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ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) DISCLOSURE AND FINANCIAL PERFORMANCE

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Abstract

Nowadays, the stakeholders placed greater emphasized towards how businesses impact the economy, environment and society as a whole. Hence, befits the foundation towards the creations of Environmental, Social and Governance (ESG) parameters factors. The evolution of this holistic approach to business management, focussing on the ESG might influence firm's financial performance. In light of these issues, motivated current study to scrutinize the influence of the ESG practices towards firm's financial performance. The static panel data regression analysis was utilized for an unbalanced panel data for 69 firms listed on Bursa Malaysia spanning from the year 2009 to 2018. The postulated hypothesis used ESG scores as the indicators for the ESG practice among the public listed firms. While, the financial performance is measured using Return on invested capital (ROIC). The results suggest statistically significant negative relations between the ESG score and firm's financial performance. The relationship dimensions support the long standing debates on the trade-off between benefits and the costs of doing "good".

1. Introduction

The era of doing "good" amidst the organisation portrayed through 'ESG-aware' is here to stay. The ESG resembled the integration of three central factors of environmental, social and governance into firm's decision-making and investment processes; and widely known as considerations for socially responsible investment (SRI) (Kell, 2018). The SRI are currently acquaint with the sustainability principles allied into investment decisions, compared to the typical investment which emphasis on financial criteria only (Sahut & Pasquini-Descomps, 2015). The discussion of ESG also was widely used in interchange with the corporate social responsibility (CSR) for sustainable and responsible investing and now becoming part and parcels of the corporate decision. Amassed attentiveness among stakeholders towards the issues related to the disruption of the earth from human activities, the effects of climate change, inequality of wealth and also the severity of the corporate scandals around the globe to name few pressured the corporations, governments and related international bodies to address these issues.

The milestone of ESG was initiated in a report entitle "Who Cares Wins" by the Global Compact in 2004 (Kell, 2018). The report was materialized based on the joint initiative of the financial institutions in developing the guidelines and endorsements to incorporate issues related to environmental, social and corporate governance into the organizations. Successively, in October 2005, the United Nations Environment Programme Finance Initiative (UNEP FI) produced the "Freshfield Report" that evidenced the importance of embracing ESG issues for financial valuation (United Nations Environment Programme Finance Initiative [UNEP FI, 2005]). Thus, become the mainstay for the inauguration of the Principles for Responsible Investment (PRI) at the New York Stock Exchange in 2006 and the takeoff Sustainable Stock Exchange Initiative (SSEI) in 2007 (Kell, 2018).

In Malaysia, the positive determinations of Bank Negara Malaysia (BNM), Securities Commission Malaysia (SC) and Bursa Malaysia (BM) open the new dimension to the growth of responsible investment in Malaysia. The FTSE4Good Bursa Malaysia (F4GBM) index was launched by Bursa Malaysia on 22 December 2014. It was aligned with the Financial Times Stock Exchange as part of the worldwide FTSE4Good Index Series and also aligned with other leading global ESG frameworks such as the global reporting initiative and the carbon disclosure project. This new index resembles the expectation of firm's stakeholder's such as the investors, shareholders, and clients on the firms' accountability and transparency of investment decisions (Lee, 2014). The encouraging support shown by the Malaysian Government towards responsible investment initiatives with the establishment of F4GBM becoming the focal point of aligning current study towards listed firms in Malaysia.

However, the benefits of being "good" in running the business through practicing the ESG principles to stimulate the firm's financial performance from the Malaysia perspective is yet to be confirmed. Previous research do enthusiastically examining its added value such as Sahut and Pasquini-Descomps (2015), Atan et al. (2016), Qiu et al. (2016), Amel-Zadeh and Serafeim (2018), Velte (2017), Yoon et al. (2018), Atan et al. (2018), and Duque-Grisales and Aguilera-Caracuel (2019) to name a few. However, the ESG related research based on Malaysian context has been relatively scant. Therefore, this study develops its objective to discover the effects of being "Good" by using the ESG score towards the financial performance of Malaysian public-limited companies.

The reminder of this paper outlines the empirical study undertaken on the issues of ESG to stem the problem statement. Then, the clarification of data and research methodology was discussed. Followed by the core findings of the research are presented and finally composed the findings with the discussion of the potential for future research

2. Problem Statement

Grounded by the traditional view emphasizing towards shareholder value maximization as the main objective of the firms holds that firms are responsible only to profit-maximizing shareholders. Equally deliberates by Friedman (1962) that economic profit making is the main indicators of firm's social responsibility. Hence, abide the responsibility to serve the other stakeholders' interests or to enhance society's welfare (Bénabou & Tirole, 2010; Friedman, 1970). However, the rise of firm's devotion beyond profit maximization and involvement in activities that improve other stakeholder's welfare is taking place. Subsequently, investors starting to consider timely and accurate non-financial terms such as ESG parameters factors in their investment decisions. Listed firms started to integrate ESG activities as one of the strategic direction and being effectively disclosed those activities to the investors and stakeholders (Aybars et al., 2019). This being supported by the stakeholder theory (Freeman, 1984) that holds firm should also focus on the comprehensive need of stakeholders such as the workforces, dealers, clienteles, societies, financial institutions, regulatory agents and others; and not only towards firm's profit maximizations.

Nonetheless, does doing "good" lead to superior financial performance? This question is being debated past few decades across various literature beforehand with incoherent conclusions. See Duque-Grisales and Aguilera-Caracuel (2019), Farooq (2015) for negative relations, Velte (2017) with positive relations, and Qiu et al. (2016), Atan et al. (2016), and Atan et al. (2018) with insignificant relations. The conflicted result might arise from diverse contributor such as selection of variables measurement, the possibilities of errors in the models used and a failure to deal with the problem of endogeneity (Madorran & Garcia, 2016). Consequently, the mixed results in signifying the relationship between ESG with firm's financial performance provide a gap towards future research. Notwithstanding the encouraging evidence of ESG practices towards the firm's financial performance across various country and business sectors, the actual state of ESG impacts from Malaysia perspective remain limited and inconclusive. Given that there is no consensus among scholars that view being "good" contribute towards firm's financial benefits; the current study is expected to provide a meaningful insight.

3. Research Questions

In view of the inadequacy of ESG issues towards firm's financial performance literature from Malaysia perspective, this study was highlighted to fill the gaps by formulating the following research question:

1. Do ESG practices by the firm able to influence the firm's financial performance?

4. Purpose of the Study

This study was performed to analyse the relationships between being "good" that was resembling by ESG practices with the firm's financial performance from Malaysia perspective. The ESG practices were measured using the ESG scores of the listed firms. Based on the existing literature relating ESG with financial performance globally; the following objectives were set towards the achievement of the aim of this study:

1. To identify the relationships between the ESG practices' towards firm's financial performances.

5. Research Methods

5.1. Sample and Data Selection

This study used unbalanced panel data for 69 companies listed in Bursa Malaysia based on the availability of ESG score provided for the year 2009 to 2018 with 483 observations. The ESG practices were reflected by the ESG scores of listed firms extracted from the Thomson Routes Database. Breaking down the ESG was the first criteria known as environmental (E). The score represents the firm's efficiency in managing its environmental cost towards its stakeholders while operating the firms through more eco-efficient solutions (Yoon et al., 2018). The second criteria are social (S) assessed by looking at the firm's closed relationships with its stakeholders by considering how firm's treat and value people (Yoon et al., 2018). Lastly, the third criterion is the governance factors (G). It was scored based on the firm's perseverance in upholding the corporate governance practices and apprehending transparency in its decision-making processes (Han et al., 2016; Lee & Kim, 2013; Yoon et al., 2018). In addition to ESG score, the firm's specific variable is made up of leverage (total debt over total asset; LEV), efficiency (sales over net fixed asset; EFC) and also the firm's size (log value of market capitalization; SIZE).

The return on invested capital (net operating profit after tax over invested capital; ROIC) was used to represent the firm's financial performance. Specifically, most of the previous study in Malaysia measured the performance through return on asset and market valuation using Tobin Q measurement such as Yip and Lee (2018), Atan et al. (2016), Othman et al. (2011) to name a few. Hence, current study builds its originality as the only study based on Malaysia listed firms looking from the perspective of return applicable by investors from their invested capital. The ROIC was selected due to the weight given by this financial ratio as an indicators of firm's efficiency in utilising the firm's capital resources into profitable investments. Thus, justify the indicator of ROIC from the viewpoint of return that will be received by the bondholders and shareholders; in which portrayed the firm's financial performance.

5.2. Methodology

Current study utilised panel data regression due to its ability in controlling heterogeneity which contributed towards unbiased results. Additionally, according to Griliches and Hausman, (1986), the multi-collinearity problems that arise in cross-sectional or time-series data can be mitigated using the panel data. This study assumed that the selected data to be dependent across varied years, making the pooled Ordinary Least Squares (OLS) might not appropriate for our structure. Thus, the static panel data using Random Effect (RE) and Fixed Effect (FE) also were applied to test the model estimation. In examining the impact of ESG scores towards firm's financial performance the panel regression equation was proposed as follows:

$$ROIC_{it} = \int + \beta_1 ESG_{1it} + \beta_2 LEV_{2it} + \beta_3 EFC_{3it} + \beta_4 Size_{4it} + \mu_i + \lambda_t + \varepsilon_{it} \quad ....(1)$$

The subscripts i and t representing the firms (cross-section) and time (time series) respectively. While μ_i is the firms specific variable, λ_t is the time specific variable and ε_{it} is the random disturbance which may exist due to the presence of some outliers in the data set.

6. Findings

To confirm the existence of the multicollinearity problems among variables, the Variance Inflation Factor (VIF) and the Pairwise Correlation (PWC) were used. Results indicate no existence of multicollinearity among variables since the VIF values for all the observations reported are less than 10 (O'brien, 2007). The VIF results of the current study are ESG (1.28), LEV (1.01), EFC (1.18), and SIZE (1.38) with the mean VIF of 1.21. Additionally, the results of Pairwise Correlation (PWC) analysis also evidenced nonexistence of multicollinearity. The current results indicated the highest correlation coefficient regressors value reported is for EFC (0.4348) which was less than the threshold (<0.80). According to Gujarati (2014), larger value than 0.80 in their coefficients regressors signified multicollinearity problems that required for the omission of the variable Overall, the analysis revealed that the multicollinearity was not detrimental to the results of multiple regression estimations since both VIF value and the pairwise correlations coefficients support none existence of multicollinearity. Therefore, the model specification developed with the selected variables is valid for prediction.

Table 01 depicted the result of best fit model between the Pooled OLS and the RE in affirming the existence of specific effect or heterogeneity in the model prediction. The the Breuch-Pagan Lagrange Multiplier (BP-LM) test (Breusch and Pagan, 1980) was applied to separate between the Pooled OLS and the RE. The results illustrated that RE is the best fit model in explaining the relationship between the dependents variable with the firm's financial performance. The BB-LM test as reported in Table 01 shows that the chi-bar-square is 489.34. The probability is significant at 99% confidence level ($P < 0.01$) thus rejected the null hypothesis that the slopes and intercepts are similar across the firm. Results indicate a firm random-specific effects on the data, thus the RE model provides a better estimation. Therefore, the pooled estimator might provide a bias result since the error term is leading towards serial correlations between both observations. Next, to identify the final best-fit model prediction between the RE and FE the Hausman test was performed. Established along the result in Table 1, the chi-bar-square is 45.09 with the probability significant at 99% confidence level. Results evidenced the preferences of fixed effect against the random effect model since the p-value for the test is $< 1\%$. The model prediction of the panel data the selected firms assumes the existence of the firm's specific intercepts. Henceforth, it captures the effects of variables particular to that specific firm by eliminating the time invariant. Therefore, the interpretation of results is based on FE model.

Table 01. Results of Pooled OLS, Random Effect GLS and Fixed Effect and Robust OLS with Hetero & Serial Correlation

	Model (1) Pooled OLS	Model (2) Random Effect	Model (3) Fixed Effect	Model (4) OLS with Hetero & Serial Correlation
Constant	2.83 (0.005)	4.03 (0.000)	3.91 0.000	2.91 (0.005)
ESG	0.38 (0.703)	-3.10 (0.002)***	-2.07 (0.039)**	-2.00 (0.050)**
EFC	11.92 (0.000)***	8.96 (0.000)***	8.95 (0.000)***	6.47 (0.000)***
LEV	-3.17 (0.002)***	-1.98 (0.048)***	-1.17 (0.242)	1.21 (0.231)
SIZE	4.23 (0.000)***	3.30 (0.001)***	1.96 (0.051)*	1.38 (0.171)
BP- LM Test	489.34(0.0000)***	-		-
Hausman Test	-	45.09(0.0000)***		-
Observation	483	483	483	483
r-square	0.2603	0.2427	0.2289	0.2289
Model Fit(F-stat)	42.05 (0.000)***		26.59 (0.000)***	12.65 (0.000)***
Multicollinearity (mean VIF)	1.21	1.21	1.21	1.21
Heteroskedasticity ($\varkappa^2$-Stat)	-	-	56571.71 (0.000)***	-
Serial Correlation (F-Stat)	-	-	12.619 (0.000)***	-

[1]Figure in the parentheses are t-statistics, except for Bruech-pagan LM test, hausman test, heteroskedasticity and serial correlation test , which are p-values.

[2] Asterisks *, ** and *** denote statistical significance level respectively at 10%, 5% and 1%.

Consequently, the heteroskedasticity diagnostic test and serial correlations were performed on the selected FE model and the results are reported in Table 01. The modified Wald Statistic for group wise heteroskedasticity in the residual of a fixed effects regression model (Greene, 2000) indicated a chi-bar-squared of 56571.71 with the probability significant to 99% confidence level. Hence, signify the problem of heteroskedasticity, and confirming that the non-constant of the variances for the selected model. Also, the Woolridge test for autocorrelation in panel data was performed and result indicated 99% confidence level with F-value of 12.619. The panel model thus indicated, serial correlation problems. To rectify the problems of heteroskedasticity and serial correlation problems, the OLS with heteroskedasticity and serial correlation robust standard error (Hoechle, 2007) were conducted, and results are depicted in table 01.

Grounded along the results of robust fixed effect, only ESG and EFC was significant and portrayed existence of a relationship with the firm's financial performance designating by ROIC. The results signify a significant negative coefficient (-2.00) between the ESG scores of the listed firms in relations with the ROIC. The increase in ESG scores diminishes the firm's financial performances in which supported the previous study by Duque-Grisales and Aguilera-Caracuel (2019) and Farooq (2015). The negative relationships might arise due to the possibility of higher cost associated towards the implementation of ESG practices among the firms. Current study supports the justification of the long standing issues on the trade-

off between benefits and the costs of environmental regulation and investment raised by Walley and Whitehead (1994) and Palmer et al. (1995). Likewise, become the basis of competitive advantages among the firms that do not imposed towards responsible investment (Waddock & Graves, 1997). In additions, the negative contribution of ESG towards ROIC might contributed from the opportunity costs arising from the invested capital that supposed to be invested in more profitable activities (Madorran & Garcia, 2016). The results for EFC indicate a positive coefficient with ROIC (6.47) at the 1% significance level. The higher the ratio resembles the efficiency of the firm's management in utilizing its fixed assets to generate sales (Baker & Powell, 2009; Okwo et al., 2012). Subsequently, the improvement in firm's efficiency able to enhance the firm's financial performance. Yet even though the FE results shown an existence of significant positive relationships between firm size, the robust FE indicates that LEV and Size are not statistically significant in influencing the firm's financial performance.

7. Conclusion

The objective of the current study is to gain a deeper insight towards the ability of ESG practices towards the firm's financial performance by utilizing unique measures of ESG scores towards the ROIC. The existing literature shows an inconsistent results such as Duque-Grisales and Aguilera-Caracuel (2019), Farooq (2015); Velte (2017); Qiu et al. (2016); Atan et al. (2016), and Madorran and García (2016). Therefore, motivated the current study to search for the link between ESG and firm's financial performance. Study evidence significantly statistically negative between ESG scores and ROIC from the Malaysia perspectives. Hence conclude that being "good" is detrimental towards firm's financial performance. In light of the current study provide a conflicting results towards existing literature supporting the stakeholder theory and also numerous opposite opinions directed to this assertion. The justification towards the negative relationships might due to the cost associated towards the implementation of ESG practices among the listed the firms in Malaysia. As practically, these activities require a large amount of financial resources and time allocation. The firm's that pursuing the ESG goals might limit the range of other potential investment opportunities. Consequently, created towards the opportunity cost that required scarifying firm's financial performance. This could stimulate future research to consider the cost associated towards implementations of ESG practices in their model specifications.

Finally, it is essential to note that the question of whether or not the firm's decisions to embark into ESG practices will reduce firm's financial performance should not be laid completely to rest. Given the wide range of outcome may be caused by the ambiguity issues on the quality of the data, the appropriate methodology to be used and the measurement of variables selected. Thus, the challenge of the ESG issues is left for the futures to be further explored.

Acknowledgments

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