

Can ESG Increase Firm Value in the Banking Institution and Financial Services in Malaysia? An Insight from Social Norm Theory

Mohd Ashari Bakri*

Universiti Malaysia Sabah

Email: mohd.ashari@ums.edu.my

Mohamad Isa Abd Jalil

Universiti Malaysia Sabah

Email: isa@ums.edu.my

Zakiah Hassan

Universiti Malaysia Sabah

Email: zakiah@ums.edu.my

** Corresponding Author*

Abstract

Purpose: This paper aims to ascertain the impact of environmental, social and governance (ESG) on Malaysian banking institutions and financial services.

Design/methodology/approach: The study examined 24 firms from the banking institution and financial services obtained from DataStream. The study used OLS, random effect and fixed effect analysis with robust standard error. To ensure robust result, the study uses two stages least square to solve for potential endogeneity concerns.

Findings: The finding reveals that ESG increase firm value significantly in all analysis. The study also discovered that social pillar score negatively moderates ESG and firm value.

Research limitations/implications: The data is only limited to Malaysia's banking institution and financial services. Thus the results may not be extrapolated into other industries.

Practical implications: A manager should promote the ESG agenda to obtain a better firm valuation among investors, especially those concerned with the ESG agenda.

Originality/value: By applying the perspective from social norm theory, the study shows that empowering social responsibility disclosure (create positive credibility to investors) significantly adds value within banking institutions and financial services firms in Malaysia. The study also discovered that the social pillar has a significant moderating effect on ESG and firm value relationships.

Keywords: ESG, firm value, Malaysia, banking institution, and financial services.

Introduction

Even though the concept of ESG or Environmental, Social and Governance (ESG) was established a long time, the impact of ESG has only recently been noticeable in Malaysia (The Star, 2021). One of the reasons for the noticeable development of ESG emerges from the target made by Employee Fund Provider (EPF) in aiming all its investments based on the ESG practices by 2030 (The Star, 2021). Seeing the development of ESG in Malaysia leads to

inquiries; how important is the ESG certification to the firms in Malaysia? And does the ESG certification matter? The increasing trends of firms with ESG ratings suggest that the importance of ESG to the capital providers¹. Additionally, a cost reduction in terms of firm monitoring by obtaining ESG certification, which is paid by the investment from fund provider, may shift the demand for stock with ESG certification and eventually lead to the increase of firm valuation relative to the stock without the ESG certification (Galema, Plantinga, & Scholtens, 2008).

The study on ESG impact on firm value has received lots of attention among researchers, and recently Wong et al. (2021) conducted an empirical study on the impact of ESG on firm value in Malaysia. Since the study on the impact of ESG on firm value has been conducted in Malaysia by Wong et al. (2021), our study specifically aims to bridge this gap by investigating the impact of ESG on banking institutions and financial services which has been neglected in their study. The institutional setting of Malaysia, with a robust domestic banking institution and financial services, should provide a lesson to the other emerging markets.

Our study hypothesises that when firms are certified as ESG firms, it creates a positive perception on investors regarding the firm incentives towards any ESG related activities or schedules. The rating provided by ESG mitigates any cost related to the monitoring activities on the ESG agenda, which lead to better firm valuation. To analyse the impact of ESG on firm value, our study use Tobin's Q as a proxy for firm value.

Besides examining the neglected industries, the study also fills the research gaps by using social norms theory to explain the ESG and firm value relationship. The ESG and firm value relationship in past studies often neglect the social theoretical explanation, which may improve the way to understand this relationship. Additionally, the study also adds moderating factors, namely social pillar score, to contribute to the body of knowledge. Fatemi, Glaum, & Kaiser (2018) discovered that the ESG strengths could increase or decrease firm value. The finding indicates that the ESG components have the moderating effect of strengthening or weakening the relationship. Therefore, the study specifically aims to ascertain whether one of the ESG components, namely the social pillar score, has the moderating effect of strengthening or weakening the relationship between ESG and firm value.

The remaining of this paper are as follow. The following section presents a literature review and hypothesis development. Whereas sections 3 and 4 present methodology and findings. Finally, section 5 presents the discussion and conclusion discovered from this study.

Literature Review

The board of directors plays a crucial role in formulating their ideas, especially in developing strategic policies that hugely impact firm value, among recent critical policies for implementation and being emphasised among practitioners, including the Environmental, Social and Governance (ESG) agenda. ESG implementation has become more substantial among firms since obtaining the third party ESG certification increases (Wong et al., 2021). The importance of ESG implementation on firm value has been answered by Wong et al. (2021), but the study neglected financial sectors as part of their sample, which our research addresses. Additionally, the lack of theoretical explanation on explaining the impact of ESG on firm value should require further clarification. Therefore, as part of the contribution in this study, we use the social norm theory perspective to explain how the ESG agenda may influence firm valuation.

The growing number of socially responsible investors in considering ESG information to diversify or allocate their investment suggests that the ESG related information has become

¹ The eight notable ESG rating providers according to Huber et al. (2017) are: Bloomberg ESG Data Services, Corporate Knights Global 100, Dow Jones Sustainability Index (DJSI), ISS, MSCI ESG Research, RepRisk, Sustainalytics Company ESG Reports, Thomson Reuters ESG Research Data.

more crucial than in the past². The importance of ESG is essential to protect the ESG agenda and influence the financial market behaviour. Additionally, the social norm has influenced economic behaviour and may affect the market outcome (Becker, 1971; Merton, 1987). According to Amel-Zadeh & Serafeim (2018), environmental and social responsibilities has become a central societal focus in recent years, and the trend has dragged into the financial market. The framework to understand the reasons or motivation behind corporate social responsibilities was developed over a decade ago by Benabou and Tirole (2010). However, there is still little understanding of corporate prosocial behaviour in investment decisions (Amel-Zadeh & Serafeim, 2018).

According to Hong and Kacperczyk (2009), the social norm is against any funding or investment of firms associated with human vice. Thus, it creates a perception among the investors not to involve themselves by purchasing the stock from these firms. ESG agenda was established specially to protect the Environmental, Social and Governance agenda from any misconduct related to this ESG agenda. Applying the same concept of social norm theory to the firm that does not critically involves or play a substantial effort towards any ESG agenda may suffer from the negative social norm perspective and suffer from a poor firm valuation. On the contrary, the investors concerned with the ESG agenda may experience a positive perception among those concerned with the ESG agenda and give these firms a better firm valuation. The statement supported by Mohammad and Wasiuzzaman (2021) posited that investors reward the firm with good ESG, and firms that poorly disclose any ESG related information will suffer idiosyncratic risk. Furthermore, Hong and Kacperczyk (2009) mentioned that the anecdotal evidence that supports the premise of social norm theory could be discovered of socially responsible investing (SRI) by managers of the organisation such as endowments and pension funds that screen their fund providers to remove any immoral or sinful stocks such as tobacco, alcohol, and gaming firms.

In addition, Wong et al. (2021) posited that firms with ESG scores deliver a credible signal to the investors on their concerns about the ESG agenda. Before the third-party ESG rating existed, all the information on the ESG agenda was held by the firm privately, and as a result, a firm cannot be valued based on its ESG performances. The existence of ESG rating provides a reduction in monitoring costs, especially to the fund's provider and investors, leading to better firm valuation (Wong et al., 2021). On the contrary, the firm without ESG scores may signal the least credible signal to the investor. This is because they must bear additional costs for monitoring the ESG agenda and, as a result, experience a poor firm valuation.

Hypothesis Development

ESG and firm value

In recent years, extensive research has been carried out on the relationship between ESG and firm value. However, the past studies have neglected the banking institution and financial services as part of their sample. Firms in these industries are often highly regulated and may not suitable to be analysed together with other industries, and separate research should be conducted. Despite being neglected in the past studies, our study posited that the positive relationship between ESG and firm value might persist in banking institutions and financial services. Mohamad and Wasiuzzaman (2021) state that a firm that discloses the ESG agenda will be rewarded with better value. In contrast, firms that hide or do not disclose their ESG agenda will suffer from idiosyncratic risk.

Furthermore, Wong et al. (2021) claimed that the ESG score provides a credible signal to the investors that the firm is concerned with the ESG related agenda. The disclosure of the ESG

² See the (2016) US SIF reports for the growth and size of the responsible investment industry in the United States (www.ussif.org/store_product.asp?prodid=34) and in Europe (www.eurosif.org/sri-study-2016/).

score will mitigate the costs to monitor activities related to ESG, and this will improve firm value. On the contrary, firms that do not disclose ESG score require additional cost from the investors and fund providers, thus resulting in a poor firm valuation. Besides that, Yoon, Lee & Byun (2018) also discovered a positive association between ESG and firm value in the Korean market even when examining some of the ESG components separately. Based on the argument and empirical evidence found in the past studies, we hypothesise that:

H1: There is a positive relationship between ESG and firm value within banking institutions and financial services in Malaysia

Moderating effect of social pillar score on ESG and firm value

The ESG and firm value received much attention in recent years, but less attention was given to the factors that may strengthen or weaken this relationship. As discovered by Fatemi et al. (2021), the strength of ESG correlates with firm value. They found out that ESG strengths improved firm value and weakened ESG score resulting in poor valuation. The changes in ESG correlation with firm value indicate that the components in ESG also affect firm value significantly. However, there is a lack of studies in which how the ESG components impact the firm value. In general, the better the components of ESG should be result in better firm valuation. However, we only examine social pillar score as the moderating factors on ESG and firm value relationship for this study. Based on the argument in this section, we hypothesise that:

H2: Social pillar score positively moderates the ESG and firm value within banking institutions and financial services in Malaysia

Methods

Data

This study includes 10-year observations between 2011 and 2020. The analysis was conducted in Malaysian firms, specifically within banking institutions and financial services. All firm's data were extracted from DataStream databases.

Variables

Dependent variable

The study uses Tobin's Q as dependent variables following Wong et al. (2021) and Bakri (2021) to proxy firm value.

Independent variable

To measure ESG, the study follows Wong et al. (2021) in using a dummy variable that takes the value of one of the banking institutions or financial services with ESG scores and zeroes if otherwise.

Moderator variable

To measure social pillar score, the study follows Abdi, Li & Camara (2020) in using social pillar score which directly extracted from DataStream database.

Control variable

The study chooses control variables used in the past literature. The variables include firm characteristics: firm size, asset growth, cash holdings, debt ratio, tangibility, and return on asset following Wong et al. (2021). The paper also adds a dummy to control year fixed effects to mitigate the potential variable bias.

Analytical strategy

This paper follows Wong et al. (2021) framework to examine the link between ESG and firm value. However, unlike the previous studies, which neglected the financial sector such as banking institutions and financial services, this study specifically addresses this industry to examine the impact of ESG on firm value. All the continuous variables in the analysis were winsorised at the 1st and 99th percentile to mitigate the risk of extreme value observations influenced. Before examining the model, the study conducts several diagnostic tests to identify a few issues: multicollinearity, heteroscedasticity, and autocorrelation. The study used Pearson correlation and VIF analysis to identify the multicollinearity, whereas the Breusch Pagan test was used to identify the heteroscedasticity, and the Woolridge autocorrelation test was used to identify the autocorrelation issue. The study does not include social pillar score in Pearson correlation and VIF analysis due to the expected high multicollinearity between ESG and social pillar score. The reasons are because social pillar score is parts of ESG component. To examine the model, the study uses the following model:

$$\text{Tobin's } Q_{i,t} = \alpha_{i,t} + \beta_2 \text{ ESG}_{i,t} + \text{Firm Characteristics}_{i,t} + \lambda_{i,t} + \varepsilon_{i,t} \quad (1)$$

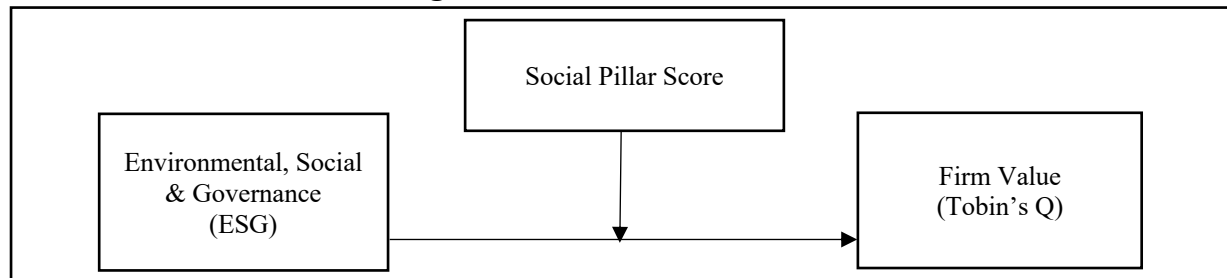
H1: ESG positively affects firm value in the Malaysian banking institution and financial services.

Where Tobin's Q is denoted as the market value of equity plus book value of the total asset minus book value of equity, divided by book value of total assets. β_2 represents ESG that takes the value of one firm with an ESG score and zero if otherwise. The firm characteristics represent by firm size, asset growth, cash holding, debt ratio, tangibility and return on asset. Meanwhile $\lambda_{i,t}$ represent the year fixed effects, whereas $\varepsilon_{i,t}$ represent the error term.

$$\text{Tobin's } Q_{i,t} = \alpha_{i,t} + \beta_2 \text{ ESG}_{i,t} + \beta_3 \text{ Social Pillar}_{i,t} + \beta_4 \text{ ESG} * \text{Social Pillar}_{i,t} + \text{Firm Characteristics}_{i,t} + \lambda_{i,t} + \varepsilon_{i,t} \quad (2)$$

H2: Social Pillar Score ESG positively affects firm value in the Malaysian banking institution and financial services.

For hypothesis two, Tobin's Q is denoted as the market value of equity plus book value of the total asset minus book value of equity, divided by book value of total assets. β_2 represents ESG that takes the value of one firm with an ESG score and zero if otherwise. $\beta_3 \text{ Social Pillar}_{i,t}$ represent by social pillar score whereas by $\beta_4 \text{ ESG} * \text{Social Pillar}_{i,t}$ represented by interaction term between ESG and social pillar score. The firm characteristics represent by firm size, asset growth, cash holding, debt ratio, tangibility and return on asset. Meanwhile $\lambda_{i,t}$ represent the year fixed effects, whereas $\varepsilon_{i,t}$ represent the error term. The following research framework was used as guidelines to examine the relationship:

Figure 1: Research Framework

Social Norm Theory (Firm with ESG creates positive credibility)

Findings

Descriptive Statistics

Table 1: Descriptive statistics

Variables	Observation	Mean	Std. Dev.	Min.	Max.	VIF
Tobin's Q	234	1.003432	0.4394318	0.354397	3.072449	N/A
ESG	240	0.3666667	0.4829015	0	1	2.48
Log (Total Asset)	240	16.22167	2.639514	11.91286	20.56786	3.90
Asset Growth	234	7.565983	16.8565	-67.09	59.34	1.15
Cash holding	240	0.1822807	0.2210251	0.0038618	0.9514063	1.60
Debt Ratio	231	0.1856521	0.2113097	0	0.8364965	1.33
Tangibility	240	0.0309051	0.0618427	0.000012	0.3120526	1.36
ROA	234	3.214701	4.118651	-11.92	15.5	1.47

*N/A: Not Available

Table 1 presents the descriptive statistics of the study variables for a banking institution and financial services in Malaysia. Based on Table 1, the highest mean among the variables is log (total asset) with a value of 16.22, while the lowest is tangibility with a value of 0.03. On the other hand, the variable with the highest standard deviation is asset growth with a value of 16.85, and the lowest is tangibility with a value of 0.06. Table 1 also presents minimum and maximum values for each variable. Besides descriptive statistics, table 1 also presents Variation Inflation Factors analysis (VIF), which refers to the alternative test of multicollinearity. According to Hair, Black, Babin, and Anderson (2010), any VIF score exceeding four should indicate the existence of multicollinearity.

Since the maximum value of VIF in this table is 3.90, it indicates that the multicollinearity issue does not exist. To ensure that our test for multicollinearity is robust, we also test multicollinearity using the Pearson correlation matrix, and this test is shown in table 2. According to Hair et al. (2010), any correlation value that exceeds 0.60 indicates the existence of multicollinearity. As shown in table 2, log (total asset) has high multicollinearity with a value exceeding 0.60. However, the study decided not to drop the log (total asset) because we may lose some vital information by dropping this variable. Alternatively, the study provided additional tests in the appendix that exclude the log (total asset) for comparison.

Correlation Analysis

Table 2: Pearson Correlation Matrix

	Tobin's Q	ESG	Firm Size	Asset Growth	Cash Holding	Debt Ratio	Tangibility	ROA
Tobin's Q	1							
ESG	0.379***	1						
Log (Total Asset)	0.1489**	0.723***	1					
Asset Growth	0.1437**	0.0454	0.1283**	1				
Cash Holding	0.2517***	-0.2079***	-0.5022***	-0.0835	1			
Debt Ratio	-0.0282	-0.3129***	-0.1706***	0.1819***	-0.1731***	1		
Tangibility	0.1059	-0.2119***	-0.3691***	-0.1704***	0.0888	0.1442**	1	
ROA	0.2678***	-0.1969***	-0.3511***	0.2115***	0.2188***	0.2092***	0.0135	1

***Denotes significance at the 10% level.**

**** Denote significance at the 5% level.**

***** Denote significance at the 1% level.**

To ensure data robustness, the study adopted several diagnostic tests. Besides multicollinearity, as demonstrated in Tables 1 and 2, we also test for heteroscedasticity and autocorrelation. The test used to check for heteroscedasticity in this study is the Breusch Pagan-heteroscedasticity test, whereby the test used to check the autocorrelation is Woolridge serial correlation test. Both tests demonstrate a significant result that indicates the existence of both heteroscedasticity and autocorrelation. To mitigate these issues, we used robust standard error following Ofori-Sasu, Abor & Osei (2017) to mitigate the concern for heteroscedasticity and autocorrelation in the entire analysis. The results of these analyses are present in table 3.

Main Analysis: Ordinary Least Square, Random Effect and Fixed Effect Analysis

Table 3: OLS, Random Effect and Fixed Effect (Robust Standard Error)

Models:	Model 1: OLS (RSE)		Model 2: Random Effect (RSE)		Model 3: Fixed Effect (RSE)	
Models:	Coefficient	t-value	Coefficient	z-value	Coefficient	t-value
Constant	-0.2921849	-1.05	0.6404846	2.61*	0.896241	2.35*
ESG	0.3648529	4.15***	0.1438825	2.34*	0.0556521	4.64***
Log (Total Asset)	0.0470288	2.84**	0.0134549	0.92	0.0245085	0.08
Asset Growth	0.0021917	1.40	0.000381	0.44	0.0009189	0.36
Cash Holdings	1.0224890	4.16***	0.2711155	0.81	0.1943346	0.69
Debt Ratio	0.2357782	1.96	0.1829846	0.87	0.1992925	0.90
Tangibility	1.6161200	3.89***	-0.1960427	-0.51	-0.3903071	-1.17
ROA	0.0353141	3.60***	0.0053087	1.19	0.0042045	1.03
Year Fixed Effect	Yes		No		No	

*RSE: Robust Standard Error

*Denotes significance at the 10% level.

** Denote significance at the 5% level.

*** Denote significance at the 1% level.

ESG and Firm Value (Tobin's Q)

The main analysis conduct in three different methods, namely, OLS, random and fixed effect analysis. The entire analyses run using robust standard error calculation to mitigate the risk of heteroscedasticity and autocorrelation, as the Breusch Pagan heteroscedasticity test and the Woolridge autocorrelation test indicate. The study, as shown above, also included year fixed effect in OLS analysis only.

Model 1 shows that firm value proxy by Tobin's Q is positively affected by ESG with a t-value of 4.15. The remaining control variables under model 1, namely, log (total asset), cash holdings, tangibility, and return on asset, significantly affect firm value. The other two remaining variables, asset growth and debt ratio, do not significantly correlate with firm value. Additionally, model 1, using OLS, include year fixed effect.

Based on model 2, the ESG also significantly impacts firm value with a z-value of 2.34. Under this model, the remaining controls variables does not demonstrate any significant relationship with firm value. On the other hand, based on model 3, the ESG also demonstrate a significant positive relationship with firm value with a t-value of 4.64. The remaining controls variables under model 3 also demonstrate an insignificant relationship with firm value. Under models 1 and 2, no year fixed effect is included.

The results present in models 1, 2 and 3 from table 3 are consistent and supported by previous empirical evidence (Fatemi et al., 2018). They discovered that ESG strengths increase firm

value, and the weakened ESG will mitigate it. The study finding is also consistent with Wong et al. (2021), where they discovered that ESG certification mitigates the firm's cost of capital and increases firm value significantly. They also highlighted that the existence of the ESG score should minimise the related costs of monitoring the ESG agenda. Such costs reduction makes the investors and fund providers concerned with the ESG agenda provide a better firm valuation. Additionally, the study is consistent with Mohammad and Wasiuzzaman (2021), who discovered that ESG disclosure improved firm performances even after controlling for the competitive advantages.

In a nutshell, the entire model, as shown in Table 3, demonstrate a consistently positive and significant relationship between ESG and firm value. The result indicates the positive impact of ESG on firm value. The trends of firms to obtain ESG certification reflect the investors' perception of the firm's value, especially for the investors concerned with the ESG agenda. A firm, especially in the banking institution and financial services, should pay close attention to their ESG agenda and perhaps emphasise obtaining an ESG certification to obtain better firm valuation according to the investors and funds providers criteria on assessing firms value.

Robustness test: Two Stages Least Square

Table 4: Two Stage Least Square (2SLS)

Models:	Model 1: 2SLS	
Models:	Coefficient	z-value
Constant	-0.3541153	-1.18
ESG	0.3332936	3.95***
Log (Total Asset)	0.0516670	2.83**
Asset Growth	0.0021609	1.58
Cash Holdings	1.0183560	7.38***
Debt Ratio	0.2086909	1.70
Tangibility	1.6395710	4.06***
ROA	0.0367548	5.22***
Year Fixed Effect	No	

*RSE: Robust Standard Error

*Denotes significance at the 10% level.

** Denote significance at the 5% level.

*** Denote significance at the 1% level.

Robustness test – Two stages least square (endogeneity concern)

The result presented in table 3 may be affected by endogeneity concerns, for example, ESG may correlate with an error term, and the coefficient presented in table 3 may be unreliable and biased. Thus, to mitigate the concern of endogeneity bias, the study uses two stage least squares by regressing the ESG variable with the instrumental variable. The result of this analysis is presented in table 4. As shown in table 4, solving for potential endogeneity using the two-stage least square method, the significant results of ESG on firm value persist with a z-value of 3.95 and a significance level of 0.01.

Moderating effect of Social Pillar Score on ESG and firm value: Ordinary Least Square, Random Effect and Fixed Effect Analysis

Table 5: OLS, Random Effect and Fixed Effect (Robust Standard Error)

Models:	Model 1: OLS (RSE)		Model 2: Random Effect (RSE)		Model 3: Fixed Effect (RSE)	
Models:	Coefficient	t-value	Coefficient	z-value	Coefficient	t-value
Constant	-0.2494447	-0.84	0.6311046	2.45*	0.8638156	2.16*
ESG	0.3005485	3.38**	0.1568726	3.73**	0.0721678	1.71
Social Pillar	0.1945914	2.26*	0.057534	3.09**	0.0470669	3.60**
ESG*Social Pillar	-0.1932388	-2.26*	-0.0578133	-3.18**	-0.0472605	-3.72**
Log (Total Asset)	0.0450089	2.55*	0.0141774	0.92	0.0037491	0.14
Asset Growth	0.0022990	1.46	0.0003545	0.41	0.0003194	0.36
Cash Holdings	1.0024670	4.01***	0.2670403	0.81	0.1963347	0.70
Debt Ratio	0.2350905	1.95	0.1831279	0.86	0.1977207	0.88
Tangibility	1.5978330	3.82***	-0.208024	-0.55	-0.3836382	-1.16
ROA	0.0346746	3.50**	0.0052398	1.19	0.0042441	1.05
Year Fixed Effect	Yes		No		No	

*RSE: Robust Standard Error

*Denotes significance at the 10% level.

** Denote significance at the 5% level.

*** Denote significance at the 1% level.

Moderating effect of Social Pillar Score on the relationship between ESG and Firm Value (Tobin's Q)

To answer the second research hypothesis, namely the moderating effect of social pillar score on the relationship between ESG and firm value, the study conducts three analyses using OLS, random and fixed effect analysis. The entire analyses run using robust standard error calculation to mitigate the risk of heteroscedasticity and autocorrelation, as the Breusch Pagan heteroscedasticity test and the Woolridge autocorrelation test indicate in the earlier analysis. Additionally, the study also included year fixed effect in OLS analysis.

Based on table 5, Model 1 shows that the interaction term between ESG and social pillar score is negatively moderates the relationship between ESG and firm value with a t-value of -2.26. The remaining control variables under model 1, log (total asset), cash holdings, tangibility, and return on asset, significantly affect firm value. The other two remaining variables, asset growth and debt ratio do not significantly correlate with firm value. Additionally, model 1, using OLS, include year fixed effect.

Based on model 2, the interaction term between ESG and social pillar score also negatively moderate ESG and firm value impacts firm value with a z-value of -3.18. Under this model, the remaining controls variables does not demonstrate any significant relationship with firm value, except for the direct relationship between ESG, social pillar score and firm value. On the other hand, based on model 3, the interaction term between ESG and social pillar score also demonstrate a significant negative moderating on ESG and firm value relationship with a t-value of -3.72. The remaining controls variables under model 3 also demonstrate an insignificant relationship with firm value. Under models 1 and 2, no year fixed effect is included.

The negative moderating effect of the social pillar on ESG and firm value relationships seems surprising. In general, investors place better value for a firm that deals better on social responsibilities issues (Abdi et al., 2020). The potential reason that the social pillar negatively moderates the ESG and firm value relationship is that the investors do not give weight to social-

based practices such as human rights and product responsibility and are likely to value more tangible governance and environmental activities (Abdi et al., 2020).

In a nutshell, the entire model, as shown in Table 3, demonstrate a consistently negative and significant moderating effect on the relationship between ESG and firm value. Based on the second hypothesis, the study expects a positive moderating effect of the social pillar on ESG and firm value relationships. Nevertheless, it is still consistent with other past studies (Abdi et al., 2020) that explain a potential reason for the negative effect of social pillar score on firm value.

Discussion and Conclusion

This paper investigates the ESG impact on firm value, particularly Malaysia's banking institutions and financial services. Using the Ordinary Least Square, random effect and fixed effect analysis within 24 banking institutions and financial services in Malaysia for ten years from 2011 to 2020, the results show that ESG has a positive and significant relationship with firm value.

Theoretical Implications

Based on the findings, this study contributes in terms of three aspects. First, it extends the literature regarding ESG and firm value, especially in banking institutions and financial services. Prior research mostly emphasised examining the non-financial firms and abandoned the financial institutions. The study highlights the importance of ESG on firm value to the banking institution and financial services. Thus, this paper confirms the empirical evidence found in the past studies regarding the non-financial institution to be similar in a financial institution, especially within ESG agenda and firm valuation. Secondly, the study uses the social norm theory concept to explain how the ESG agenda may affect firm value. The result and explanation found in this study should be very helpful in understanding the relationship between ESG and firm value, especially on banking institutions and financial services, which were often neglected in past studies. Thirdly, the study is the first to introduce the social pillar score as moderating factor in ESG and firm value relationship.

Practical and Social Implications

ESG and firm value relationships are not only crucial to the investors but also the managers. ESG agenda was introduced to protect the environment's rights, social and simultaneously help firms improve the governance. Although the managers' main task is to maximise shareholders wealth, the right for the environment, social and governance should be well balanced, and this is where the ESG agenda comes into play. Investors who are particularly concerned about the ESG agenda will be punishing a firm with poor ESG criteria resulting in a lower firm value. Therefore, a firm, especially banking institutions and financial services, should emphasise their ESG agenda to obtain better firm value. The study shows that ESG plays a substantial role in influencing firm valuation. This suggested that policymakers such as the government should devote more attention to highlighting the importance of ESG, especially within banking institutions and financial services in Malaysia.

Limitations and Suggestions for Future Research

However, this study has some limitations. First, the data are only limited to the banking institution and financial services. Thus, the results cannot be extrapolated in the other industries. Second, the study only considers one country, namely Malaysia. Other countries with different settings and regulations may provide a different result that requires further investigation. Future studies may consider additional factors that may affect this relationship, such as a new moderating factor that may strengthen or weaken the relationship between ESG

and firm value. Despite the limitations, this study provides new insights on the ESG and firm value relationship, especially on the banking institution and financial services in Malaysia, with the additional explanation using social norm theory.

References

- Abdi, Y., Li, X., & Càmara-Turull, X. (2020). Impact of Sustainability on Firm Value and Financial Performance in the Air Transport Industry. *Sustainability*, 12(23), 9957.
- Amel-Zadeh, A., & Serafeim, G. (2018). Why and how investors use ESG information: Evidence from a global survey. *Financial Analysts Journal*, 74(3), 87-103.
- Bakri, M. A. (2021). Does dividend policy affect firm value in an emerging market? evidence from Malaysian firms. *Labuan Bulletin of International Business and Finance (LBIBF)*, 19(1), 49-58.
- Becker, G. S. (1971). *The Economics of Discrimination*. 2nd ed. Chicago: Chicago University Press.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global Finance Journal*, 38, 45-64.
- Galema, R., Plantinga, A., & Scholtens, B. (2008). The stocks at stake: return and risk in socially responsible investment. *Journal of Banking and Finance*, 32, 2646–2654.
- Hair, J., Black, W., Babin, B. and Anderson, R. (2010), *Multivariate data analysis*, 7th edition, Pearson Education.
- Hong, H., & Kacperczyk, M. (2009). The price of sin: The effects of social norms on markets. *Journal of financial economics*, 93(1), 15-36.
- Mohammad, W. M. W., & Wasiuzzaman, S. (2021). Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems*, 2, 100015.
- Merton, R. (1987). A Simple Model of Capital Market Equilibrium with Incomplete Information. *Journal of Finance* 42 (3), 483–510.
- Ofori-Sasu, D., Abor, J. Y., & Osei, A. K. (2017). Dividend policy and shareholders' value: evidence from listed companies in Ghana. *African Development Review*, 29(2), 293-304.
- The Star (2021). Retrieved from <https://www.thestar.com.my/business/business-news/2021/02/06/esg-is-here-to-stay>.
- Wong, W. C., Batten, J. A., Mohamed-Arshad, S. B., Nordin, S., & Adzis, A. A. (2021). Does ESG certification add firm value?. *Finance Research Letters*, 39, 101593.
- Aivazian, V., Booth, L., & Cleary, S. (2003). Do emerging market firms follow different dividend policies from U.S. firms? *Journal of Financial Research*, 26(3), 371–387.
- Yoon, B., Lee, J. H., & Byun, R. (2018). Does ESG performance enhance firm value? Evidence from Korea. *Sustainability*, 10(10), 3635.

Appendix

Table 6: Construct definition

Variables	Definition
Tobin's Q	Firm value measure as the market value of equity plus book value of the total asset minus book value of equity, divided by book value of total assets
ESG inclusion (0,1)	Indicator variable equals to one for firm-year observations with ESG score and zero if otherwise.
Firm Size	Firm size measure by the natural logarithm of total assets
Asset Growth	Annual total asset growth
Cash Holdings	Cash and cash equivalent divided by total asset
Debt Ratio	Total debt divided total assets.
Tangibility	Net fixed asset divided by total asset
Return on Asset	Net Income divided by total asset
Year Fixed Effect	Dummy variable equal to one for each different year

Table 7: Alternative Test using OLS, Random Effect and Fixed Effect (Robust Standard Error)

Models:	Model 1: OLS (RSE)		Model 2: Random Effect (RSE)		Model 3: Fixed Effect (RSE)	
Models:	Coefficient	t-value	Coefficient	z-value	Coefficient	t-value
Constant	0.4603239	4.77***	0.8623826	15.6***	0.9277172	14.48***
ESG	0.506871	7.48***	0.1457566	2.77**	0.0551346	3.99***
Asset Growth	0.0028329	1.84	0.0003952	0.46	0.0003345	0.36
Cash Holdings	0.8536299	3.65***	0.2588839	0.79	0.1950996	0.71
Debt Ratio	0.2389949	1.93	0.1976806	0.95	0.2015237	0.92
Tangibility	1.148177	3.18**	-0.2985658	-0.77	-0.3998432	-1.18
ROA	0.0281679	3.03**	0.0048256	1.04	0.0041617	0.96
Year Fixed Effect	Yes		No		No	

*RSE: Robust Standard Error