Melinda MALAU (The Impact of Environmental, Social, and Governance Performance on The Financial Health and Firm Value of The Publicly Listed Firms at Indonesia Stock Exchange)

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CHAPTER 14

The Impact of Environmental, Social, and Governance Performance on The Financial Health and Firm Value of The Publicly Listed Firms at Indonesia Stock Exchange

Riko RANGKUTI
Sekolah Tinggi Manajemen IPMI, Indonesia
riko.rangkuti@ipmi.ac.id
Orcid: 0009-0007-5803-6013

Roy H. M. SEMBEL
Sekolah Tinggi Manajemen IPMI, Indonesia
roy.sembel@ipmi.ac.id
Orcid: 0000-0002-9023-9976

Melinda MALAU
Universitas Kristen Indonesia, Indonesia
melinda.malau@uki.ac.id
Orcid: 0000-0002-6576-3063

ABSTRACT

During the last decade, companies have increasingly enhanced corporate sustainability by targeting Environment, Social, Governance (ESG), and financial objectives. Several studies highlight the benefits of ESG on financial performance and stock return. However, the effect of ESG on overall firm risk still remains an open debate. This study examines the impact of ESG performance on the financial health and firm value of publicly listed firms at the Indonesia Stock Exchange. We hypothesize that ESG performance positively affects financial health and firm value. The research method uses a quantitative approach by observing ESG performance from the KEHATI foundation and financial reports of the publicly listed firms as secondary data sources. The samples use the 40 cross-sectional selected firms and 6 semesters selected time series balanced data for a period of 2019 to 2021 which form a 240 samples observation. The measurement of variables is the ESG performance pillar scores, financial health proxied by Altman Z-score, financial performance, and firm value proxied by Tobin's Q score. The equations use a panel data regression model. The tool uses EViews 12 software for general statistical analysis and econometric analyses. Our findings are the ESG pillars scores have a high correlation among themselves, individually has an insignificant effect on Altman Z-score and Tobin's Q, and jointly have an insignificant effect and very low relationship to Altman Z-score and Tobin's Q. Furthermore, Altman Z-score has insignificant effect as the mediating variable to Tobin's Q. Overall, we conclude that ESG performance does not have a significant effect to the financial health and firm value.

Keywords: ESG performance, environment social governance, financial health, financial performance, firm value

INTRODUCTION

Background

Environmental, Social and Governance (ESG) is one of the fastest growing trends in business and finance and is transforming how companies need to communicate. It has become necessary for companies to adequately communicate their ESG performance to stakeholders ranging from investors and regulators to clients and employees.

Figure-1: ESG Pillars
Sources: https://www.techtarget.com

In environment, the main issue is the usage of fossil fuel energy which cause increase of carbon and other gas emission and create a greenhouse effect at the atmosphere. Earth temperature has increase 1.2 degree and make the climate change. Other issues are waste reduction and management, and biodiversity loss. In social, the issues are employment and wages, workplace health and safety and community engagement. In governance, the issues are risk management, ethical business practice, avoid conflict of interest, accounting integrity and transparency.

Environment, Social, and Governance or ESG is one of the fastest growing trends in business and finance and is transforming how companies need to communicate. This trend become the stakeholders interest ranging from investors and regulators to clients and employees. Since it was first introduced, ESG trends is growing fast as indicated by the total Asset Under Management or AUM from 6 trillion US Dollar and 23 signatories in 2004 to 103.4 trillion US Dollar and 3038 signatories in 2020. With growing action from governments, companies and investors, ESG consideration will be included in all of investment decisions.

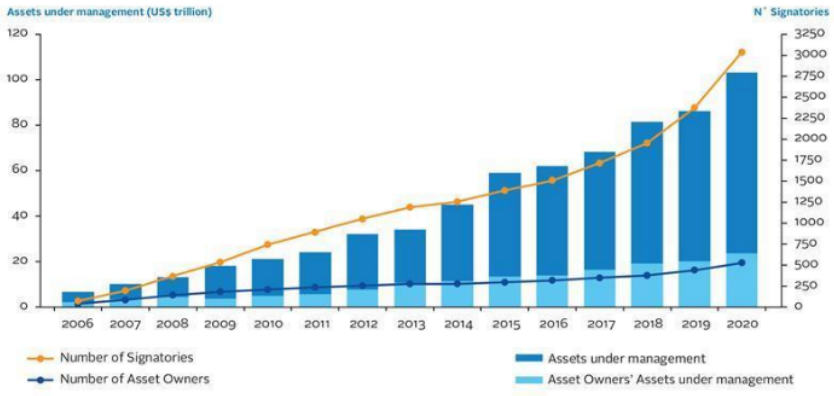

Figure-2: ESG Assets Under Management
Sources: https://www.unpri.org

Harvard Business School tested the performance of a sample of 90 companies that had adopted sustainability policies since the early 1990.

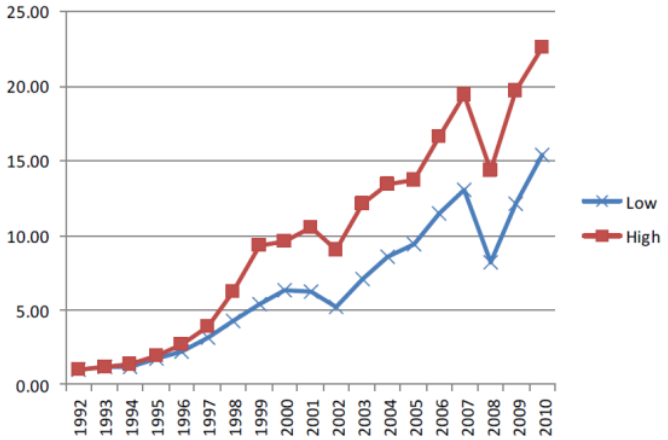

Figure-3: ESG Market Performance
Source: (Eccles et al., 2014)

The key finding of the research was that in the 18-year period studied. Stocks of high sustainable firms perform better than those of less sustainable firms. The evolution of $1 invested in the stock market in a value-weighted portfolio. The high sustainability firms outperformed the low sustainability ones in terms of both stock market and accounting measures.

According to a review by Friede et al., in 2015 of over 2000 empirical studies, including review studies, 90 percent of the studies found a nonnegative ESG-CFP (Corporate Financial Performance) and a large majority of these studies report positive findings.

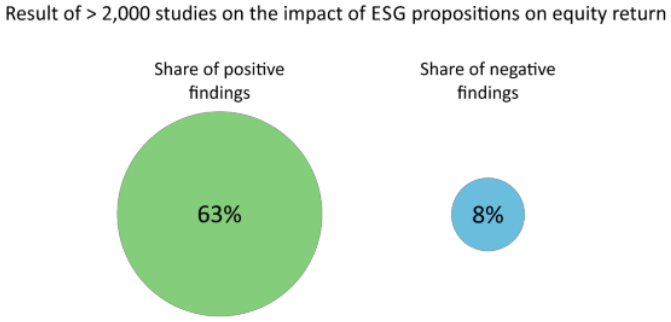

Figure-4: Aggregated Evidence from More Than 2000 Empirical Studies
Source: (Friede et al., 2015); McKinsey analysis (Henisz et al., 2019)

More specifically, the results are 63 percent found positive ESG-CFP relationship, 8 percent found negative ESG-CFP relationship. Moreover, the significant impact of the ESG on the CFP tends to be constant over time.

Research Problem

The relationship of environment, social, and governance (ESG) with business and investment has been paid more attention to organizations and investors globally. The ESG implementation by the enterprises to increase the sustainability value would increase costs and it should impact their profitability. Some studies have found that the ESG is considered as a non-financial value of the enterprise, as it should be treated as a parallel value of the financial value. Other studies have found that the ESG effect may take a long time to play a role. Even though the ESG implementation would increase cost to firms, many studies and articles have also found the ESG factors have high percentage of positive effect on the corporate financial performance.

However, we found out that the study of the correlation between ESG performance and company's financial health and its mediating effect to other financial factors in the stock market still have been discussed rarely particularly in the case of Indonesia stock exchange. With that consideration, this journal would like to study the impact of the ESG performance on the financial health and its mediating effect to the firm value of publicly listed firms at Indonesia stock exchange.

Research Questions

To find the empirical evidence on the impact of environmental, social, and governance performance on financial health and firm value of the publicly listed firms at Indonesia Stock Exchange. Thus, the research questions are as follows:

1. Does ESG performance positively affect firm value?
2. Does ESG performance positively affect financial health?

3. Does ESG performance mediated by financial health and controlled by financial performance positively affect firm value?

LITERATURE REVIEW

ESG Performance

Environmental Social Governance (ESG) is defined as a set of activities or processes associated with an organization's relationship with its ecological surroundings, its coexistence and interaction with human organisms and other populations, and its corporate system of internal controls and procedures (such as processes, customs, policies, laws, rules, and regulations, etc.) to direct, administer and manage all the affairs of the organization, to serve the interests of stockholders and other stakeholders (Whitelock, 2015). ESG term was first coined in 2004 in a study report by the UN Global Compact in collaboration with the Swiss government entitled "Who Cares Wins" in a broad set of concepts with no standard definition. The initiative was endorsed by 23 financial institutions collectively representing more than US$ 6 trillion in assets (Spitz et al., 2021). There are several ESG data providers, Morningstar, Bloomberg, Sustainalytics, and Morgen Stanley Capital International (MSCI). These data providers collect and evaluate the data. Up to 450 ESG data points can be collected.

Financial Performance

Financial performances are created with the use of numerical values taken from financial statements to gain meaningful information about a company. The numbers found on a company's financial statements – balance sheet, income statement, and cash flow statement – are used to perform quantitative analysis and assess a company's liquidity, leverage, growth, margins, profitability, rates of return, valuation, and more.

According to Thamrin and Sembel (2020), firms' fundamental factors have various impact to the stock return. TATO have positive and significant effect to stock return, while CR, ROA and DER have insignificant effect to stock return.

Financial Health

Altman's Z-Score model is a numerical measurement that is used to predict the chances of a business going bankrupt in the next two years. The model was developed by American finance professor Edward Altman in 1968 as a measure of the financial stability of companies. Altman's Z-score model is considered an effective method of predicting the state of financial distress of any organization by using multiple balance sheet values and corporate income. Altman's idea of developing a formula for predicting bankruptcy started at the time of the Great Depression, when businesses experienced a sharp rise in incidences of default.

Investors use Altman's Z-score to make a decision on whether to buy or sell a company's stock, depending on the assessed financial strength. If a company shows a Z-score closer to 3, investors may consider purchasing the company's stock since there is minimal risk of the business going bankrupt in the next two years. However, if a company shows a Z-score

closer to 1.8, the investors may consider selling the company's stock to avoid losing their investments since the score implies a high probability of going bankrupt.

According to Malau and Murwaningsari (2018), market pricing accrual has a significant positive effect, while a company's leverage has a significant negative effect on financial statement integrity. However, bankruptcy and foreign ownership have no significant effect on financial statement integrity.

Firm Value

The Q ratio, also known as Tobin's Q, equals the market value of a company divided by its assets' replacement cost. Thus, equilibrium is when market value equals replacement cost. At its most basic level, the Q Ratio expresses the relationship between market valuation and intrinsic value. In other words, it is a means of estimating whether a given business or market is overvalued or undervalued. The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets. Since the replacement cost of total assets is difficult to estimate, another version of the formula is often used by analysts to estimate Tobin's Q ratio. Often, the assumption is made the market value of liabilities and the book value of a company's liabilities are equivalent, since market value typically does not account for a firm's liabilities. This provides a simplified version of the Tobin's Q ratio as equity market value divided by equity book value.

Theoretical Framework

The author illustrates the theoretical structure of this study in the diagram below:

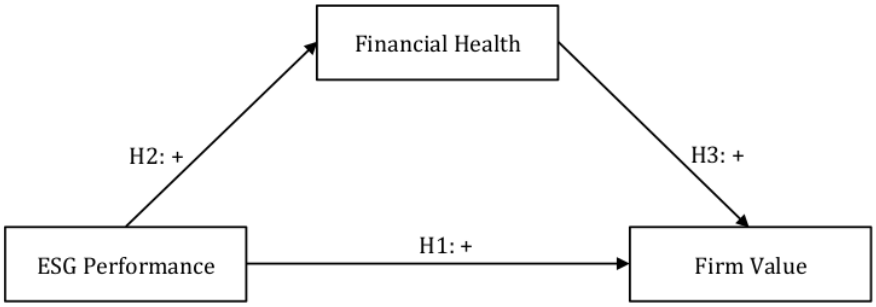

Figure-5: Impact of ESG Performance on Financial Health and Firm Value

Hypothesis Development

The author develops the hypotheses for this research according to the finding from the previous studies.

Table-1: Hypotheses of The Research

Name	Hypothesis
H1A	ENV pillar score positively affects firm value
H1B	SOC pillar score positively affects firm value

H1C	GOV pillar score positively affects firm value
H2A	ENV pillar score positively affects financial health
H2B	SOC pillar score positively affects financial health
H2C	GOV pillar score positively affects financial health
H3A	Financial health positively affect firm value
H3B	ROA positively affect firm value
H3C	TATO positively affect firm value
H3D	CR positively affect firm value
H3E	DAR positively affect firm value

RESEARCH METHODOLOGY

Research Design

A research design is plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell, 2014).

Table-2: Research Design

Item	Description
Method	Quantitative Approach
Collection Technique	Secondary Data
Population	Universe SRI-KEHATI ESG performance of Firms at IDX
Sampling	Selected SRI-KEHATI many sectors from S1 2019 to S2 2021
Sample Size	40 cross-section and 6 time-series total 240 observations
Data Analysis Tool	Eview 12
Model Evaluation	Panel Data Regression
Hypothesis Testing	p-value, F-statistics

Measurement of Variables

A variable is simply an attribute on which cases vary. An independent variable is understood as potentially having a causal influence on dependent variables (Bell et al., 2018).

Table-3: Research Variables

Type	Variable
Independent Variables	Environment Pillar of ESG

	Social Pillar of ESG
	Governance Pillar of ESG
Dependent Variable	Firm Value (proxied by Tobin's Q)
Mediating Variable	Financial Health (proxied by Altman Z-score)
Control Variables	Return on Asset (ROA)
	Total Asset Turn Over (TATO)
	Current Ratio (CR)
	Debt to Asset Ratio (DAR)

Variables Equations

The dependent variables of this research are the financial health which is proxied by the ALTMAN Z-Score and the firm value which is proxied by the TOBIN's Q Score. The Sobel test is basically a specialized t test that provides a method to determine whether the reduction in the effect of the independent variable.

Table-4: Variable Equations

No	Equation
1	Tobin's Q = Total Market Value of Firm / Total Asset Value of Firm
2	Altman's Z-Score = 1.2*A + 1.4*B + 3.3*C + 0.6*D + 1.0*E
3	Return on Assets (ROA) = Net Income / Total Assets
4	Total Asset Turnover (TATO) = Total Sales / Total Assets
5	Current Ratio (CR) = Current Asset / Current Liabilities
6	Debt to Asset Ratio (DAR) = Total Liabilities / Total Assets
7	Sobel (t-test) = $(a * b) / \sqrt{(b^2 * SE_a^2) + (a^2 * SE_b^2)}$

Panel Data Regression

Panel data regression is a pool time-series of cross-sections. Pooling this data gives a richer source of variation which allows for more efficient estimation of the parameters. Additionally, more informative data, one can get more reliable estimates and test more sophisticated behavioral models with less restrictive assumptions (Baltagi, 2011).

Table-5: Regression Model Equations

No	Equation
1	$TOBINSQ_{H1} = C1_{H1} + C2_{H1}*ENV + C3_{H1}*SOC + C4_{H1}*GOV + \varepsilon$
2	$ALTMANZ_{H2} = C1_{H2} + C2_{H2}*ENV + C3_{H2}*SOC + C4_{H2}*GOV + \varepsilon$
3	$TOBINSQ_{H3} = C1_{H3} + C2_{H3}*ALTMANZ + C3_{H3}*ROA + C4_{H3}*TATO + C5_{H3}*CR$

	$+ C6_{H3}*DAR + \varepsilon$
4	$TOBINSQ_{H4} = C1_{H4} + C2_{H4}*ENV + C3_{H4}*SOC + C4_{H4}*GOV + C5_{H4}*ALTMANZ + C6_{H4}*ROA + C7_{H4}*TATO + C8_{H4}*CR + C9_{H4}*DAR + \varepsilon$

FINDINGS, ANALYSIS, AND DISCUSSIONS

Equation 1 Regression Analysis

Table-6: Regression Result of Equation 1 TOBINSQH1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.2494	0.5494	4.0942	0.0001
ENV	0.1085	0.6907	0.1571	0.8753
SOC	-0.0506	0.6365	-0.0795	0.9367
GOV	-0.3450	0.8691	-0.3970	0.6917
Root MSE	0.6389	R-squared		0.0019
Mean dependent var	0.2288	Adjusted R-squared		-0.0108
S.D. dependent var	0.6408	S.E. of regression		0.6443
Sum squared resid	97.9692	F-statistic		0.1478
Durbin-Watson stat	0.6957	Prob(F-statistic)		0.9310
R-squared	-0.0009	Mean dependent var		2.0133
Sum squared resid	1291.8150	Durbin-Watson stat		0.0528

Source: EViews 12 Analysis Output (Author, 2023)

ENV has a positive and insignificant effect on TOBINSQ. SOC has a negative and insignificant effect on TOBINSQ. GOV has a negative and insignificant effect on TOBINSQ. The regression has the probability value 0.9310 which is greater than the significance level 0.05. It means that the null hypothesis is rejected. Thus, it can be concluded that ENV, SOC and GOV have an insignificant effect on the TOBINSQ. The regression has the Adjusted R-squared value -0.0108. It means that the ENV, SOC and GOV can jointly explain the relationship with TOBINSQ only 1.08% and the remaining 98.92% explained by other variables outside the model.

Since all the individual probability (t-statistic) values are insignificant and the simultaneous probability (F-statistic) value is insignificant, the null hypothesis H0 is rejected, Thus, it can be concluded that Environment, Social and Governance pillars of ESG performance have an insignificant effect on the firm value.

Equation 2 Regression Analysis

Table-7: Regression Result of Equation 2 ALTMANZH2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.5249	1.4502	3.1202	0.0020
ENV	-0.2945	1.6824	-0.1751	0.8612
SOC	0.2202	1.5479	0.1422	0.8870
GOV	0.8788	2.1168	0.4151	0.6784
Root MSE	1.5530	R-squared		0.0025
Mean dependent var	0.4974	Adjusted R-squared		-0.0102
S.D. dependent var	1.5581	S.E. of regression		1.5661
Sum squared resid	578.8040	F-statistic		0.1954
Durbin-Watson stat	1.5959	Prob(F-statistic)		0.8994
R-squared	-0.0010	Mean dependent var		5.1789
Sum squared resid	10551.3300	Durbin-Watson stat		0.0875

Source: EViews 12 Analysis Output (Author, 2023)

ENV has a negative and insignificant effect on ALTMANZ. SOC has a positive and insignificant effect on ALTMANZ. GOV has a positive and insignificant effect on ALTMANZ. The regression has the probability (F-statistic) value 0.8994 which is greater than the significance level 0.05. It means that the null hypothesis is rejected. Thus, it can be concluded that ENV, SOC and GOV have an insignificant effect on the ALTMANZ. The regression has the Adjusted R-squared value -0.0102. It means that the ENV, SOC and GOV can jointly explain the relationship with ALTMANZ only 1.02% and the remaining 98.98% explained by other variables outside the model.

Since all the individual probability (t-statistic) values are insignificant and the simultaneous probability (F-statistic) value is insignificant, the null hypothesis H0 is rejected, Thus, it can be concluded that Environment, Social and Governance pillars of ESG performance have an insignificant effect on the financial health.

Equation 3 Regression Analysis

Table-8: Regression Result of Equation 3 TOBINSQH3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.5200	0.5811	0.8948	0.3720
ALTMANZ	0.3192	0.0270	11.8111	0.0000

ROA	1.9400	2.4800	0.7823	0.4350
TATO	-0.6609	0.5440	-1.2149	0.2259
CR	-0.3906	0.0876	-4.4574	0.0000
DAR	1.7981	0.9484	1.8960	0.0594
Root MSE	0.4369	R-squared		0.9645
Mean dependent var	2.0133	Adjusted R-squared		0.9565
S.D. dependent var	2.3239	S.E. of regression		0.4847
Akaike info criterion	1.5569	Sum squared resid		45.8163
Schwarz criterion	2.2095	Log likelihood		-141.8253
Hannan-Quinn criter.	1.8198	F-statistic		120.4184
Durbin-Watson stat	1.2606	Prob(F-statistic)		0.0000

Source: EViews 12 Analysis Output (Author, 2023)

ALTMANZ has a positive and significant effect on TOBINSQ. ROA has a positive and insignificant effect on TOBINSQ. TATO has a negative and insignificant effect on TOBINSQ.

CR has a negative and significant effect on TOBINSQ. DAR has a positive and insignificant effect on TOBINSQ. The regression has the probability (F-statistic) value 0.0000 which is smaller than the significance level 0.05. It means that the null hypothesis is accepted. It can be concluded that ALTMANZ, ROA, TATO, CR and DAR jointly have a significant effect on the TOBINSQ. The Adjusted R-squared value 0.9565. It means that the ALTMANZ, ROA, TATO, CR and DAR jointly explain the relationship with TOBINSQ up to 95.65%.

Since some of the individual probability (t-statistic) values are significant and some other are insignificant and the simultaneous probability (F-statistic) value is significant, the null hypothesis H0 is partially accepted, Thus, it can be concluded that Return on Asset, Total Asset Turnover and Debt to Asset Ratio have an insignificant effect on the firm value, while financial health and Current Ratio have a significant effect on the firm value.

Equation 4 Regression Analysis

Table-9: Regression Result of Equation 4 TOBINSQH4

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.7806	0.6604	1.1820	0.2387
ENV	0.4328	0.5289	0.8182	0.4142
SOC	-0.0061	0.4934	-0.0123	0.9902
GOV	-0.8689	0.6818	-1.2744	0.2041

ALTMANZ	0.3195	0.0273	11.7182	0.0000
ROA	2.2629	2.5158	0.8995	0.3695
TATO	-0.5866	0.5485	-1.0695	0.2862
CR	-0.3799	0.0889	-4.2736	0.0000
DAR	1.9817	0.9984	1.9849	0.0486
Root MSE	0.4348	R-squared		0.9648
Mean dependent var	2.0133	Adjusted R-squared		0.9562
S.D. dependent var	2.3239	S.E. of regression		0.4861
Akaike info criterion	1.5721	Sum squared resid		45.3727
Schwarz criterion	2.2683	Log likelihood		-140.6579
Hannan-Quinn criter.	1.8526	F-statistic		112.1227
Durbin-Watson stat	1.2398	Prob(F-statistic)		0.0000

Source: EViews 12 Analysis Output (Author, 2023)

ENV has a positive and insignificant effect on TOBINSQ. SOC has a negative and insignificant effect on TOBINSQ. GOV has a negative and insignificant effect on TOBINSQ. ALTMANZ has a positive and significant effect on TOBINSQ. ROA has a positive and insignificant effect on TOBINSQ. TATO has a negative and insignificant effect on TOBINSQ. CR has a negative and significant effect on TOBINSQ. DAR has a positive and significant effect on TOBINSQ. The regression has the probability (F-statistic) value 0.0000 which is smaller than the significance level 0.05. It means that the null hypothesis is accepted. Thus, it can be concluded that ENV, SOC and GOV have a significant effect on the TOBINSQ. The regression has the Adjusted R-squared value 0.9562. It means that the ENV, SOC, GOV, ALTMANZ, ROA, TATO, CR and DAR can jointly explain the relationship with TOBINSQ up to 95.62% and only the remaining 4.38% explained by other variables outside the research model.

Since some of the individual probability (t-statistic) values are significant and some other are insignificant and the simultaneous probability (F-statistic) value is significant, the null hypothesis H0 is partially accepted, Thus, it can be concluded that Environment, Social and Governance pillars of ESG performance, Return on Asset, and Total Asset Turnover have an insignificant effect on the firm value, while financial health, Current Ratio and Debt to Asset Ratio have a significant effect on the firm value.

Mediating Variable Test

Table-10: Sobel Test of Mediating Variable

Dependent Variable: ALTMANZ				
	Coefficient	Std. Error	z (p=0.05)	z-value
ENV	-0.2945	1.6824	1.9701	-0.1750
SOC	0.2202	1.5479	1.9701	0.1422

GOV	0.8788	2.1168	1.9701	0.4149
Dependent Variable: TOBINSQ				
	Coefficient	Std. Error		
ALTMANZ	0.3195	0.0273		

The ALTMANZ intervening variable for ENV independent variable has z-value -0.1750, while for critical p-value 0.05 it has z-value 1.9701. It means that the null hypothesis is rejected. Thus, it can be concluded that ALTMANZ has a negative and insignificant effect as intervening variable for ENV independent variable.

The ALTMANZ intervening variable for SOC independent variable has z-value 0.1422, while for critical p-value 0.05 it has z-value 1.9701. It means that the null hypothesis is rejected. Thus, it can be concluded that ALTMANZ has a positive and insignificant effect as intervening variable for SOC independent variable.

The ALTMANZ intervening variable for ENV independent variable has z-value 0.4149, while for critical p-value 0.05 it has z-value 1.9701. It means that the null hypothesis is rejected. Thus, it can be concluded that ALTMANZ has a positive and insignificant effect as intervening variable for SOC independent variable.

Summary of Panel Data Regression

Table-11: Regression Summary

Dependent Variable: TOBINSQ						
Equation	ENV	SOC	GOV	p	H0	
1	+	-	-	n	r	
Dependent Variable: ALTMANZ						
Equation	ENV	SOC	GOV	p	H0	
2	-	+	+	n	r	
Dependent Variable: TOBINSQ						
Equation	ALTMANZ	ROA	TATO	CR	DAR	p	H0
3	+***	+	-	-***	+*	s***	f
Dependent Variable: TOBINSQ										
Equation	ENV	SOC	GOV	ALTMANZ	ROA	TATO	CR	DAR	p	H0
4	+	-	-	+***	+	-	-***	+**	s***	f
Description: Significant levels at *** p < 0.01, ** p < 0.05, * p < 0.10, p = p-value, s = significant, n = not significant, H0 = null hypothesis, f = fail to reject, r = reject										

Equation 1 TOBINSQH1 panel data regression has ENV independent variable with positive coefficient and p-value insignificant, SOC independent variable with negative coefficient and p-value insignificant, and SOC independent variable with negative

coefficient and p-value insignificant. Equation 1 has simultaneous p-value insignificant and null hypothesis is rejected.

Equation 2 ALTMANZH2 panel data regression has ENV independent variable with negative coefficient and p-value insignificant, SOC independent variable with positive coefficient and p-value insignificant, and SOC independent variable with positive coefficient and p-value insignificant. Equation 2 has simultaneous p-value insignificant and null hypothesis is rejected.

Equation 3 TOBINSQH3 panel data regression has has ALTMANZ independent variable with positive coefficient and p-value significant at level 0.01, ROA control variable with positive coefficient and p-value insignificant, TATO control variable with negative coefficient and p-value insignificant, CR control variable with negative coefficient and p-value significant at level 0.01 and DAR control variable positive coefficient and p-value insignificant. Equation 3 has simultaneous p-value significant at level 0.01 and null hypothesis is fail to be rejected.

Equation 4 TOBINSQH4 panel data regression has ENV independent variable with positive coefficient and p-value insignificant, SOC independent variable with negative coefficient and p-value insignificant, and SOC independent variable with negative coefficient and p-value insignificant. Equation 4 has ALTMANZ mediating variable with positive coefficient and p-value significant at level 0.01, ROA control variable with positive coefficient and p-value insignificant, TATO control variable with negative coefficient and p-value insignificant, CR control variable with negative coefficient and p-value significant at level 0.01 and DAR control variable positive coefficient and p-value significant at level 0.05. Equation 4 has simultaneous p-value significant at level 0.01 and null hypothesis is fail to be rejected.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

From the panel data regression finding and analysis, the author concludes that the ESG performance which represent by Environment, Social and Governance pillar scores do not have significant effect directly to the firm value. The ESG performance also do not have significant effect to the financial health.

Furthermore, The ESG performance do not have significant effect when mediated by financial health as intervening factor to the firm value. The financial health itself has significant effect to the firm value. Several control variables of the financial performance which are ROA and TATO do not have significant effect to the firm value. Meanwhile several other control variables of the financial performance which are CR and DAR have significant effect.

Recommendations

Based on the data analysis, the author found that there are different characteristics of the ESG performance, financial health, financial performance and firm value which are determined by the sector and profitability of the firms. The ESG performance score also have small variance and high correlation among the pillars. The firms on the list of ESG performance also keep changing for each period. The recommendations for further research are as follow:

1. To study the impact of ESG performance to financial health and firm value according to the sectors.
2. To study the impact of ESG performance to the profitability of the firm.
3. To study the ESG performance scoring criteria and method improvement.

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