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Does Sustainability Reporting Lead to improved Financial Performance of Malaysian Public Listed Firms?

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Abstract
Awareness of the sustainability Reporting (SR) nowadays, has increased among the firms worldwide. SR is not only a communication tool to disclose information to stakeholders, but also measures the performance of a firm associated with economic, environment and society. The principle issue currently isn't about the compliance of sustainability to the required standards or protection of firm image, but it is about disclosing the reliable information for the wider interest of stakeholders. Moreover, sustainability reporting is a costly and complicated process to prepare that's why management is not interested in its implementation. In Malaysia, sustainability reporting is neglected due to lack of awareness on the significance of reporting with respect to economic, social and environmental perspectives. In Southeast Asia, Malaysia has the highest rank to report sustainability, but the improvement is required. Though there is an increased acceptance of sustainability reporting worldwide, yet, Malaysia has contributed very little to the literature on sustainability. Therefore, this study has investigated this issue by examining the association between the individual components of SR and firm performance based on a sample of 200 Malaysian listed firms for the years 2013-2018 and consisting 1200 observations. The study is based on panel data and utilized pooled OLS regression method. Accordingly, the regression outcomes propose that there is a positive relationship between all three components of SR and financial performance.

Keywords**:** *sustainability reporting (SR), Financial performance, Non-Financial performance, Malaysia, panel data*

1. Introduction

The disclosures by a firm on economic, social and environmental performance are known as SR. Economic, social and environmental factors are significant and must be under consideration of a firm when measuring the performance because of the fact that non-financial performance can contribute of financial performance in long run (McGuire, Sundgren, & Schneeweis, 1988; Yadava & Sinha, 2016; Chetthamrongchai & Jermsittiparsert, 2019; Pamornmast, Sriyakul, & Jermsittiparsert, 2019; Kerdpitak & Jermsittiparsert, 2020). While, previous studies are inconsistent on this issue that which particular components of SR influences the financial performance of the firm because the some of the prior studies offered positive, whereas, other studies found negative

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relationships (Kasbun, Teh, & San Ong, 2017). On the other hand, there is an increasing demand by investors to report sustainability information, as sustainability problems of the firms are increasing globally (Lee & Hwang, 2019). Consequently, the SR can provide emerging economies like Malaysia with a competitive edge through SR (Johari, 2019), therefore, the in the emerging countries firms are adopting the SR as a strategy firms for the better performance of the business; and in this context, it can be stated that SR is opening new horizons for firms (Galpin, Whitttington, & Bell, 2015; Qu, 2009). SR in addition to other factors elaborates the organizations' corporate social responsibility (CSR) practices specifically, its commitment to society and It is a powerful tool to correspond with stakeholders. Research questions in this examination are two dimensional: (I) to what degree does sustainability reporting influence profitability? (ii) Do economic, environmental and social sustainability disclosure influence e performance of a firm? Subsequently, the purpose of this investigation is to examine the association among SR and performance and to investigate whether economic, social and environmental SR is positively associated with financial performance in Malaysian quoted firms.

SR in addition to the concept of CSR incorporates environment and economic disclosures rather social disclosures only. It discloses a detailed report about a firm along with issues like climate change, global warming, animal rights, protection of biodiversity, human rights are included in CSR now. Reports are evolving to fulfil the requirements, especially investors of the firms in the past few decades. Reports are not only disclosing the financial data, but they are incorporating the non-financial data associated to the economic conditions, societal impact, and environmental safety form the firms business activities (Bennett, James, & Klinkers, 2017; Zhu, Sun, & Leung, 2014). A well-defined SR framework is proposed by GRI that discloses the firm performance in economic, environmental and social domains as well as includes the firm portfolio and governance practices (Manes-Rossi, 2018). GRI has paid much attention for the development of SR by maintaining transparency and accessibility to the information required for the sustainability and GRI has created a harmony among the all aspects of performance rather than only financial and social objective (Ehnert, Parsa, Roper, Wagner, & Muller-Camen, 2016) and developed an effective coordination in financial and sustainability disclosures (Yadava & Sinha, 2016). There are different stakeholders including NGOs, shareholders, workforce of the firm and other groups, and they all require scrutinized fair and rational SR disclosure. GRI proposed a framework to foster the SR activities at the level of financial reporting and intends to achieve the same level of consistency, comparability and acknowledgement form the stakeholders.

Accordingly, Johari (2019) and Manes-Rossi (2018), though Malaysia is an emerging economy in South Asian region, yet, percentage of firms disclosing SR, is very low as compared to the number of firms operating in the other regions. Fig 1 depicts the data for the last three years regarding the disclosures of the SR of the Malaysian listed firms. It is observable from the figure that other than financial disclosure, there is a small percentage of the firm that is meeting GRI guideline. This is an emergent issue that needs to be addressed by the Malaysian regulators because lack of compliance is dangerous for the overall society.

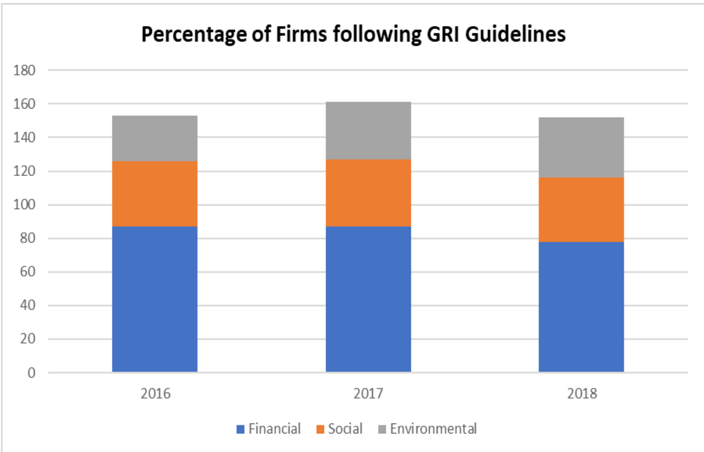

Figure 1: Percentage of firms following GRI guidelines
Source: (Johari, 2019)

The factors that are involved in lower reporting is, higher disclosure costs, difficulties in the measurement of performance, hurdles to convince the firms higher authorities for the adoption of proactive SR, non-availability of information, companies perception about extra costs and required resources. Other than these factors, one thing needs understanding that the developing countries normally consider this disclosure practices as a money-wasting activity and they are unable to understand that current cost will results in high benefits in terms of profitability in future. (Agyemang & Ansong, 2017; Naseem, Shahzad, Asim, Rehman, & Nawaz, 2019). These are the potential reasons for poor SR practices in Malaysia. Additionally, ineffectively performing organizations and the irregularity of disclosure are two reasons those have lowered down Malaysia's score on sustainability in emerging nations (Johari, 2019). Therefore, due to the emerging nature of this issue and Malaysian policymaker's interest to participate and develop a public understanding of SR practices, this study analyzes the association between economic, social and environmental SR and financial performance of the Malaysian quoted firm.

2. Literature Review

2.1 Sustainability Dimensions and Firm Performance

Yadava and Sinha (2016) argued that a similarity exists between SR and financial reporting but in some respect, SR is voluntarily compliant. While, it is arguable that a firm is liable for its economic, social and environmental conduct(McGuire et al., 1988). Even as voluntary conduct, most of the prior research found a positive association among firm performance for the firms that sustainable growth in their SR practices (Manes-Rossi, 2018; Reimsbach & Hahn, 2015). Financial performance of a firm is precisely reflected by SR practices because it improves the confidence of investors on firms and results in higher revenues (Kend, 2015). An investigation on the association among SR and firm performance based on ten years data revealed that the influence of SR practices on the firm performance varies over the period. The findings showed positive, negative and even no association between these two variables, the main reasons behinds these results were the change in CSR practices over time (Agyemang & Ansong, 2017; Lozano, 2015). Hummel and Schlick (2016) shed further light on the study by the Lozano (2015), the main reason behind these results are the variations in the SR practices, for example, when firm provides more disclosures, it results in enhanced performance when firms reduce SR practices, it affects the performance negatively in that particular years.

Firms assume that SR practices restrict sustainability fundamentals to improve financial performance by limiting the plans and decisions of firms because firms need to invest in SR reporting and consider as an opportunity cost (Naseem et al., 2019). Consequently, sustainability disclosure is reduced and would have an adverse effect on firm performance (Kuzey & Uyar, 2017). Form the other point of view, specifically, from the investment context, low risk and high return are the immediate motives of stockholders and stakeholders. Therefore, sustainability reporting would enhance shareholders interest in two different ways: first, an increase in revenue through disclosing SR, firm image is improved and results in a better financial performance, secondly, providing assurance to the stockholders about their investment (Lizińska & Czapiewski, 2018; Ong, Soh, Teh, & Ng, 2015). A study by the Yusoff and Adamu (2016) claimed that by meeting social obligations and disclosure of SR disclosures regarding these effectively transforms into financial performance and growth of the firm.

Economic sustainability is defined as the duty of an organization to generate revenue to safeguard its ability to cater shareholders' interest in the long term (Hsu, Tan, & Mohamad Zailani, 2016). One thing is very important in this context, the financial performance of a firm and economic sustainability reporting are two different terms. Data relating to economic sustainability is taken from either sustainability reports or CSR activities that are based on certain flexible principles, but financial performance is based on strict fundamentals based on international financial reporting standards and gathered from financial accounts of the firm.

Moreover, Yadava and Sinha (2016) shed further light on this issue and argued that economic sustainability reports required to disclose information about distribution and generation of direct economic value, financial aspects such as risks and opportunities that have an impact for the long-run sustainability of the firm (Qu, 2009; Toukabri, Jilani, & Jemâa, 2014).

As far as the impact of the business activities on the environment is concerned, environment security is always acknowledged by Malaysians regulators. Malaysian organizations were considered accountable for polluting the environment and destabilizing the eco-system (Johari, 2019; Kuzey & Uyar, 2017). It is argued that strong environmental performance can support the economic stability and financial performance of an organization, and improves its financial status and satisfies the needs of stakeholders and assures the long term sustainability of the organization (Sun, Salama, Hussainey, & Habbash, 2010; Zailani, Govindan, Iranmanesh, Shaharudin, & Chong, 2015). Firms that do not pay attention to an environment-related problem because avoiding an environmental problem can be a competitive disadvantage for a firm and many firms are ignorant in this context. Data associated with the environmental concern is in demand by the stakeholders and it illustrates that investors' decisions are influenced by the environmental sustainability reports (Bamgbade, Kamaruddeen, & Nawi, 2017).

Social sustainability has a more significant impact because it is directly associated with the human capital of the firm and general society as well (Mishra & Suar, 2010). Social sustainability is facing challenges and to counter the threats, social participation and social awareness about the appropriate decision making related to complicated social problems is necessary (Ghani, Jamal, Puspitasari, & Gunardi, 2018; Mackey, Mackey, & Barney, 2007). Social sustainability effectively aware people for healthy and livable societies and also regarding the role of the firms in maintaining good societies. The firms that are operating in any society contribute to societies in different ways, such as charities, making hospitals and universities, through this action people perceive that the revenues that the firms are getting from the society, now the firms are paying back in terms of the social help (Ahmad, 2016; Mishra & Suar, 2010). Therefore, Sustainability performance has remarkable impacts on financial performance through increased revenues that can enhance their performance by utilizing social sustainability. To improve and report sustainability performance is as significant as improvement in financial performance is (Hummel & Schlick, 2016; Manes-Rossi, 2018). Many studies have discovered different outcomes, but significant evidence supports the view that SR contributes to the financial performance of a firm. It is a known fact that these practices are advantageous to the firms. Consequently, it is also be argued that financial performance is also influenced by the different dimensions of sustainability as well. Henceforth, the above arguments lead to the following hypotheses:

H1: SR has a positive and significant impact on the financial performance.

H2: Economic sustainability reporting has a positive and significant impact on the financial performance.

H3: Environmental sustainability reporting has a positive and significant impact on the financial performance.

H4: Social sustainability reporting has a positive and significant impact on the financial performance.

3. Methodology

3.1 Research Design

The sample is based on 200 firms quoted on the Malaysian capital market. This study used random sampling is based on a random sampling method, there is a total of 816 listed firms on Malaysian main capital market. (Mirza, Malek, & Abdul-Hamid, 2019b, 2019c). The reason for adopting random sampling method is that it results in an unbiased selection form the population., whereas, this study also used the stratified random sampling

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method and the stratum was based on the industry classification given by the Malaysian capital market. The sample of the study is small that may result in biased statistical inferences but according to Hair, Black, Babin, and Anderson (2010) a sample size of 200 or more may result in unbiased statistical inferences.

3.2 Data Collection

This study is based on the secondary data and the required data is collected directly from the sustainability part of the annual financial statements and website of the firm. Financial statements are the primary source of data for this study, previous studies also used annual financial statements to collect the data related to SR (Johari, 2019; Lee, Vikneswaran, & Manual, 2019; Mutalib, Jamil, & Husin, 2017). Financial performance data from 2013-2013 was collected from the Thomson Reuters Data Stream.

3.3 Variable Measurements

3.3.1 Dependent Variable Measurement

The measures of financial performance selected for the study was, return on capital employed (ROCE). This measure is the most common measurements to evaluate financial performance, consistent with the previous studies related to firm performance (Bamgbade et al., 2017; Johari, 2019; Lizińska & Czapiewski, 2018; Manes-Rossi, 2018; Reimsbach & Hahn, 2015; Toukabri et al., 2014).

3.3.2 Independent Variables Measurements

The measurement of SR was based on GRI fundaments. As a matter of fact, that the Malaysian firms are not following some of the guidelines given GRI until now, therefore, some parameters are combined with other activities. SR is divided into three categories for detailed analysis. First, economic sustainability (ES) The social sustainability (SS) and environmental sustainability (ESR). There are multiple measures available in the past literature to operationalize these three measures, whereas most of the prior research used a score based on GRI (Hummel & Schlick, 2016). The procedure to construct a score on the basis of GRI is the content analysis approach. Content analysis translated the qualitative data into quantitative data (Cheah, Kuan, Chew, Low, & Poon, 2016). Therefore, this study has utilized this approach based on the number of sentences and GRI parameters to conduct a content analysis Many of the studies have utilized this by using the number of sentences as an operationalization method (Johari, 2019; Lee & Hwang, 2019; Misko, 2015; Nadvi & Raj-Reichert, 2015; Yasmin & Haniffa, 2017).

To test the hypothesis, this study has developed two regression model, Model 1 is used to test the hypotheses 1, whereas Model 2 is used to test Hypotheses 2,3 and 4.

$$\mathbf{ROCE_{it} = \beta_0 + \beta_1 SR_{it} + \varepsilon_{it}} \qquad \textbf{Model 1}$$

Where

$ROCE_{it}$= Return on capital employed at the year t and firm i,

SR_{it}= Overall sustainability reporting score at the year t and firm i,

Afterwards, this study has divided the SR inti three components to evaluate the impact of individual SR practices (ES, SS and ESR) on the ROCE.

$$\mathbf{ROCE_{it} = \beta_0 + \beta_1 ES_{it} + \beta_2 SS_{it} + \beta_3 ESR_{it} + \varepsilon_{it}} \qquad \textbf{Model 2}$$

Where

$ROCE_{it}$= Return on capital employed at the year t and firm i,

ES_{it}= Economic sustainability reporting score at the year t and firm i,

SS_{it}= Social sustainability reporting score at the year t and firm i,

ESR_{it}= Environmental sustainability reporting score at the year t and firm i,

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4. Findings and Implications

As discussed above, the sample of study covers all industries classification assigned by the Malaysian capital market. The percentage of firms falling into different industries are presented in Table 1. The results present that most of the sample firms lie in the consumer sector, whereas, the lowest concentration of the firm is in the technology sector.

Table 1
Type of Industry

Industry Classification	No. of Firms	%
Consumer	55	27.5
Construction	42	21
Trading & Services	39	19.5
Industrial Product	27	13.5
Property	20	10
Technology	17	8.5
Total	**200**	**100**

Table 2 provides a descriptive analysis of variables. Findings show that the mean value of ROCE is 11.7% that average ROCE of the sample firms is 11.7%. While, mean values of SR, ES, SS, ESR is 42.3, 36.46, 47.37 and 39.45 respectively. These figures are a little bit encouraging that overall the 42% of the GRI disclosures are being provided by the sample firms.

Table 2
Descriptive Statistics

Variable	Mean	Min.	Max.	St.D
ROCE	11.7	6.9	27.3	35.1
SR	42.3	27.7	69.4	47.6
ES	36.46	31.07	79.04	39.18
SS	47.37	18.97	57.09	49.34
ESR	39.45	21.42	47.67	41.72

ROCE= Return on capital employed, SR= Overall sustainability reporting, ES= Economic sustainability reporting score, SS= Social sustainability reporting score, ESR= Environmental sustainability reporting score

Pairwise correlation among constructs was also performed. The results from Table 3 depicts that all independent variables are correlated with the dependent variable at 1 % significance level. The highest correlation lies between ES and ESR (.78) but still, it is less than normal value i.e. 0.8 in accounting literature as suggested by Hair, Bill, Barry, and Anderson (2006).

Table 3
Correlation Matrix

	ROCE	ES	SS	ESR
ROCE	1			
ES	0.47*	1	0.23*	0.63**
SS	0.69*	0.32**	1	0.74
ESR	0.52*	0.78	0.37*	1

Significance level (0.01,0.05**,0.10***)*
ROCE= Return on capital employed, ES= Economic sustainability reporting score, SS= Social sustainability reporting score, ESR= Environmental sustainability reporting score

This study further conducted the test for autocorrelation and heteroskedasticity for both models in the panel data set. These tests are very important in the context of panel data set because of ignorance of these issues can result in biased estimates of the regression model. Results of the diagnostic tests are provided in Table 4.

Table 4
Wooldridge test for Auto Correlation

	Model 1	Model 2
F (1, 200)	41.97	47.78
Probability > F	0.000	0.000

Cook-Weisberg Test for Heteroskedasticity

	Model 1	Model 2
Chi^2	2197.42	2005.52
Probability > Chi^2	0.000	0.000

The value of Chi^2 statistics autocorrelation test is 41.97 and 47.78 for Model 1 and 2 respectively and the p-value<0.01. Therefore, it shows the presence of serial correlation. The value of Chi^2 of heteroskedasticity statistics is 2197.42 and 2055.52 respectively and the p-value<0.01. Based on the findings, the panel data set is suffering from autocorrelation and heteroskedasticity. The final step to perform regression is the selection of an appropriate method of regression. Therefore, as

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recommended by Baltagi (2005), to conduct Lagrange Multiplier (LM) to determine whether the pooling of data is appropriate or not. The findings are provided in Table 5 below. The result shows that the Chi2 value is 3012.57 and 2930.09 and the p-value >0.05, for both models. If p-value>0.05, then the Pooled OLS is appropriate for performing the regression of both models. This study will perform regression with robust standard errors as suggested by White (1980) to address the issues in the panel data set mentioned above.

Table 5
Breusch and Pagan Lagrange Multiplier Test for Random-Effects vs Pooled Effect

	Model 1	Model 2
Chi2	3012.57	2930.09
Probability > Chi2	0.082	0.097

4.2 Regression Results

Table 6 and 7 present the findings of the pooled OLS regression method. The R^2 is 31.7 % and 33.28% respectively for Model 1 and Model 2. On the basis of the findings of Model 1, The relationship among SR and ROCE is significant and positive at 1% significance level (β=5.677, p<.01), that supports hypothesis 1. This result highlights that the SR contributes positively toward performance in the Malaysian Context. The result further infers that the stakeholders are aware of the significance of disclosure of sustainability provided by the firm and Malaysian firms are getting reward against it in terms of profitability. These results are in line with the previous studies that argued that SR is a communication tool to provide the details of performance of a firm from every aspect if firms provide quality SR it leads to better financial performance (Ahmad, 2016; Hummel & Schlick, 2016; Manes-Rossi, 2018; Mishra & Suar, 2010; Sun et al., 2010; Zailani et al., 2015).

Model 2 is based on the dimensions of the SR. The first dimension is based on economic sustainability, the findings show a positive and significant association among ES and ROCE at 1 % significance (β=8.229, p<.01), it shows that ES improvers the performance of the firm. The second dimension is based on social sustainability, the findings show a positive and significant association among SS and ROCE at 5 % significance (β=1.329, p<.05), it shows that SS improvers the performance of the firm also. The third dimension is based on environmental sustainability, the findings show a positive and significant association among ESR and ROCE at 10 % significance (β=0.324, p<.10), it shows that ESR improves the performance of the firm along with all other dimensions. Therefore, H2, H3 and H4 are also accepted as well.

Overall it can be concluded that all these dimensions contribute positively towards the performance of the firm, while the significance of each dimension is different from each other. As can be seen from the results that the most significant dimension of SR is economics sustainability β=8.229, followed by social β=1.329, and environmental sustainability β=0.324, based on the variation explained by the β coefficients. Theses result further infer that the role of each dimension towards performance is different that highlights the market gives different weights to different dimensions. These results are in line with the previous findings of many studies that claimed that every dimension positively contributes to firm performance (Bamgbade et al., 2017; Johari, 2019; Kuzey & Uyar, 2017; Mishra & Suar, 2010; Toukabri et al., 2014; Yadava & Sinha, 2016).

These results are also in with the theoretical support offered but the stakeholder and agency theory. The stakeholder's theory talks about the interest of the stakeholders if their interest is achieved, naturally, they will reward the firm. Firms also work for the wider interests of the stakeholders and the source of finance and incomes are also the stakeholders. Therefore, firms work for the welfare of the stakeholders from the profits that they are generated from the stakeholders. If firms disclose this information and stakeholders believe that this information is relevant and reliable, the firms will be rewarded through higher sales growth and capital. Moreover, these results can further be explained form the agency context, the firms which are disclosing data of SR, this will result in equal information to insiders as well as outsiders(Jensen & Meckling, 1976). Consequently, the confit of interest will reduce Mirza, Malek, and Abdul-

Hamid (2019a) and stakeholders confidence will be increased, as well as financial performance (Naseem et al., 2019).

Table 6
Regressions of Sustainability Reporting and ROCE

Independent Variables	**Model 1**		
	Coefficient	***t***	**Sig.**
SR	5.677	4.369	.000*
Constant	5.067	1.433	.154
R^2	31.7%		

Significance level (0.01,0.05**,0.10***)*
ROCE= Return on capital employed, SR= Overall sustainability reporting

Table 7
Regressions of Sustainability Reporting dimension and ROCE

Independent Variables	**Model 2**		
	Coefficient	***t***	**Sig.**
ES	8.229	3.388	.001*
SS	1.329	2.384	.018**
ESR	0.324	1.720	.087***
Constant	8.625	1.980	.049
R^2	33.28%		

Significance level (0.01,0.05**,0.10***)*
ROCE= Return on capital employed, ES= Economic sustainability reporting score, SS= Social sustainability reporting score, ESR= Environmental sustainability reporting score

5. Conclusion, Practical Implication, Limitations and Directions for Future Research

5.1 Conclusion

Evidence found in the prior literature still not sufficient to conclude that firms disclosing sustainability reports are financially performing well in comparison to the firms who are not reporting sustainability. While the current study tried to provide empirical evidence in this context of SR that the disclosure of information improves the financial performance of a firm. While in the Malaysian context, first of all, this research found that a few firms disclosed reports regarding economic, social and environmental sustainability completely, while other firms are reporting partially. This highlights that the firms that are disclosing partial information because they are afraid, if the data is released to the market, it can reduce firm valuation and future profitability. The study has additionally investigated what sustainability dimension can increase the financial performance of a firm better. The findings supported that the most important dimension is the economic sustainability is the Malaysian firms.

5.2 Practical Implications

This study has several practical aspects for the consideration of policymakers in Malaysia. The finding revealed a significantly positive association among all dimensions of SR and performance. The issue offers some unique implications for policymakers. In Malaysia the firms are focusing more on economic sustainability, that is a good step but on the other hand, the other two dimensions are also important. The policymakers should focus on the improvement of another two-dimension as well. Moreover, policymakers should take serious step to discourage choose and pick the approach of SR reporting because results highlight that firms are disclosing the information that is in favor of the firm. Finally, the firms reporting complete disclosure are not too many. Policymakers should try to improve the number of complaint firms to protect the interest of the stakeholders.

5.3 Limitations and Directions for Future Research

This study is having numerous limitations. The First concerns related to the generalizability of the findings to other developing countries due to the difference in the overall business environment as compared to Malaysia. Therefore, this model should be tested in other developing countries that are having different business environment as compared to Malaysia to evaluate whether these results other in other jurisdictions. Additionally, the other measures of firm performance such as sales growth, growth in assets, share price and return should be considered by future studies.

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