Arifin, Chairman of the Public Relations Forum for the Upstream Oil and Gas Industry Jabanusa, the sustainability of economic growth and other sectors is influenced by the energy sector, which has the most critical role. Developed countries in the future are predicted to experience an increasing trend in energy consumption and use (*Dewan Energi Nasional*, 2022).

The energy sector in Indonesia has contributed a significant amount of PNBP (Penerimaan Negara Bukan Pajak) or non-tax state revenue in recent years. According to the Ministry of Energy and Mineral Resources, non-tax state revenue from the energy sector in 2019 was 172.9 trillion Rupiahs, accounted for 96 per cent of the 2019 state budget target or APBN (Anggaran Pendapatan dan Belanja Negara). Moreover, Minister of Energy and Mineral Resources Arifin Tasrif stated that the realization of PNBP last year was the most significant over the past ten years (*Kementerian ESDM*, 2022).

Minister of Energy and Mineral Resources Arifin Tasrif stated that the mineral sector also influences a vital role in national economic growth. Community development and empowerment, especially mining activities, can move because of the mineral sector's contribution (Pribadi, 2020). In addition, according to the Expert Staff of the Minister of Energy and Mineral Resources for the Acceleration of Mineral Governance, Irwandy Arif stated that mineral commodities have the potential and a significant role. A mineral is used as a source of energy to increase the competitiveness of the national economy and encourage energy independence and sovereignty (Pribadi, 2021).

However, there are still some companies that have poor financial performance. A decreasing profit can be an indication of poor financial performance. The following is the average net profit of energy and mineral sector companies from 2018 to 2020.
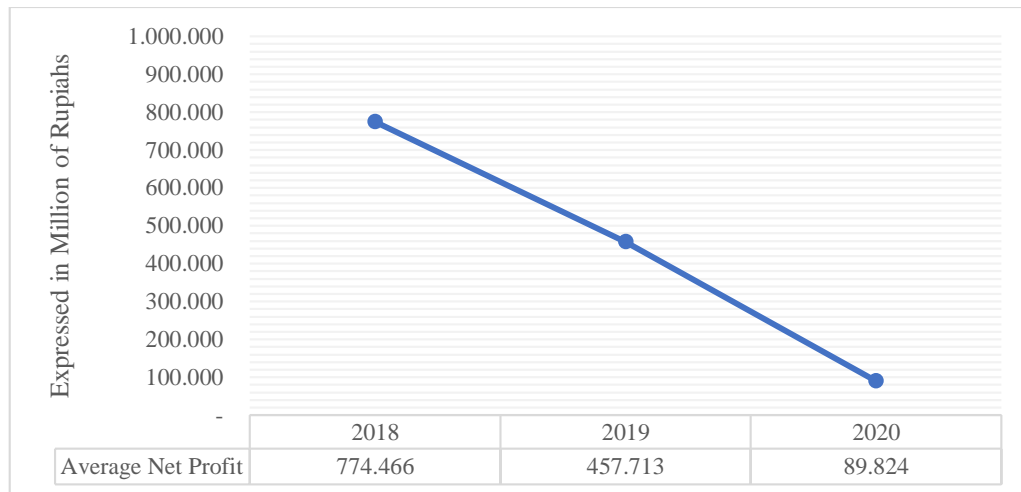
Figure 1. The Average Net Profit of the Energy and Mineral Sector
Source: Processed data, 2023

Figure 1 shows the average net profit of the energy and mineral sector listed on the Indonesia Stock Exchange. Energy and mineral sector companies have recorded a declining net profit in the past three years. In 2018, the average net profit of the energy and mineral sector was recorded at 774.466 billion Rupiahs. In 2019, the average decreased by 40.900 per cent to 457.713 billion Rupiahs. Then in 2020 experienced a significant decline of 82.441 per cent to 89.824 billion Rupiahs. Based on this phenomenon, on average, energy and mineral sector companies have had declining financial performance in the last three years.

Financial performance is a fundamental aspect of every company. However, financial performance can be affected by certain factors that cause financial performance to decline. This research determined how companies manage their resources to improve their financial performance. The company's management activities are used as variables in this study in the form of environmental management systems, asset management, and capital structure.

Research run by (Ong et al., 2016) states that the environmental management system affects financial performance. The study argues that companies with an environmental management system have advantages that can help company activities become profitable. However, the research conducted by (Muda and Wahyuni, 2019) shares different results, which state that the environmental management system does not affect financial performance.

Research by (Susanti et al., 2021) states that asset management affects financial performance. The study indicates that implementing good asset management can increase company profitability. However, (Setiawan and Suwaidi, 2022) research states different things. The study results state that asset management does not affect financial performance.

Research (Kristianti, 2018) states that capital structure influences financial performance. The study says that an increase in corporate debt funding would affect the company's net profit growth. Contrary to the research run by (Heliola et al., 2020), which states that capital structure does not involve financial performance.

Hinged on the background above, including the phenomena and variables described, the results differ from those of previous studies. The author is motivated to conduct further

research on factors affecting financial performance. Therefore, the author wants to discover the effect of environmental management systems, asset management, and capital structure on financial performance with supporting empirical evidence in the energy and mineral sector.

THEORETICAL REVIEW

Agency Theory. Agency theory describes a conflict of interest in a company that can emerge due to the separation between the ownership function for the principal and control for the agent (Ansca et al., 2019). Agency theory occurs between shareholders (principal) and management (agent), which arise due to conflicts of interest. Differences in goals and tolerance for different risks for each party can be the root of conflicts of interest (Pham, 2020). The agent is generally involved in the company's operational activities, while the principal is not directly involved. Although not directly involved, the principal provides funds and facilities to support the company's activities. Therefore, supervision by the principal is needed to maintain or improve performance to achieve company targets.

This theory has implications for financial performance. The essence is that the principal will ask the agent to achieve the target set by the company. The agent is responsible for operational activities by ensuring that the funds from the principal are used properly and correctly. To achieve the targets, the agent can optimize operational and non-operational activities so that financial performance can improve and company targets can be achieved. It can happen because the agent knows the overall condition of the company (Ansca et al., 2019). Therefore, agent actions can affect the company's financial performance.

Legitimacy Theory. Legitimacy theory links the implication of environmental sustainability and corporate social responsibility (Maharantika and Fuad, 2022). The durability or sustainability of the company will be guaranteed by legitimacy. Legitimacy is the establishment of norms, standards, and limits that apply and can be accepted by society (Maharantika and Fuad, 2022). Legitimacy theory can describe the relationship between companies and society. The existence of companies that coexist with society will make companies pay more attention to community norms in their operational activities.

According to (Demuijnck and Fasterling, 2016), proof of legitimacy in company activities can be shown by the certification achieved or owned by the company. The company will get a certificate when the company has fulfilled and complied with applicable community norms (Maharantika and Fuad, 2022). Therefore, the company's sustainability will be maintained when the company seeks legitimization efforts towards society. However, the company's sustainability can be threatened if the community determines that the company cannot meet the norms and rules following community expectations. The company's ability to obtain certification can affect the public's view of the company. Companies that have certificates tend to have better standards in their system. Applying these standards can help the company by improving the quality of the management system and the company's credibility.

Financial Performance. Financial performance is an indicator that provides an overview of the capability to generate profits through the efficient use of funds in achieving it (Komara et al., 2016). Implementing financial structuring correctly and adequately can reflect how far the company's financial performance has gone. Financial performance can

represent an analysis of the company's good or bad financial condition under the application of financial regulations (Lubis and Rahyuda, 2022). For stakeholders and stockholders, a company's financial performance can provide vital information to support decision-making.

Environmental Management System. The environmental management system is a system that aims to assist companies in managing environmental impacts and improving environmental performance (Sam and Shuqi, 2019). In addition, the environmental management system includes environmental auditing, evaluating, labelling, communicating, and analyzing the lifecycle of the company's service and product related to the ecological aspects. The environmental management system aims to provide management characteristics to support environmental policies to reduce pollution and support sustainable growth (Voinea et al., 2020). Companies implementing an environmental management system can show how much the company contributes and cares about managing its environment.

Asset Management. In managing assets or resources owned, the company will take management actions with asset management. Asset management is the management and realization of the value of a company's assets used in operational activities during their useful life (Olatunji et al., 2019). In achieving a company's goals, asset management is responsible for organizing assets in the form of decisions, plans, and use of these assets. Asset management assists companies in utilizing the value of assets during their useful life. In addition, asset management can provide other operational benefits in the form of compliance, sustainability, competitiveness, and performance effectiveness (Lima et al., 2021).

Capital Structure. Capital structure is the structure of the company's liabilities derived from the company's decisions in funding derived from a combination of debt and capital (Pham, 2020). In addition, the decision to determine the capital structure is crucial. It can maximize company returns and successfully function in competitive industries (Tretiakova et al., 2021). The effectiveness of managing the resources owned will reflect the company's condition, where one of the resources is the capital structure. Therefore, the company will manage its capital structure to improve its financial performance.

Hypothesis Development. The research hypothesis is the author's conjecture or quick answer to the problem being studied. Therefore, the hypothesis needs to be further investigated to determine its accuracy. This study's independent variables are environmental management systems, asset management, and capital structure. In comparison, financial performance is used as the dependent variable. Below are the hypotheses formulation in this research.

The Effect of Environmental Management System on Financial Performance. The environmental management system is a process of reducing environmental impacts by making continuous improvements. These continuous improvements include organizing, planning, and making decisions regarding the company's environmental performance (Sam and Shuqi, 2019). An environmental management system will help companies identify and control environmental impacts and improve their environmental performance.

The author predicts that the environmental management system positively affects financial performance. According to research conducted by (Ong et al., 2016), the environmental management system implemented by companies with additional ISO 14001 certification tends to perform well by increasing public view trust, company reputation, and the company's operational activities. The environmental management system also

supports the legitimacy theory, where companies with ISO 14001 certification have fulfilled and completed the norms and rules desired by society. Companies with an environmental management system with ISO 14001 certification will impact the company's healthy state regarding profit, social care, and environmental preservation.

H₁: Environmental management system positively affects financial performance.

The Effect of Asset Management on Financial Performance. Asset management is the act of managing assets owned to produce profits. Maintaining sustainability requires good asset management at every company level (Olatunji et al., 2019). Therefore, the growth of the company requires good asset management.

The author predicts that asset management positively affects financial performance. According to research conducted by (Susanti et al., 2021), the more efficient the use of assets to produce profits, the higher the TATO (total asset turnover ratio) value. It will affect the company's profitability, where sales will increase proportionally to asset turnover in generating profits. An efficient use of assets can help the company's operational activities to be more efficient, where the high profits earned can enhance financial performance.

H₂: Asset management positively affects financial performance

The Effect of Capital Structure on Financial Performance. Capital structure is an action to fund various company activities where the funds combine debt and capital. Determining the capital structure is a crucial financial decision as funding for operational activities. The decision on capital structure is also essential for the company's business. A good capital structure results in a low cost of capital, while a poor capital structure results in a high cost of capital (Mangondu and Diantimala, 2016).

The author predicts that capital structure negatively affects financial performance. According to research conducted (by Nassar, 2016), high debt quantity can cause a decline in the company's financial performance. The amount of debt will cause the number of financial costs that must be paid to the debtor. Therefore, companies tend to have high financial costs that can reduce the company's financial performance.

H₃: Capital structure negatively affects financial performance

Theoretical Framework. The theoretical framework is the interconnection between the cause and the effect of the independent and dependent variables, which comes from previous research to build a hypothesis. Based on the disclosed theories and the developed hypotheses, the research model of this research is as follows.
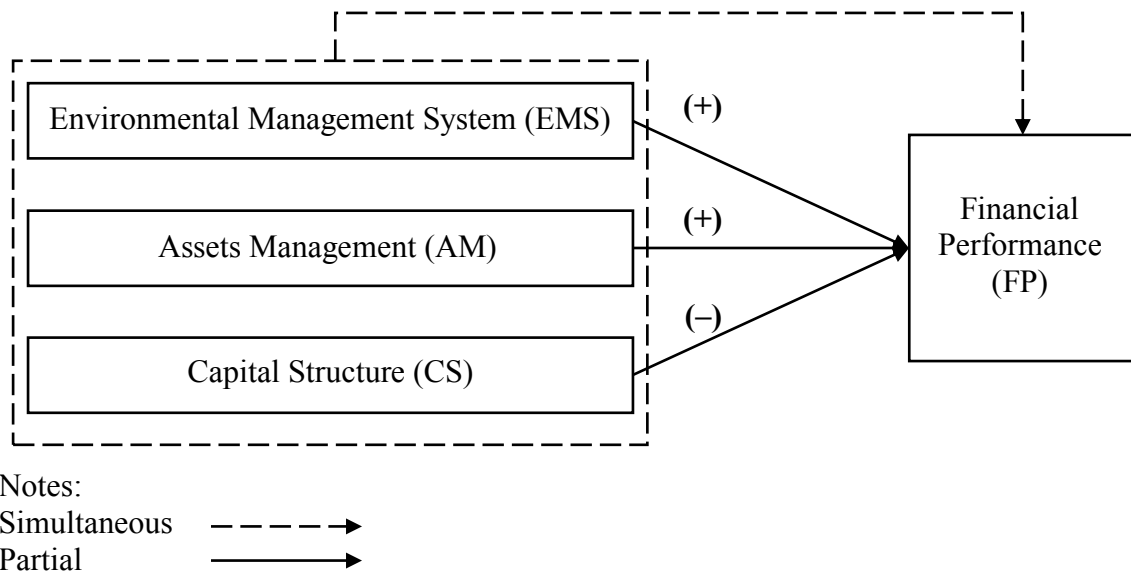

Notes:
Simultaneous
Partial

Figure 2. Research Model
Source: Processed data, 2023

METHOD

This study uses data collection from secondary data with a quantitative approach method. Quantitative research tests hypotheses by examining, collecting, and analyzing quantitative or statistical data (Sugiyono, 2018). The data contained in this study comes from secondary data. Secondary data in this study comes from the official website of the energy and mineral sector company which is the object of research, and the official website of the Indonesia Stock Exchange, which includes financial reports, annual reports and sustainability reports that are published and generally accessible from 2018 to 2021.

Population and Samples. The population in this study is energy and mineral sector companies listed on the Indonesia Stock Exchange from 2018 to 2021, which consecutively and publicly publish financial, annual, and sustainability reports. The purposive sampling technique was used in this study to take samples. Purposive sampling is a sampling technique based on research objectives or with specific criteria (Sugiyono, 2018). The sample selection in this study is based on the following criteria.

Table 1. Sampling Criteria

No	Criteria	Total
1	Companies in the energy and mineral sector listed on the Indonesian Stock Exchange from 2018 to 2021	60
2	Companies in the energy and mineral sector listed on the Indonesian Stock Exchange inconsistently disclosed financial reports, annual reports and sustainability reports from 2018 to 2021	(10)
	Total companies used in the research period	50
	Total samples used in the research (4 years)	200

Source: Processed data, 2023

From the sampling criteria, 50 energy and mineral-coal sector companies that meet the criteria were obtained with the number of samples from 2018 to 2021, so 200 sample data were obtained.

Variable Operationalization. This study examines the influence of environmental management systems, asset management, and capital structure on financial performance. The independent variable in this study is the financial performance which will be measured using return on assets (ROA). While the dependent variables in this study, namely environmental management systems, asset management, and capital structure, will be measured by the completeness or comprehensiveness of the system implemented by the company, total asset turnover ratio (TATO), and debt ratio (DR), respectively. The following is the variable operationalization used in this study.

Dependent Variable. The dependent variable is a variable that is influenced by changes in other variables, namely the independent variable (Sugiyono, 2018). In this study, financial performance is used as the dependent variable. Financial performance is used as a benchmark for generating profits to portray a company's success (Ningsih and Utami, 2020).

Financial Performance. This variable can be measured using ROA (return on assets). ROA is a ratio to evaluate company performance in achieving profits (Afif and Mahardika, 2019). ROA is an essential ratio because ROA aims to assess company assets based on the efficiency and effectiveness of use by management (Ningsih and Utami, 2020). Based on research conducted by (Purba and Bimantara, 2020), The following is the formula for calculating ROA.

$$ROA = \frac{\text{Net Profit}}{\text{Average Total Assets}} \dots \dots \dots \dots \dots \dots \dots (1)$$

Independent Variable. An Independent variable can affect or cause changes in the dependent variable (Sugiyono, 2018). Researchers determine independent variables by considering management or management factors that can influence the dependent variable. At the same time, environmental management systems, asset management, and capital structure are the independent variables in this study.

Environmental Management System. The environmental management system will be measured by the level of completeness or comprehensiveness of the management system implemented by the company. The completeness of the management system will be reflected in the company's policies and certifications in managing its environment. Environmental policy is a statement and commitment to environmental management with aspects of operations related to a company's goals and business principles. The

effectiveness of the environmental management system in managing the company's environment can be increased by establishing environmental policies or regulations.

The company's environmental management system will be optimized with ISO 14001 and ISO 14000 series certifications. ISO 14001 is an international standard that regulates the competence of the company's environmental management system to help companies monitor and minimize environmental impacts (Maharantika and Fuad, 2022). ISO 14001 certification combines management competencies in achieving corporate goals focusing on environmental management with effective and efficient environmental management (Ong et al., 2016). ISO 14000 series is a collection of standards and rules governing environmental management. Therefore, companies implementing environmental management policies and having ISO 14001 and ISO 14000 series certifications indicate that they have managed their environment well. The environmental management system measurement scale in this study adapts the measurement scale in research conducted by (Voinea et al., 2020).

Table 2. Environmental Management System Scoring Criteria

Score	Criteria
0	Companies still need to implement environmental policies.
1	Companies implemented environmental policies.
2	Companies implemented environmental policies with ISO 14001 certificate <u>or</u> other ISO 14000 series certifications.
3	Companies implemented environmental policies with ISO 14001 certificate <u>and</u> other ISO 14000 series certifications.

Source: (Voinea et al., 2020)

Asset Management. This variable can be measured using TATO (total asset turnover ratio). TATO is a ratio that aims to reflect how well all company assets are used to generate profits (Susanti et al., 2021). According to Sinaga (2018), the more influential the company utilizes its assets to generate profits, the higher the asset turnover value (Diana and Osesoga, 2020). Based on (Diana and Osesoga, 2020) research, TATO can be formulated as follows.

$$TATO = \frac{Net\ Revenue}{Average\ Total\ Assets} \dots\dots\dots (2)$$

Capital Structure. This variable can be measured using DR (debt ratio). DR is a measurement that aims to describe the leverage level of a company. In addition, DR can be used to assess the company in managing and fulfilling its obligations. A company's leverage level can be reflected in DR. Companies with high leverage indicate a high amount of owned debt, which also suggests the company has a high risk of failing to fulfil its obligations. As in the research conducted by (Dinh and Pham, 2020), The following is the formulation for calculating DR.

$$DR = \frac{Total\ Debt}{Total\ Assets} \dots\dots\dots (3)$$

Data Analysis Method. This study uses descriptive statistical methods. Descriptive statistics are data generalization techniques by describing and describing various

characteristics of the studied data (Sugiyono, 2018). Panel data regression is used as the hypothesis analysis method, where the data will be analyzed using the software EViews 12. Panel data regression combines time series and cross-section data (Basuki and Prawoto, 2016). Using panel data regression models can explain symptoms observed repeatedly in the same object with different period ranges. The regression equation in this study can be formulated as follows.

$$FP = \alpha + \beta_1 EMS + \beta_2 AM + \beta_3 CS + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (4)$$

Based on the regression equation above, FP represents the dependent variable of this study in the form of financial performance. α represents a constant value. β_n represents the regression coefficient of each independent variable of this study in the form of the environmental management system (EMS), asset management (AM), and capital structure (CS). At the same time, ε represents an error value.

RESULT

Descriptive Statistics. In this study, the method used is descriptive statistics. Descriptive statistics is a technique for generalizing data by describing and describing the various characteristics of the data under investigation (Sugiyono, 2018). The descriptive statistics used in this study are mean, median, maximum, minimum, and standard deviation.

Table 3. Descriptive Statistics

	ROA	EMS	AM	CS
Mean	0.034	1.765	0.645	0.566
Median	0.031	2.000	0.482	0.528
Maximum	0.628	3.000	2.357	2.112
Minimum	-0.856	0.000	0.000	0.002
Std. Dev	0.154	0.511	0.523	0.318
Observations	200	200	200	200

Source: Output EViews 12, 2023

Table 3 shows the results of descriptive statistics in this study. The dependent variable, the financial performance represented by (ROA), has an average value of 0.034, while the standard deviation has a higher value of 0.154. The financial performance of companies in the energy and mineral sector varies. PT Bayan Resources Tbk owns the maximum value of financial performance in 2021 with a value of 0.628. It can happen because PT Bayan Resources Tbk can generate significant net profit with an increase of 267.520 per cent compared to the previous year. PT Mitra Investindo Tbk owns the minimum value is 2019, amounting to -0.856. It can occur because the net profit of PT Mitra Investindo Tbk decreased significantly by -1275.126 per cent.

The independent variable, the environmental management system represented by (EMS), has an average value of 1.765, higher than the standard deviation of 0.511. It shows that most energy and mineral sector companies have implemented an environmental management system with sound comprehensiveness. PT Adaro Energy Indonesia Tbk

owns the maximum value of the environmental management system in 2019 and 2020, and PT Medco Energi Internasional Tbk also owns the maximum value in 2021 with a value of 3.000. It can happen because both companies have implemented a comprehensive environmental management system with ISO 14001 and additional ISO 14000 series standards. In 2019 and 2020, PT Adaro Energy Indonesia Tbk has the ISO 14040: 2006 standard, which regulates Life Cycle Assessment (LCA). In 2021 PT Medco Energi Internasional Tbk had ISO 14064-1:2006, a standard that regulates the principles and requirements of Greenhouse Gas (GHG) emissions. Therefore, PT Sumber Energi Andalan Tbk owns the minimum value from 2018 to 2019, PT Capitalinc Investment Tbk from 2018 to 2019, and PT Perdana Karya Perkasa Tbk in 2018 with a value of 0.000. It can happen because companies must implement an environmental management system to manage environmental aspects.

The asset management variable (MA) represents an average value of 0.645, slightly higher than the standard deviation of 0.523. It illustrates that most energy and mineral sector companies efficiently use assets to generate revenue. PT Dwi Guna Laksana Tbk will own the maximum asset management value in 2021, with a value of 2.357. It can happen because PT Dwi Guna Laksana Tbk can increase its coal sales by 46.904 per cent. It is also supported by an increase in coal inventory available for sale by 61.902 per cent from the previous year to meet sales demand. PT Mitra Investindo Tbk owns the minimum asset management value in 2019 with a value of 0.000. It can happen because PT Mitra Investindo Tbk decided to sell its investment in Mentari Garung Energy Ltd (MGE). The 2019 annual report of PT Mitra Investindo Tbk stated that the company needed more financial resources to develop its upstream oil and gas business. To meet the financial limitations, PT Mitra Investindo Tbk decided to include MGE in the investment sold by the company. Therefore, the exit of MGE caused PT Mitra Investindo Tbk's revenue in 2019 to be 0.

The capital structure variable represented by (CS) has an average value of 0.566 which is higher than the standard deviation value of 0.318. It shows that the capital structure of most companies in the energy and mineral sector depends on the total debt to fund their operations. PT Apexindo Pratama Duta Tbk owns the maximum value of capital structure in 2018 with a value of 2.112. It can happen because PT Apexindo Pratama Duta Tbk experienced a significant increase in current liabilities in the accrued expenses account, which amounted to 91.740 per cent. The increase in accrued expenses was dominated by a relatively large portion of financial costs, where the share of financial costs reached 80.477 per cent. In addition, financial costs significantly increased by 120.236 per cent from the previous year. The minimum value of the capital structure owned by PT Sumber Energi Andalan Tbk in 2020 is 0.002. It can happen because PT Sumber Energi Andalan Tbk had low total debt in 2020. Compared to equity, the total liabilities of PT Sumber Energi Andalan Tbk in 2020 only contributed a portion of 0.158 per cent.

Classical Assumption Test. The classic assumption test evaluates the data quality in the regression model of this study. Panel data regression analysis is used in this study. Therefore, the classic assumption tests used are the multicollinearity and heteroscedasticity tests (Basuki and Prawoto, 2016).

Multicollinearity Test. The multicollinearity test aims to find a correlation between the independent and dependent variables in the study's regression model. The absence of correlation between independent variables indicates a proper regression model.

Table 4. Multicollinearity Test

	ROA	**EMS**	**AM**	**CS**
ROA	1.000			
EMS	0.179	1.000		
AM	0.494	0.045	1.000	
CS	-0.276	-0.126	-0.113	1.000

Source: Output EViews 12, 2023

Table 4 shows the correlation results between this study's independent and dependent variables. Referring to the table, multicollinearity in the variables of financial performance (ROA), environmental management system (EMS), asset management (MA), and capital structure (CS) indicates that each variable tested in this study has a correlation value below 0.800. Based on these results, in this study, no multicollinearity is detected. Furthermore, the multicollinearity results also indicate that environmental management systems and asset management positively correlate to financial performance. In contrast, capital structure negatively correlates to financial performance.

Heteroscedasticity Test. The heteroscedasticity test aims to find the occurrence of variance inequality from other residual observations. A good regression model can be indicated when the model has homoscedasticity or no heteroskedasticity.

Table 5. Heteroscedasticity Test

F-statistic	1.161	Prob. F(1,197)	0.283
Obs*R-Squared	1.166	Prob. Chi-Square(1)	0.280

Source: Output EViews 12, 2023

Table 5 shows the results of variance similarity from one residual observation to another. This study uses the ARCH test method in testing heteroscedasticity. Based on the results, the Prob Chi-Square value of 0.280 is higher than the significance level of 0.050. It can be concluded that heteroscedasticity does not occur in this study.

Model Selection Test. This test aims to determine the best model estimation suitable for this study. The assessment of the model is between Common Effect Model, Fixed Effect Model, and Random Effect Model. Determining the model estimation can be done by conducting three tests: Chow, Hausman, and Lagrange Multiplier.

Chow Test. Chow test aims to determine the most suitable test model between Common Effect Model and the Fixed Effect Model. The following is the hypothesis for conducting the Chow test.

H_0: Common Effect Model will be selected
H_a: Fixed Effect Model will be selected

Table 6. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.997	(49,147)	0.000
Cross-section Chi-square	138.535	49	0.000

Source: Output EViews 12, 2023

Table 6 shows the test results to determine a suitable research model between Common Effect Model and the Fixed Effect Model. The results indicate that the Prob Cross-section Chi-square value is 0.000, smaller than the significance level of 0.050, which means the test results accept H_a. Referring to the test results, the suitable research model for this study is the Fixed Effect Model. Therefore, this test is still required to proceed to the next test, which is the Hausman test.

Hausman Test. Hausman test aims to determine the most suitable test model between Random Effect Model and the Fixed Effect Model. The following is a hypothesis for conducting the Hausman test.

H_0: Random Effect Model will be selected
H_a: Fixed Effect Model will be selected

Table 7. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob
Cross-section random	12.049	3	0.007

Source: Output EViews 12, 2023

Table 7 shows the test results to determine a suitable research model between Random Effect Model and Fixed Effect Models. The results show that the Prob Cross-section random value is 0.007, lower than the significance level of 0.050, which indicates the test results accept H_a. Referring to the test result, the Fixed Effect Model is the suitable model for this study. Based on the Chow and Hausman test results, the Fixed Effect Model is the proper model for this study. Hence, the Lagrange Multiplier test does not need to be done, and this study will choose the Fixed Effect Model.

Hypothesis Testing. The Fixed Effect Model is the most suitable regression model according to the model selection test results. Below are the results of the hypotheses testing of this study g using the Fixed Effect Model.

Table 8. Fixed Effect Model Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.096	0.070	1.361	0.176
EMS	0.009	0.031	0.288	0.774
AM	0.298	0.047	6.279	0.000
CS	-0.139	0.051	-2.699	0.008
Effects Specification				
Cross-section fixed (dummy variables)				
R-squared	0.655	Mean dependent var		0.034
Adjusted R-squared	0.533	SD dependent var		0.154
SE of regression	0.105	Akaike info criterion		-1.445
Sum squared resid	1.625	Schwarz criterion		-0.571
Log-likelihood	197.471	Hannan-Quinn criteria.		1.091
F-statistic	5.364	Durbin-Watson stat		2.702
Prob(F-statistic)	0.000			

Source: Output EViews 12, 2023

Table 8 shows the results of the Fixed Effect Model. The regression equation of this study can be formulated as follows.

$$FP = -0.096 + 0.009(EMS) + 0.298(AM) - 0.139(CS) \text{………………..……... (5)}$$

Based on the equation, it shows a constant value of -0.096 which indicates that if the independent variables in the regression equation in the form of the environmental management system, asset management, and capital structure are zero, then the value of the dependent variable, namely financial performance has a value of -0.096. The coefficient value of the environmental management system of 0.009 indicates that if the environmental management system variable increases by one unit with the assumption that the other variables are zero, then the value of the environmental management system will increase by 0.009 units. The asset management coefficient value of 0.298 indicates that if the asset management variable increases by one unit, assuming other variables are zero, the asset management value will increase by 0.298 units. The capital structure coefficient value of -0.139 indicates that if the capital structure variable increases by one unit, assuming that the other variables are zero, the value will decrease by -0.139 units.

Coefficient of Determination (R^2). The regression coefficient shows the influence of the combination of independent variables in describing the dependent variable. The result shows the Adjusted R-squared value of 0.533. The value means that environmental management system, asset management, and capital structure can reflect financial performance by 53.300 per cent. While as much as 46.700 per cent of the influence can be obtained with other variables outside this study.

Simultaneous Test (F-test). Simultaneous testing shows the effect of the independent variable in influencing the dependent variable. The result indicates that the Prob(F-statistic) value of 0.000 is lower than the significance level of 0.050. This value indicates that the independent variables, namely environmental management system, asset management, and capital structure, simultaneously affect the dependent variable, financial performance.

Partial test (t-test). The environmental management system has a probability value of 0.774, higher than the significance level of 0.050. This result rejects the first hypothesis (H_1) of this study. Therefore, the environmental management system does not affect financial performance.

Asset management has a probability value 0.000, lower than the significance level of 0.050. In addition, asset management has a regression coefficient value of 0.298, which shows that asset management affects in a positive direction on financial performance. These results accept the second hypothesis (H_2) of this study. Therefore, asset management positively affects financial performance.

Capital structure has a probability value of 0.008, lower than the significance level of 0.050. Capital structure also has a regression coefficient value of -0.139, indicating that capital structure negatively affects financial performance. This result accepts the third hypothesis (H_3) of this study. Therefore, capital structure negatively affects financial performance.

DISCUSSION

Environmental Management System and Financial Performance. The probability value of the environmental management system variable of 0.774 is higher than the significance level of 0.050. Therefore, the environmental management system does not affect the financial performance of energy and mineral sector companies listed on the Indonesia Stock Exchange from 2018 to 2021.

The results of this study contradict the legitimacy theory. According to the legitimacy theory, companies that have certification regarding environmental management standards will be considered suitable in the eyes of the community so that the company has fulfilled and complied with applicable community norms. It can happen because energy and mineral sector companies in operational activities, including exploration, extraction, transformation, transmission, and distribution of natural resources, can damage the environment. Therefore, regardless of their certification, protecting and preserving the environment is an obligation for energy and mineral sector companies.

Evidence on PT Exploitasi Energi Indonesia Tbk 2019 and PT Adaro Energy Indonesia Tbk in 2019, although the two companies have different levels of comprehensive environmental management systems, the financial performance of the two companies tends to be the same. PT Exploitasi Energi Indonesia Tbk in 2019 only implemented environmental policy. Therefore, PT Adaro Energy Indonesia Tbk 2019 has environmental management supporting certification, namely ISO 14001 regarding environmental management systems and other supporting certifications in the form of ISO 14040: 2006, which regulates Life Cycle Assessment (LCA). However, the two companies have similar financial performance where. PT Exploitasi Energi Indonesia Tbk has a level of financial performance measured by ROA of 5.370 per cent. In contrast, PT Adaro Energy Indonesia Tbk, which has a better comprehensive environmental management system, tends to have the same financial performance of 5.970 per cent.

The study results align with research conducted by (Aprilasani et al., 2017), which states that the environmental management system does not affect financial performance. Implementing an environmental management system has other non-financial effects, namely the fulfilment of environmental obligations from the government. In addition, it can be caused by implementing an environmental management system used only to improve the company's image in the eyes of the public and government. The company's concern for environmental management can be reflected by having an environmental management system and ISO certification. However, the research conducted by (Ong et al., 2016) has different results from this study which states that the environmental management system affects financial performance.

Asset Management and Financial Performance. The asset management variable has a probability value 0.000, lower than the significance level of 0.050. It shows that asset management affects the financial performance of energy and mineral sector companies listed on the Indonesia Stock Exchange in 2018-2021. A regression coefficient value of 0.298 also shows that asset management affects financial performance positively, where the higher the asset management, the higher the company's financial performance.

The findings of this study support agency theory. Agency theory states that management incentives will encourage management to generate profits for the company. The agent who fully understands the company's condition is expected to use the company's

assets effectively and efficiently. Therefore, the company's financial performance can be improved by effective and efficient use of the assets.

Evidence at PT Bayan Resources Tbk in 2018 with a total asset turnover ratio (TATO) value of 1.692. A company's ability to use its assets effectively and efficiently to generate revenue can be reflected in a high TATO value. It is reflected by the company's performance, which can increase revenue by 57.088 per cent from the previous year. This increase can occur due to an increase in coal sales by 58.214 per cent. The increase also affected the company's financial performance, where the company's financial performance based on ROA in 2018 amounted to 52.896 per cent.

Other evidence is PT Eterindo Wahanatama Tbk in 2018 with a total asset turnover ratio (TATO) value of 0.022. The low TATO value proves the company cannot use its assets effectively and efficiently to generate revenue. It is reflected by the company experiencing a decrease in revenue of -53.725 per cent. The decline can occur because the sale of biodiesel, a New Renewable Energy, decreased significantly from the previous year by -84.858 per cent. The decline in biodiesel sales affected the company's financial performance, where the company's financial performance based on ROA in 2018 amounted to -4.771 per cent.

Based on the research results, asset management can affect financial performance. The use of assets reflected in the high value of total asset turnover (TATO) shows that the company has managed its assets effectively and efficiently to increase profit. This study's results align with research run by (Nurlaela et al., 2019), which suggests that asset management positively affects financial performance. However, this study's results reject research run by (Setiawan and Suwaidi, 2022), which states that asset management does not involve financial performance.

Capital Structure and Financial Performance. The capital structure variable has a probability value of 0.008, lower than the significance level of 0.050. It shows that capital structure affects the financial performance of energy and mineral sector companies listed on the Indonesia Stock Exchange from 2018 to 2021. A regression coefficient value of -0.139 shows that the capital structure negatively affects financial performance; the higher the capital structure, the lower the company's financial performance.

The findings of this study support agency theory. Based on the agency theory, the agent will make the company profitable because of the incentives or compensations that will be obtained. The amount of debt the company owns will make the agent more careful in determining funding activities. Therefore, the existence of the debt is expected to be maximally utilized by management.

Evidence was found in PT Samindo Resources Tbk in 2020. The amount of debt of PT Samindo Resources Tbk, which decreased by -41.765 per cent, affected the company's financial costs, significantly reducing by -89.769 per cent. The decreased financial costs allowed PT Samindo Resources Tbk to make an excellent net profit margin that can be converted from revenue of 12.990 per cent. This evidence states that a small amount of debt causes financial costs to tend to be low. So low financial costs impact the small amount of cash that must be spent.

Other evidence at PT Exploitasi Energi Indonesia Tbk in 2018. The amount of debt that increased by 7.194 per cent from the previous year affected the company's financial costs with an increase of 18.879 per cent. The growing financial costs of PT Exploitasi Energi Indonesia Tbk reduced the company's financial performance by recording a loss in 2018. This evidence shows that a large amount of debt causes a significant increase in

financial costs. The high financial costs impact the amount of cash that must be spent to meet these costs.

The study results align with previous research (Ansca et al., 2019), which states that capital structure negatively affects financial performance. It can happen because high debt levels carry risks where the company will be burdened with financial costs. On the other hand, debt is focused on fulfilling cost obligations and working capital in the company's operational activities. However, this research does not align with research conducted by (Wulandari et al., 2020), which states that capital structure does not affect financial performance.

CONCLUSIONS

This study aims to determine the effect of environmental management systems, asset management, and capital structure on financial performance with supporting empirical evidence. This study took samples from energy and mineral sector companies listed on the Indonesia Stock Exchange from 2018 to 2021. Following the results and discussion, it can be concluded that environmental management systems, asset management, and capital structure affect financial performance. While partially, it can be concluded that (1) environmental management system does not affect financial performance, (2) asset management positively affects financial performance, and (3) capital structure negatively affects financial performance.

Limitations. The author is aware that the results of this study have imperfections and limitations. This study uses samples from the energy and mineral sectors with an observation period of only four years (2018 to 2021). Therefore, the study results have a limited generalization level only in the energy and mineral sectors and cannot present the research results over a long period.

Suggestion. Based on the limitations of this study, further research is expected to (1) extend the research observation period so that the observation data becomes more extensive, (2) use other variables outside this study that may influence financial performance, and (3) adding control variables to strengthen the research results.

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