

# ANALYSIS OF CORPORATE SUSTAINABILITY PRACTICE AND IMPACTS TO CORPORATE VALUES IN MALAYSIA: DATA VISUALIZATION APPROACH

# Christopher Jerry Thomas<sup>1\*</sup>, Jasman Tuyon<sup>1</sup>, Hylmee Matahir<sup>1</sup>, Samir Dixit<sup>2</sup>

<sup>1</sup> Faculty of Business and Management, Universiti Teknologi MARA, Sabah Campus, Malaysia

<sup>2</sup> Brand Finance Asia Pacific, 150 Beach Road #35-00, The Gateway West, Singapore, 189720

\* Corresponding Author: jasma402@uitm.edu.my

Article history			Т
<b>Received date</b>	:	13-7-2020	Т
<b>Revised date</b>	:	10-8-2020	(2
Accepted date	:	30-9-2020	ar
Published date	:	1-12-2020	V
			Δ

## **Fo cite this document:**

Thomas, C. J., Tuyon, J., Matahir, H., & Dixit, S. (2020). Analysis of Corporate Sustainability Practice and Impacts to Corporate Values in Malaysia: Data Visualization Approach. *International Journal of Accounting, Finance and Business (IJAFB)*, 5 (30), 148 - 164.

**Abstract:** In response to the United Nations sustainable development goals agenda, companies uses sustainability reporting as a tool to meet stakeholders' expectation and promoting accountability which are essential for achieving sustainable competitive advantage and creating corporate values through sustainability. In recent years, there is a growing body of sustainability practice and reporting globally, but the nature and extent in Malaysia have not been sufficiently explored leaving the impacts of sustainability practice to corporate values remain puzzle. This study aims to provide a comprehensive analysis of corporate sustainability practice of FTSE4Good Bursa Malaysia index components through the following analysis. First, review of corporate sustainability policy development. Second, analyse corporate sustainability reporting practice by public listed companies using data visualization tools that provide an accessible way to see and understand trends, outliers, and patterns based of ESG scores in relations to firm financial performance proxies. This research would provide insights into this new sustainable corporate finance practice, yet very promising in enhancing firm values, therefore, have important implications for corporate and portfolio managers.

*Keywords:* Corporate finance, corporate sustainability reporting, data visualisation, *FTSE4Good*, sustainable finance

## Introduction

Sustainability is a noble and comprehensive development model idealize by the World Commission on Environment and Development (WCED) where it defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). The concept of sustainable development can be described through "triple bottom line" (Elkington, 1997) that comprises of three parameters built into the sustainability structure with respect to environment, social, and economic (Schoenmaker and Schramade, 2019). The environmental aspect emphasis business practices without overexploiting the environmental resources for future generations to address change of climate,



biodiversity loss, land and also natural resources depletion (Arowoshegbe and Emmanuel, 2016; Schoenmaker, 2017). The social aspect emphasis on ethical and social corporate sustainability to overcome health, education, equity and human rights issues (Schoenmaker, 2017; Nikolaou, Tsalis and Evangelinos, 2019). The economic aspect emphasizes on the impact of the organization's sustainable business practice towards the economic system. Development must be ecologically prudent, economically sustainable and socially desirable (Elkington, 1997).

In general context, sustainable development has been intensely debated for more than twenty years, but real progress of our societies to become more sustainable is very slow (Baumgartner, 2011). In fact, no country has currently achieved sustainable development based on the respective dimensions (Holden, Linnerud, and Banister, 2014). The implementation of this idea has proved to be challenging, particularly in developing countries (Kritz, 2018). In business and marketplace context, the ideology is not widely practice in firm, society, and marketplace. Still the explosions in environmental science and dramatic fallout from the financial crisis have cemented sustainability's relevance to today's business and society (Institute of Chartered Accountants in England and Wales, 2015).

In finance field, the novel idea of sustainable corporate finance practices are partly intended to address the environmental and social problems presently experienced by the world. In line with this, the United Nation Sustainable Stock Exchange Initiative emphasize the needs to disclose the ESG impacts by all of the listed firm in the United States by 2030 (Sustainable Stock Exchanges, 2015). The ESG practices presumably prominent to stakeholders, regulators, investors, scholars and policy maker, hence the relationship between ESG disclosure and performance needs to be taken into account (Buallay, 2019). However, the corporate sustainability practices remain low by large companies in developing countries including due to lack of ethical consciousness related to sustainability (Stampe and McCarron, 2015). This is due to the fact that the individual, firm and market practices are guided by modern finance theory which is only concerned with wealth maximization (Schoenmaker and Schramade, 2019). As such ESG dimensions in particular are not incorporated in the decisions taken by companies and investors (Schoenmaker, 2017).

There is a vast amount of literature has been studied over the years in examining the relationship between sustainability reporting practices and financial performance. However, the results have been inconsistent and contradictory. The results range from positive (Aboud and Diab, 2018; Albitar, Hussainey, Kolade and Gerged, 2019) to negative (Buallay, Fadel, Alajmi and Saudagaran, 2020; Dufwa and Hammarstrom, 2015) to mixed (Buallay, 2019; Garg, 2015) and even to insignificant (Atan, Alam, Said and Zamri, 2017). Incorporating sustainability practices lead to major concern by corporations as it increases the expenditure while reducing firm resources which in the short run, it will affect the profitability despite the fact that it will be rewarding in the long run (Molla, Ibrahim, and Ishak, 2019). In the context of Malaysian firm practice, the sustainability reporting practices trend in Malaysia still at an infancy stage (Muhammad, Talukder, Quazi and Khan, 2020) with no common framework has been developed for sustainable assessment of industries (Said, Ling, Kamarudin, Senik, Rashid, 2019). Consequently, the understanding on the extent and nature of the ESG practices in Malaysia are limited (Ogundare, 2013). There is a need for reconstruction of the theory and



practice of finance towards sustainability practices (Salzmann, 2013; Lagoarde-Segot and Paranque, 2017).

Based on these research gaps, this research aims to provide a comprehensive analysis of corporate sustainability practice of FTSE4Good Bursa Malaysia index components through the following analysis. First, review of corporate sustainability policy development. Second, analyse corporate sustainability reporting practice by public listed companies using data visualization tools that provide an accessible way to see and understand trends, outliers, and patterns based of ESG scores in relations to firm financial performance proxies. This research would provide insights into this new sustainable corporate finance practice, yet very promising in enhancing firm values, therefore, have important implications for corporate and portfolio managers.

# **Theory, Policy and Practice**

## Sustainable finance theory

The concept of sustainable finance has garnered attention in recent years. Sustainable finance is seen as a direction towards sustainable development goals which stresses the relevance of this study as most firms only focus on maximizing shareholders value (Lagoarde-Segot, 2019). The interconnection between investing and lending with economic, social and environment issues promotes strategic decision making on the trade-offs between sustainable development goals (Schoenmaker, 2017). The evolution focuses from shareholder's value to stakeholders by incorporating the triple bottom line approach which is planet, profit and people. Investors nowadays are concern about the risks involving economic, social and environmental impacts on firm performance which points out the needs of incorporating the issues in investment decision (Weber, Scholz and Michalik, 2010). In sustainable finance theory, stakeholders place an important aspect in balancing between financial, social and environmental to achieve long term value. In the long run, the transparency of the company's non-financial information is the crucial part of progressing towards sustainable development whereas traditional finance theories are too narrow to put the elements into corporate decision making as long as it promotes better cash flow to achieve their main goals (Soppe, 2004).

Financial sector plays a major role in transitioning towards sustainable economy. Sustainable finance helps in dealing with the uncertainties by evaluating risk affecting the future cash flow of the firms in order to reduce cost during production process (Schoenmaker, 2017). As such, companies incorporating relevant sustainable policies in decision making aiming at a long term approach in optimizing economic, social and environmental dimensions to prevent further loss associated with social and environmental impacts (Soppe, 2004). In sustainable finance, financial institution and investment companies avoid investing in particular sectors with negative impacts such as high carbon emissions, overuse non-renewable resources, exploiting child labor and land degradation which consequently affects the firm's ability to obtain fund due to stigmatise sector. Incorporating sustainability impacts will help to reduce risk thereby will beneficial to improve market positions, build relationship between financial institution and companies while achieving competitive advantage (Schoenmaker, 2017).



## Sustainable reporting policy in Malaysia

Bursa Malaysia reporting guidelines - Bursa Malaysia initiated its sustainability framework back in October 2015, in hope to properly guide Malaysian public listed companies in committing and practicing sustainability reporting (Bakar, Ghazali and Ahmad, 2019). The reporting guideline provided by Bursa Malaysia was prepared according to Global Reporting Initiative (GRI) framework (Molla et al, 2019). Therefore, it is crucial for every listed firm in Malaysia to act in accordance with the regulations imposed by the government and Bursa Malaysia in disclosing their sustainability activities (Aman, Ismail, and Bakar, 2015). Bursa Malaysia plays an important role in incorporating transparency among corporations in Malaysia based on environmental, social and corporate governance issues (Aman and Takril, 2016). The implementation of sustainability reporting promotes transparency and long term value creation. Listed companies should consider the negative impact of their production on the environment, community, workplace and marketplace not just philanthropic activities (Aziz, and Bidin, 2017). In Bursa Malaysia sustainability reporting guideline, sustainability is regarded as economic, environmental and social (EES), as governance dimension is viewed as one of the foundations of underpin along with the EES dimensions. All the listed issuers obligated under Bursa Malaysia need to disclose the non-financial information, economic, environmental and social in their sustainability reporting in meeting stakeholders expectations and improving sustainability practices (Bursa Malaysia, 2018). The sustainability statement must reflect the following criteria for evaluation of sustainability reporting.

*Balanced, comparable and meaningful information* - Sustainability statement must disclose information that is comparable, balanced and meaningful by referring to sustainability reporting guide provided by Bursa Malaysia. The concept of "balance" is to reflect both positive and negative aspects of firm's sustainability performance to ensure there is no unbiased and omitted negative information such as fatalities that caused death of employees due to non-compliance safety procedures, high total carbon emissions and or diversity issues at workplace. Every details of non-financial information must be disclosed and selected approach need to mention by the organization to ensure there is a balance between positive and negative aspects. The sustainability statement must contain adequate non-financial information to ensure that stakeholders have clear understanding that is comparable and meaningful. The information must be comparable and quantifiable with other firms or sectors allowing stakeholders to compare the data over time though both narrative statement and year to year performance approach highlighting areas of improvement (Bursa Malaysia, 2018).

Governance structure for sustainability disclosure - Governance structure ensures the oversight, accountability and review of the management towards sustainability practices. Governance body information required to be disclosed such as board responsibilities, board composition, remuneration, audit committee, internal control and risk management, general meeting and communication with stakeholders that mainly responsible for managing environmental, economic and social opportunities and risks. Corporate governance provides framework that promotes business prosperity, sustainability, behavior, transparency and accountability in realising shareholders value while taking into account of stakeholders. Good governance must prevent unwanted conflicts in the organization that prevent the company from achieving its goals. Governance body information must concern with both shareholders and stakeholders interest in conducting their business. Sustainability statements must disclosed all aspects to fully support good ethical behavior in business operations and culture that reduce



corruption, risk and mismanagement in the organization to sustain growth (Bursa Malaysia, 2018).

*Scope disclosure* - Scope can be referred to the geographical location of firm including the entities, associated companies, subsidiaries and joint venture and provide the reasons why choosing the current locations. Other important elements that need to be included are value chain operation, expanded scope and basis of exclusion. Scoping should also include activities reporting and current facilities and products. Every organization must also report clear details on recent acquisitions or joint venture in the basis of the scope that provides clear explanations on scope changes. This allows the stakeholders to identify and analyse the year to year performance analysis (Bursa Malaysia, 2018).

*Materials sustainability matters disclosure* - Sustainability matters explain on the opportunities and risks emerge from economic, environmental and social impacts such as human rights, diversity and energy which substantively affect the stakeholders' decision and assessment. It should be noted that, material assessment process requires transparency and the disclosure should highlight on the internal and external resources. The disclosure of the related matters should incorporate with strategy implemented by the organization to address the risk. In sustainability statement, it is important to discuss policies within the organisation to address risk contributing to unethical business conduct such as safety and health policies, environmental policy and social policies. Next, indicators should be incorporated and disclose in sustainability statement. The indicators provided in Bursa Malaysia reporting guidelines are aligned with FTSE4Good and GRI standard which are meaningful quantify the progress, policies efficiency and actions taken in managing sustainability (Bursa Malaysia, 2018).

## Sustainability practices in Malaysia

FTSE4Good Bursa Malaysia index components - Financial times stock exchange (FTSE) index is an ethical series of stock market investment widely known as FTSE4Good Index launched by the FTSE Group in 2001. It is designed to measure the ESG practices worldwide covering developed and developing index, emerging index, United States, United Kingdom, European market, Japan, Taiwan Malaysia and North America stock market exchange to promote transparency with a clear defined ESG criteria as a tool for market participants' assessment (FTSE Russell, 2020). In 2014, FTSE Group along with Bursa Malaysia launched FTSE4Good Bursa Malaysia Index as part of the global benchmark portfolio investment, FTSE4Good Index series for Malaysian stock market. FTSE4Good aims to help investor making better ESG investments in Malaysian issuer, expose and promote better transparency through ESG practices while helping transitioning to sustainable economy with lower carbon usage (Bursa Malaysia, 2018). The FTSE4Good Malaysia Index constituents are drawn and screened based on ESG criteria from top 200 firms in FTSE Bursa Malaysia EMAS index which comprises of FTSE Bursa Malaysia Top 100 Index and Small Cap Index. However, companies will be excluded if their business holds other investment and equity. The new mandate emphasize on the inclusion of ESG criteria through practicing good governance, socially ethical and environmentally safe consistent with the GRI and Bursa Malaysia reporting guideline expanding the benchmarks for the Malaysian market through FTSE4Good Bursa Malaysia index series. The review of FTSE4Good Bursa Malaysia index constituents will take place in June and December semi-annually (Bursa Malaysia, 2020).



FTSE4Good ESG Model - FTSE4Good ESG model acts as a tool for investors to derive with a better investment decision in managing risk exposure concerning ESG data integration into portfolio analysis. ESG offers an opportunity to help in aiding corporate manager understanding on non-financial information as stakeholders nowadays are concerned about how and where the firm invest in conducting their business (Albitar et al, 2019). By linking ESG factors with firm performance, it enables investors to persuade firm to be more transparent hence improving their standard of reporting (Aboud and Diab, 2018). FTSE4Good ESG Model use theme exposure and level score to assessing multiple dimensions that allows company to understand ESG practices in multiple dimensions (FTSE Russell, 2020). It comprises with overall rating split into three pillars and thematic exposure and also scores which built into over 300 individual indicator assessments which can be applied based on company's issue in related to ESG. FTSE ESG scores integrates ESG areas into stewardship and investments approaches for variety of ways which beneficial in business practices (FTSE Russell, 2020; Albitar et al, 2019). It helps in assessing the range and variance of portfolio asset manager incorporating ESG into selecting and evaluation and to identify companies' engagement progress. Investors will now have the ability to compare sustainability performance through clear defined analysis benchmark based on ESG preferences and its eligibility criteria. In terms of risk management, FTSE4Good ESG Model enables investors to identify the amount of risk bearing by the companies with comprehensive information that allows investor to analyse and develop their own perspective about risk and return relationship.

# **Data and Methodology**

## Data

This study used ESG scores and firm financial performance proxies of public listed firms FTSE4Good Bursa Malaysia Index constituents for 5 years from 2014 to 2018. As at 2018, there are total of 44 firms included in Malaysia sustainable index. The review of all FTSE4Good Bursa Malaysia index components was based on the firm list in Table 1.

ESG score measurement was based on the three main components of sustainability which are environmental, social, and governance. It is measured in percentile rank which divided into different range and grades. The ESG score data were collected from Refinitiv Eikon database which considered as the most comprehensive score and reliable data widely used by researchers, financial analyst and investors. Previous researchers also use similar ESG measurement in conducting research studies which presented in (Dufwa and Hammarstrom, 2015; Atan et al, 2017; Johansson and Fahlen, 2019). The financial performance measurements were based on ROE, ROA, Tobin Q, stock return, dividend yield, net profit, and market capitalization. ROE is the ratio of net income divided by shareholders equity, ROA is the ratio of net income divided by total assets. Tobin Q is the ratio of market value of assets divided by replacement value of assets. Stock return was based on yearly total stock return. Dividend yield is calculated as dividend per share over closing market price per share. Net profit is the net profit after tax. Market capitalization refers to stock price multiplied by its total share outstanding. The various measures of corporate financial performance are presented in Buallay 2018; Johansson and Fahlen 2019; Sahut and Pasquini-Descomps 2015; Siew, Balatbat and Carmichael, 2013). The financial performance proxies were obtained from Refinitiv Eikon database.



No	Index components	No	Index components
1	AEON Credit Service (M) Berhad		MISC
2	Alliance Bank Malaysia	24	My EG Services Bhd
3	Astro Malaysia Holdings	25	Petronas Chemicals Group Bhd
4	Axiata Group Bhd	26	Petronas Dagangan Bhd
5	Bumi Armada	27	Petronas Gas
6	Bursa Malaysia	28	Prestariang
7	Cahya Mata	29	Public Bank Bhd
8	CIMB Group Holdings	30	RHB Bank
9	Digi.com	31	Salcon
10	GD Express Carrier	32	Sime Darby
11	Hartalega Holdings Bhd	33	Sime Darby Plantation
12	Hengyuan Refining Company	34	Sime Darby Property
	KLCC PROP & KLCC REITS -	35	Sunway
13	STAPLED SC		
14	KPJ Healthcare	36	Sunway Construction Group
15	Kuala Lumpur Kepong	37	Sunway Real Estate Investment Trust
16	Lii Hen Industry	38	Telekom Malaysia
17	Malayan Banking	39	Tenaga Nasional
18	Malaysia Airports	40	Top Glove Corp
19	Malaysia Building Society	41	UEM Sunrise
	Malaysia Marine and Heavy	42	Unisem (M)
20	Engineering Holdings Bhd		
21	Malaysian Resources	43	Westport Holdings
22	Maxis Bhd	44	YTL Corp

# Table 1 FTSE4Good Bursa Malaysia Index Components

Source: 26/03/2018 © FTSE International Limited 2018. All Rights Reserved

# Methodology

Data visualization analytics using Tableau will be employed. Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data. Similar approach has been used in previous research (Conte, Vitale, Vollero and Siano, 2018; Maroufkhani, Wagner, Wan Ismail, Baroto, Nourani, 2019). Data visualization helps to classify and simplify based on data obtained. Traditionally, researchers, financial analyst, and investors used financial statement presented in numerical format. There is a need to simplify data by visualizing numbers and mapping information to ease the investors to make precise decision. Visualizing data eliminates numerical data to identify trends while increase the accuracy in terms of understanding financial information (Aulia-Absari Khalil, Reza, Junaedi, Kanigoro, 2015). This analysis used data visualization through bar chart, line chart and trend line combination to identify the movement and pattern showing the link between ESG score and firm financial performance.



# **Findings and Discussion**

## ESG performance comparison based on sectors

The bar chart in Figure 1 illustrates the average percentage of ESG score based on sectors in Malaysia between the years 2014 to 2018 at 5-years intervals. Among all the industries studied, it can be seen that in property sector scored the highest compared to the other sectors with 60.44% which indicates relatively good ESG performance and average degree of transparency in materiality sustainability reporting. The impact of property sector to build resilient infrastructure is important considering both carbon and greenhouse gas emission are affecting the environment. Meanwhile, technology sector scored the lowest with 23.17% with poor ESG performance. The other sectors such as consumer products and services, financial services, telecommunication and media and transportation and logistics show good ESG performance. The remaining sectors scored satisfactory ESG performance which range from 34% to 48% respectively. Two sectors which are construction and real estate investment trusts shows zero ESG score due to unavailable data presented in database although the company practice sustainability in Malaysia. Overall, the sectors in Malaysia are growingly incorporating sustainability practices.

#### ESG dimensions comparison based on sectors

The bar chart in Figure 2 shows the average percentage of individual dimensions of ESG based on sectors in Malaysia for the period of 5 years analysis. Among all the sectors studied, it can be seen that property sector scored the highest with 52.11% for environmental disclosure. Healthcare scored relatively low with 9.89% compared to the other sectors. Technology, construction, real estate investment trusts sectors did not show any environmental score on the figure 2 due to unavailability of data presented on database. The remaining sectors scored satisfactory in terms of environmental performance which range from 30% to 40% respectively. In social disclosure, consumer products and services and property sectors scored relatively high with 71.25% and 70.60% respectively compared to the other sectors. Technology sectors scored the lowest with 29.29% which indicates poor social performance as a whole. While utilities, telecommunication and media, transportation and logistics, and financial services sectors indicates an average social performance measure. The remaining sectors such which are energy, health care, plantation, technology and industrial products and services show satisfactory performance. In governance disclosure, plantation scored the highest with 73.57% which indicates good governance performance. The range followed by telecommunication and media, energy, transportation and logistics, property, consumer products and services, and financial services sectors which also scored good performance range from 55.09% to 67.50% respectively. Technology sector scored the lowest with average of 24.84% which indicates poor governance disclosure. Sectors such as utilities, healthcare, industrial products and services, and technology achieved satisfactory performance with moderate degree of transparency. In short, there is a growing body of sustainability practices in Malaysia but there is a need for improvement in terms of degree of transparency especially for sectors that scored below the average percentage of ESG scores.



## ESG performance and its individual dimensions for the year 2014 to 2018

The bar charts in Figure 3 illustrates the average ESG score and its dimensions for the year 2014 to 2018. Overall, there is an increment in terms ESG practices in Malaysia by looking at the ESG score. Although the percentage of companies disclosing their non-financial information in their sustainability report is slowly rising, it's still at the average level of disclosure. Environmental disclosure growing steadily but it's still below average. Social score on the other hand, slightly increase over the years and reach at a peak of 61.65% which indicates good ESG performance. Governance disclosure remain stable over the years between the range of 55% to 58% which relatively good in terms of degree of transparency. Overall, ESG score is expanding over the past few years based on the 44 samples studied in Malaysia however, in environmental aspect, it's still below average.

# ESG score in relation to firm financial performance proxy

# ESG score and financial performance measured by return on assets

Figure 4 presents the average percentage of ESG score and how it affects return on assets for the period of 5 years from 2014 to 2018. As illustrated on the graph, we can see that the highest ESG score standing at 55.70% for the year 2018 with 2.25% difference from the previous year. This indicates a good ESG performance with average degree of disclosure in their reporting. It can be seen that at the beginning of the time frame, the ESG score started off low with 46.39% but it appears to be increasing steadily which means that ESG practices are developing over the years. Moreover, the addition of listed companies to FTS4Good index constituent may contribute to the growing of ESG practices for the past 5 years. However, in comparison between the ESG score and ROA, the result affects negatively. As presented on the figure 4, we constructed dual axis graph between ESG score and ROA to see how it affects one another. The trend lines shows a downward trend which explained that the improvement of ESG resulted in lower ROA of companies. The highest peak of ESG score in 2018 impact ROA the most as it falls to 4.79% with 2.39% difference from the previous years. The result implies that, a higher ESG, will record lower profitability in terms of assets of companies. However, our result should not be described as there is no positive impact on firms' return on assets. Conversely, we do believe that incorporating ESG practices could promote better financial output but the cost imposed do not contribute to such benefits at least not in the short run (Dufwa and Hammarstrom, 2015). This indicates that companies in Malaysia are still away from incorporating the right sustainability reporting policies that suit them which in the long run can generate positive impact to firms' return on asset (Buallay, 2019).

# ESG score and financial performance measured by return on equity

Figure 5 shows the average percentage of ESG score and how it affects ROE for the period of 5 years from 2014 to 2018. It appears that the highest percentage of ROE was 22.95% in 2015 with 3.14% difference compare to the previous year. However, as ESG score increases in 2018, the percentage of ROE falls dramatically to 16.82% with 5.51% difference in between the year of 2017 which presents the lowest point of ROE among all of the respective time frame. Overall, the result between both ESG and ROE has been negative which can be seen on the figure 5. A sudden drop in 2018 indicates a downward trend. The highest peak of ESG in 2018 resulted in nearly 6% reduction which severely affects the investor's payoff. The result between ESG and ROE recorded lower profitability to shareholders as can be seen on the graph. A possible reason for this could be that, companies are burden with additional cost (Siew et al, 2013). The



dimensions of ESG comprises of economic, social and governance which represent the nonfinancial disclosure of companies. However, not all of the firms' non-financial disclosures are value adding to firm value. As such, company deals with a huge amount of cost which indicates potential risks. However, it doesn't necessarily unachievable but in the long run, there'll be a huge difference as we're analysing for 5 years analysis only.

# ESG score and financial performance measured by Tobin Q ratio

Figure 6 shows the average percentage of ESG score and Tobin Q for the period of 5 years from 2014 to 2018. As indicated on the graph, we can see that the highest ratio of Tobin Q was at 1.88% as of 2014 and it remained steadily in the year after while ESG score continue to rise. However, it began to drop dramatically as show on the figure 6. The lowest point marked at 1.54% in 2018 which showing a downward trend as the ESG scores improving over the years. In other words, the higher the ESG score, the lower the Tobin Q of the companies. Combining both ESG score and Tobin Q, it may not reflect the positive effect towards firm financial performance. However, depending how Tobin Q was measured, majority the companies' firm stocks are valued more than its replacement cost which indicates that the firm in overvalued. Firms' values with more than 1 are higher in terms of growth and investment opportunities (Dufwa and Hammarstrom, 2015). The financial markets are affected by various factors in determining the stock price which partly intended to be the reason why Tobin Q showing inverse trend line in comparison with ESG scores (Rodríguez-Fernández, Sánchez-Teba, López-Toro and Borrego-Domínguez, 2019). Moreover, investors nowadays are concern about the risk involving sustainability in relation to unethical business conduct such as high carbon emission or overuse non-renewable resources that could increase potential risks in operating business. This will simultaneously affect the market position of the companies and investor's perspectives.

## ESG score and financial performance measured by stock return

Figure 7 illustrates the average ESG score and stock return for the period of 5 years from 2014 to 2018. As can be seen on the graph, there is an unstable movement of stock return over the past few years. The average percentage of stock returns reach at the highest peak in 2017 with 31.74% compared to previous year. It shows a major difference approximately at 31.25% compared to the previous year. As ESG score rises, in 2017 with only 1.3% difference from the previous year, it shows unexpected dramatic growth in stock return. However, a sudden rapid drop in stock returns slide to -6% as indicated in 2018. It has become the lowest stock returns percentage in comparison to all of the time frame studied. Based on the analysis, as ESG expanding, there is a decrement of stock return as can be shown on the figure 7. A possible explanation for this could be the risks regarding the ESG issues affecting the firm market position. The unusual news events or problems within the companies, can lead to infrequent huge fluctuation of returns which described as price jumps (Kruusman and Afrooz, 2019). Such events could be related to the externalities such as explosion that could scrutinise future investment projects that required a huge amount of cost to recover from such incidents.

# ESG score and financial performance measured by dividend yield

Figure 8 shows the average percentage of ESG score and dividend yield for the year 2014 to 2018. Based on the graph, it can be seen that the highest dividend yield is 20.28% with 17.34% as compared to the previous year. This indicates that firms that practice sustainability in Malaysia pay high dividend in 2018 to its shareholders in relation to its stock price. The reason



for this situation is that, dividend yield rises if the price of the stock falls. Referring to our previous analysis on stock returns in 2018, the stock return falls dramatically which relatively explained why dividend yields looks unusually high since the stock price drops. The lowest point of dividend yield is at 2.84% in 2015 where it falls dramatically from previous year with 6.79% difference and the trend remained stable the year after showing slight increasing. Overall, as ESG score increases, dividend yield also increases as can be seen from the figure 8 showing an upward trend starting from 2014 to 2018 respectively. Companies with higher ESG score are most likely to pay high dividends to avoid excessive investment in sustainability activities as an incentive to shareholders (Johansson and Fahlen, 2019).

## ESG score and financial performance measured by net profit after tax

Figure 9 shows the average percentage of ESG score and net profit after tax for the period of 5 years from 2014 to 2018. As illustrated on the figure 9, the highest net profit after tax in comparison with ESG score amounted to RM1,220,573 thousand based on all the sample studied compared to previous year. The lowest net profit after tax is at RM1,013,528 thousand in 2014. The ESG score as usual, expanding over the years impacting the net profit of companies positively. As can be seen on the trend line on the figure 9, there is an increasing amount of net profits from all of the sample studied although in 2018 the amount fall down slightly. However, the trend line shows an upward trend which indicates a positive impact with ESG score. In other words, as ESG constantly rising over the years, it simultaneously increases the amount of net profits of companies evidently shown on the figure 9. It means, the ESG strategies incorporated by the sustainable companies in Malaysia perform better in generating profits although they are burden with implementation of ESG practices in organization. More specifically, sustainable firms are more likely to face lower risk in generating profits compare to the companies that are unsustainable.

# ESG score and financial performance measured by market capitalization

Figure 10 shows the average percentage of ESG score and market capitalization for 5 years analysis for the year 2014 to 2018. As can be seen on the figure 10, the highest peak of market capitalization of sustainable firms in Malaysia over the years stood at RM20,666 million which indicates that our sample studied are quite large. The amount of market capitalization is increasing over the years starting from the year 2014 with RM17,715 million which indicates the lowest point among all of the time frame. The average amount of market capitalization in 2014 is guite large for all of the 44 companies, considering it as the lowest compared to the following years. In relation to ESG score, we can say that, as the ESG score rises, the amount of market capitalization also increases which evidently shown on the figure 10. Our trend line showing an upward trend, it means that there is an increasing number of companies with large market capitalization throughout the years although in 2018 the amount reduced by RM451 million compared to the year 2015. There are several factors affecting the market capitalization of companies, one of it due to fluctuations of stock price. However, most of the companies studied are considered as large companies as they are more capable of investing and incorporating ESG strategies compared to small and medium size companies. Large market capitalization encourages firms to promote corporate sustainability practices especially when it involves with higher operational activities (Nega, 2017).



Journal website: www.ijafb.com



Figure 1. Average percentage of ESG score for each sector in Malaysia for the year 2014 to 2018



Figure 2. Average percentage of environmental, social and governance score for each sector in Malaysia for the year 2014 to 2018



Figure 3. Average percentage of ESG score and its individual dimensions in Malaysia for the year 2014 to 2018



Volume:5 Issues: 30 [December, 2020] pp. 148 - 164] International Journal of Accounting, Finance and Business (IJAFB) elSSN: 0128-1844

Journal website: www.ijafb.com



Figure 4. Average percentage of ESG score and return on asset for the year 2014 to 2018



Figure 6. Average percentage of ESG score and Tobin Q ratio for the year 2014 to 2018



Figure 8. Average percentage of ESG score and dividend yield for the year 2014 to 2018



Figure 5. Average percentage of ESG score and return on equity for the year 2014 to 2018



Figure 7. Average percentage of ESG score and stock return for the year 2014 to 2018



Figure 9. Average percentage of ESG score and net profit after tax for the year 2014 to 2018





Figure 10. Average percentage of ESG score and market capitalization for the year 2014 to 2018

# Conclusion

Sustainable finance theory explains on incorporating the three main components of sustainability which are economic, social and environment for long term value creation (Schoenmaker, 2017). The present research shows that sustainable companies in Malaysia gradually expanding in terms of sustainability practices. However, there is a need to improve ESG practices especially on the environmental aspect. Although few of the financial performance variables show lower in relation to ESG score which opposite to our expectation, but we do believe that incorporating ESG in business practices could help in promoting better financial output in the long run. The information derived from the analysis can provide corporate and portfolio managers with meaningful insight by visualizing the data through pattern and trends of sustainability practices in Malaysia. The reason for this is because sustainability reporting practices trend in Malaysia still at an infancy stage (Bakar, Talukder, Quazi and Khan, 2020). Companies in Malaysia should engage more in reporting their sustainability activities by referring to sustainability reporting guidelines provided by Bursa Malaysia. In the future, we suggest for smaller components in ESG dimensions for future studies and incorporating the elements of brand value (Interbrand, 2020) as non-financial performance. Further studies may also consider expanding the time horizon so see the pattern and trend in sustainability practices to see the link between ESG score and firm performance.

# References

- Aboud, A., & Diab, A. (2018). The impact of social, environmental and corporate governance disclosures on firm value: Evidence from Egypt. *Journal of Accounting in Emerging Economies*, 8(4), 442-458.
- Albitar, K., Hussainey, K., Kolade, N., & Gerged, A.M. (2019). ESG disclosure and firm performance before and after IR: The moderating role of governance mechanisms. *International Journal of Accounting and Information Management*, 28(2), 1-21.
- Aman, Z., & Takril, N. (2016). Corporate sustainability reporting in Malaysia: A research note. In Proceeding of the 3<sup>rd</sup> International Conference on Management and Muamalah Selangor, Malaysia, 288-298.
- Aman, Z., Ismail, S., & Bakar, N. S. (2015). Corporate sustainability reporting: Malaysian evidence. In Proceeding of the 2nd International Conference on Management and



Muamalah, Selangor, Malaysia, 287-299.

- Arowoshegbe, A.O., & Emmanuel, U. (2016). Sustainability and triple bottom line: an overview of two interrelated concepts. *Igbinedion University Journal of Accounting*, 2, 88-125.
- Atan, R., Alam, M.M., Said, J., & Zamri, M. (2017). The impacts of environmental, social and governance factors on firm performance: Panel study on Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182-194.
- Aulia-Absari Khalil, A. R., Junaedi, P. A., & Kanigoro, B. (2015). Data visualization application for analyzing public company financial statement. *Procedia Computer Science*, 59, 45-53.
- Aziz, N.S.A, & Bidin, R.H. (2017). A review on the indicators disclosed in sustainability reporting of public listed companies in Malaysia. *Journal of Human Capital Development*, *10*(2), 1-14.
- Bakar, A. B. S. A., Ghazali, N. A. B. M., & Ahmad, M. B. (2019). Sustainability reporting in Malaysia-The extent and quality. *International Journal of Academic Research in Business and Social Sciences*, 9(5), 816–835.
- Bakar, M.F.A., Talukder, M., Quazi, A., & Khan, I. (2020). Adoption of sustainable technology in the Malaysian SMEs sector: Does the role of government matter? *Information*, 11(4), 215.
- Baumgartner, R.J. (2011). Critical perspectives of sustainable development research and practice. *Journal of Cleaner Production*, 19, 783-786.
- Buallay, A. (2018). Is sustainability reporting (ESG) associated with performance? Evidence from the European banking sector. *Management of Environmental Quality: An International Journal, 30*(1), 98-115.
- Buallay, A. (2019). Sustainability reporting and firm's performance: Comparative study between manufacturing and banking sectors. *International Journal of Productivity and Performance Management*, 69(3), 431-445.
- Buallay, A., Fadel, S.M., Alajmi, J., & Saudagaran, S. (2020). Sustainability reporting and bank performance after financial crisis: Evidence from developed and developing countries. *International Business Journal*, (in press). Retrieved from, https://doi.org/10.1108/CR-04-2019-0040
- Bursa Malaysia. (2018). Sustainability reporting guide. Retrieved June 15, 2020, from https://bursasustain.bursamalaysia.com/droplet-details/resources/sustainability-reporting-guide-2nd-edition.
- Bursa Malaysia. (2020). FTSE4Good Bursa Malaysia Index. Retrieved June 15, 2020, from https://bursasustain.bursamalaysia.com/droplet-details/resources/ftse4good-bursa-malaysia-index
- Conte, F., Vitale, P., Vollero, A., & Siano, A. (2018). Designing a data visualization dashboard for managing the sustainability communication of healthcare organizations on facebook. *Sustainability*, *10*(12), 4447.
- Dufwa, L., & Hammarstrom, M. (2015). Corporate sustainability and the financial implications for the European basic materials industry. Bachelor's thesis, University of Gothenburg, Sweden.
- Elkington, J. (1997). Cannibals with forks: the triple bottom line of the 21st century. Oxford: Capstone publishing limited.
- FTSE Russell (2020). About FTSE Russell. Retrieved June, 15, 2020, from https://www.ftserussell.com/about-us



- FTSE Russell (2020). ESG rating and data model. Retrieved June 16, 2020, from https://research.ftserussell.com/products/downloads/ESG-ratings-overview.pdf
- Garg, P. (2015). Impact of sustainability reporting on firm performance of companies in India. *International Journal of Marketing and Business Communication*, 4(3), 39-45.
- Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: our common future revisited. *Global Environment Change*, 26, 130-139.
- Institute of Chartered Accountants in England and Wales. (2015). Environmental issues and UK annual reporting. Retrieved May 28, 2020, https://www.icaew.com/-/media/corporate/files/technical/sustainability/tecpln12453-eiafr-annual-report-2nd-edition-final.ashx?la=e
- Interbrand (2020). Sustainability and its impact on brand value. Retrieved June 19, 2020, from https://www.interbrand.com/views/sustainability-and-its-impact-on-brand-value/
- Johansson, A., & Fahlen, A. (2019). Does sustainability affect dividend policy? A panel data study on Nordic firms. Bachelor thesis, UMEA University, Sweden.
- Kritz, J. (2018). Effective cross-sector collaborations create sustainability. *The Lancet*, 6(9), 952-953.
- Kruusman, A., & Afrooz, Z. (2019). The effect of the ESG score on stock price jumps. Master's thesis, UMEA University, Sweden.
- Lagoarde-Segot, T. (2019). Sustainable finance. A critical realist perspective. *Research in International Business and Finance*, 47, 1-9.
- Lagoarde-Segot, T., & Paranque, B. (2017). Sustainability and the reconstruction of academic finance. *Research in International Business and Finance*, 39, 657-662.
- Maroufkhani, P., Wagner, R., Wan Ismail, W.K., Baroto, M.B., & Nourani, M. (2019). Big data analytics and firm performance: A systematic review. *Information*, *10*(7), 226.
- Molla, M.S., Ibrahim, Y., & Ishak, Z. (2019). Corporate sustainability practices: A review on the measurements, relevant problems and a proposition. *Global Journal of Management and Business Research*, 19(1), 1-8.
- Muhammad, FA.B., Talukder, M., Quazi, A., & Khan, I. (2020). Adoption of sustainable technology in the Malaysian SMEs sector: Does the role of government matter? *Information*, 11(4), 215.
- Nega, F.T. (2017). The relationship between financial performance, firm size, leverage and corporate social responsibility. Doctoral dissertation, Walden University, Minnesota.
- Nikolaou, I.E., Tsalis, T.A., & Evangelinos, K.I. (2019). A framework to measure corporate sustainability performance: a strong sustainability-based view of firm. *Sustainable Production and Consumption*, 18, 1-18.
- Ogundare, E.A. (2013). The impact of sustainability reporting on organisational performance The Malaysia experience. *International Journal of Accounting & Business Management*, *1*(2), 82-100.
- Rodríguez-Fernández, M., Sánchez-Teba, E.M., López-Toro, A.A., & Borrego-Domínguez, S. (2019). Influence of ESGC indicators on financial performance of listed travel and leisure companies. *Sustainability*, 11, 1-20.
- Sahut, J., & Pasquini-Descomps, H. (2015). ESG impact on market performance of firms: International evidence. *Management international*, 19, 40-63.
- Said, R.M., Ling, P.Y., Kamarudin, F., Senik, R., & Rashid, N. (2020). Sustainability reporting in REIT companies in Malaysia. *International Journal of Innovative Technology and Exploring Engineering*, 9(2), 403-408.

Salzmann, A.J. (2013). The integration of sustainability into the theory and practice of finance:



An overview of the state of the art and outline of future developments. *Journal of Business Economics*, 83(6), 555-576

- Schoenmaker, D. (2017). Investing for the common good: A sustainable finance framework. Bruegel Essay and Lecture Series. https://www.bruegel.org/wpcontent/uploads/2017/07/From-traditional-to-sustainable-finance ONLINE.pdf
- Schoenmaker, D., & Schramade, W. (2019). Principles of sustainable finance. Oxford: Oxford university press.
- Siew, R.Y.J., Balatbat, M.C.A., & Carmichael, D.G. (2013). The relationship between sustainability practices and financial performance of construction companies. *Smart and Sustainable Built Environment*, 2(1), 6-27.

Soppe, A. (2004). Sustainable corporate finance. Journal of Business Ethics, 53(1-2), 213-224.

- Stampe, J., & McCarron, B. (2015). Sustainable Finance in Singapore, Indonesia and Malaysia: A review of financiers' ESG practices, disclosure standards and regulations. World Wildlife Fund for Nature: Gland, Switzerland.
- Sustainable Stock Exchanges (2015). Sustainable stock exchanges initiative: model guidance on reporting ESG information to investors. Retrieved June 19, 2020 http://www.sseinitiative.org/wp-content/uploads/2015/09/SSE-Model-Guidance-on-Reporting-ESG.pdf
- WCED, S.W.S. (1987). World commission on environment and development. Our common future. Oxford: Oxford university press.
- Weber, O., Scholz, R.W., & Michalik, G. (2010). Incorporating sustainability criteria into credit risk management. *Business Strategy and the Environment*, 19, 39-50.