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Sustainable Business Practices and Firm's Financial Performance in Islamic Banking: Under the Moderating Role of Islamic Corporate Governance

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Abstract: This paper examines the moderating role of Islamic corporate governance on the link between sustainable business practices and the firm's financial performance. A post-crisis period sustainability data for the decade of 2008–2017 was collected by the study. For data collection, this study used the weighted content method. The Generalized Method of Moments (GMM) statistical test was used for empirical testing. The results of the study found that the link between sustainable business practices with the firm's financial performance measured from the shareholders' and the management's perspective is positive, while the subjected link measured from the market perspective was found to be insignificant. This implies that the market stakeholders of the Islamic banks are reluctant for their bank's spending on sustainable business practices. Interestingly, the insignificant link between sustainable business practices and market performance became significant with the moderating role of Shariah governance and managerial ownership. It shows that the moderating role of Shariah governance and managerial ownership is giving confidence to market stakeholders of Islamic banks for receiving a higher financial return through sustainable business practices initiatives. These results may provide insights for several policymakers of the Islamic banking industry about integrating vital sustainability practices in their business models and about the balanced moderating role of Islamic corporate governance in the link between sustainable business practice and the firm's financial performance. It provides a roadmap to the Islamic banking industry for efficient management of sustainability practices from an Islamic perspective and subsequently improvement of financial performance through it.

Keywords: firm's financial performance; sustainability practices; Islamic corporate governance

1. Introduction

The world is frequently facing drastic economic, environmental, and social challenges of great impact due to the unsustainable business models of firms. The challenges include global warming, depletion in natural resources, increased human rights violations, excessive consumption of natural resources and food, accumulation of toxic waste, and chemicals among others [1]. It is widely believed that the world has consumed almost half of the natural resources which should be available to the future generation [2]. The “global risks report (2019)” published by the world economic forum reported that in terms of this likelihood, the top three global risks are sustainability-related risks. In the previous “global risks reports (2017 and 2018)”, seven out of the ten highest global risks were

reported as sustainability-related. In terms of likelihood, sustainability risk is well ahead of the other global risks such as the risk of nuclear weapons. In order to cater for sustainability risk the United Nations UN launched the “UN Sustainable Development Goals” (SDGs) program, formally known as “Transforming our world: the 2030 Agenda for Sustainable Development”. These SDGs are built upon a common understanding between the UN members’ states with the common focal point “the future we want.” According to the 17 sustainable development goals, business firms are required to enrich their business models with factors such as reducing poverty in the society, improving education and public health, clean water and affordable energy, decent labor practices, global climate change, and to reduce inequality among others. In line with those requirements, many businesses have domestically linked their business policies to the UN’s sustainable development goals. The Islamic development bank plans to increase its financial support for SDGs realization to more than USD 150 billion over the next 15 years. These efforts clearly show how big and serious is the issue of sustainability on the world stage and to Islamic banking specifically. However, the literature suggests that despite its high importance, studies related to sustainability practices and their measurement in Islamic banking are scant [3,4]. The low quality, inefficient sustainable business practices of Islamic banks can depreciate a firm’s financial performance. This is because the literature supports a positive relationship between sustainable business practices and a firm’s financial performance [5]. On the other hand, frameworks/indices used to measure sustainable business practices in Islamic banks are also scant [4,6]. Muslim countries, especially Malaysia, show seriousness in manifesting Islamic values during their economic development. However, instead of recognizing the importance of religion in a multi-dimensional approach to development, the practical development of this alternative Islamic model is still lacking [7].

It is believed that the banking industry in general [8], and the Islamic banking industry specifically [4,9], have responded very slowly to the modern concept of sustainability. This study is sampling Malaysia for further investigation because Malaysia has the second-highest Islamic banking assets [4], and results from this sample can be generalized for the overall Islamic banking industry. Furthermore, in the context of the identified economic, environmental, and social challenges faced by the Islamic banks in Malaysia as reported by [4], it is vital for the Islamic banks to improve their sustainability practices and adopt a Shariah-based sustainability measurement framework/index for it. Because the stakeholder theory assumes a positive association between sustainability practices and the firm’s financial performance. Additionally, the context of Islamic banking evidence also supports the stakeholder theory and indicates a positive association between sustainability practices and the firm’s financial performance [10]. It implies that low sustainability practices can deteriorate the financial performance of Islamic banks and vice versa. In the context of associated sustainability challenges faced by the Islamic banks [4], and a missing Shariah-based sustainability measurement framework for the Islamic banks [9], it is highly expected that the sustainability practices and reporting of the Islamic banking industry in Malaysia would be very low, and could deteriorate its financial performance. However, it is also vital to first understand if there is any significant impact of sustainability practices on financial performance in the case of Malaysian Islamic banks. If so, then the techniques that can positively moderate this relationship must be identified. Furthermore, it ultimately improves sustainability practices and the subsequent financial performance of the Islamic banks through it. The Securities Commission (SC) Malaysia is determined to ensure sustainability practices through good corporate governance strategies. It alludes to the fact that effective corporate governance mechanisms can positively moderate the nexus between sustainability practices and financial performance. In line with the initiatives of SC Malaysia to promote sustainability practices through effective corporate governance mechanisms, it would be of great interest and importance to explore the role of Islamic corporate governance, which is comprised of the traditional corporate governance tools such as “managerial ownership” and the industry-specific Islamic corporate governance tools “Shariah governance”. The resource-based view theory and the convergence of interest hypothesis support the positive moderating role of these variables and financial performance. Hence practically, testing this

theory in the Islamic context would be of great importance. Against this background, an in-depth analysis of the sustainability profile of the Islamic banking industry in Malaysia is mandatory. This is because, in its quest to become a fully developed country, Malaysia demands higher sustainability from its different business sectors. In a way, a gentle push in the same direction is also required from its Islamic banking industry as well, which at present is lacking. The discussion above has given a base to some fundamental questions which need to be addressed. The questions and their subsequent objectives are stated below. The first question that arose from the above discussion is: what is the causal relationship of sustainability practices on the financial performance in the case of Islamic banking industry in Malaysia? Secondly, is there any moderating effect of managerial ownership and Shariah governance on the causal relationship between sustainability practices and the financial performance? In order to address the above questions, subsequent objectives of the study have been set. The first objective is to evaluate the causal relationship between sustainable business practices and a firm's financial performance. For a better understanding and more detailed view on the subject this study measures financial performance from three different perspectives, i.e., management perspective through Return on Assets (ROA), shareholders' perspective through ROE, and to measure firm's financial performance from a market perspective using Tobin's Q ratio; these measures are consistent with [5,11–19]. The second objective of the study is to examine the moderating role of the proposed variables in the causal relationship between sustainable business practices and a firm's financial performance. The accomplishment of this objective will illuminate the balanced role of Islamic corporate governance in promoting sustainable business practices and subsequently improving financial performance of the Islamic banks. This investigation will help Islamic banks in understanding the role of sustainable business practices and the importance of Islamic corporate governance mechanisms for achieving better financial performance. Holistically, better financial performance will allow the Islamic banks to grow internationally. Moreover, their inclusion on the world stage will provide financial equilibrium and stability to the global financial market. The outline of the remaining paper is as follows; the proceeding section explains the literature review which includes the theoretical framework and hypotheses development, and the conceptual framework of this study. The following section explains the methodology part, followed by the results and discussion. Furthermore, the last part shows the conclusions, significance of this study, and future recommendations.

2. Literature Review

Examining the link between sustainable business practices and a firm's financial performance received great attention in the recent literature. Table 1 shows the summary of the notable work that evaluated the link between sustainable business practices and a firm's financial performance.

Table 1. The link Between Sustainable Business Practices and Firm’s financial performance.

| Author | Country/Region/ /Sample | Dependent Variable | Methodology | Accounted for Endogeneity | Instrumental Variable | Finding |
|---|--------------------------------------|--|-------------------------|---------------------------------|--------------------------|--------------------------------|
| Mehmet Ali Soytaş [20] | North America | ROA (Return on Assets) | First-stage estimation | Yes | Sustainability median | Positive Impact |
| Platonova, Asutay, Dixon and Mohammad [5] | GCC | ROAA (Return on Average Assets), ROAE (Return on Average Equity) | Fixed-effect regression | Yes | No | Positive Impact |
| Nobanee and Ellili [21] | UAE | Growth in interest income | GMM | No | No | Negative Impact |
| Abduh and Azmi Omar [22] | S&P500 stock market index | ROA, ROC (Return on Capital) Excess stock return | OLS | No | No | Mixed |
| Eccles, et al. [23] | United States | ROA, ROE | Four-factor model | Yes | Sustainability means | Mixed |
| Mallin, et al. [24] | 13 countries | ROA, ROE | OLS, 2SLS, and 3SLS | Yes | Bank’s visibility | Positive Impact |
| Arsad, et al. [25] | Shariah Compliant companies Malaysia | EPS (Earnings per Share) | SEM | No | No | Positive Impact |
| Islam, et al. [26] | Bangladesh | ROAA, EPS | T-test | No | No | Inconclusive/ Insignificant |
| Torugsa, et al. [27] | Australia | Confirmatory factor analysis (CFA) | SEM | No | No | Positive Impact |
| Lin, et al. [28] | Taiwan | ROA | Regression | No | No | Positive Impact |
| Nelling and Webb [29] | United States | ROA, Stock return | Fixed-effect regression | No | No | Inconclusive/ Insignificant |
| Cochran and Wood [30] | Moskovitz list | Operating earnings/sales | Regression | No | No | Weak relationship |

3. Theoretical Framework and Hypotheses Development

3.1. Sustainable Business Practices and Firm’s Financial Performance: The Stakeholders’ Theory, the Good Management Theory, and the Slack Resource Theory

Freeman presented the stakeholder’s theory in 1984, which attempts to address the principle of who or what really counts [31]. While proposing the theory, Freeman divided the stakeholders into two main categories, i.e., direct and indirect stakeholders. Different researchers have reported them with different names. For instance, [32] referred them as the primary and secondary stakeholders. The authors of [33] mentioned them as business and social stakeholders. The stakeholders’ theory argues that the value of the firm increases when the multiple stakeholders of the company are addressed and satisfied [4]. The stakeholders of the company may include those individuals or groups which are affected by the actions of the company. Generally, it includes its customers, employees, financiers, suppliers, government bodies, trade associations, political groups, communities, the environment, etc. Companies address these stakeholders through efficient sustainable business practices and their subsequent reporting. For instance, the employees, local communities and suppliers of the company are addressed through economically sustainable business practices and reporting, as the economic sustainable business practices management preaches about reporting the minimum wages to be paid to the employees, to promote investment in communities, and to promote and

prioritized purchases from the local suppliers. The stakeholders (government bodies, communities, and environment) may be addressed through environmental sustainability practices, as the economic sustainable business practices management preaches about compliance with environmental laws enacted by the government, it also expounds about waste reduction, energy consumption, recycling, etc. The practices and its subsequent reporting address communities and environmental observes. Similarly, the stakeholders (employees, customers, suppliers) may be addressed by socially sustainable business practices and management. As socially sustainable business practices expound about decent work practices, human rights protection, occupational health, and safety. In short, efficient sustainable business practices and its subsequent reporting may address multiple stakeholders. Furthermore, the stakeholders' theory assumes that when the multiple stakeholders are addressed, it may improve a firm's performance. The findings of the past studies and the trade-off hypothesis, which drew a negative or neutral relationship for the subjected link, are less supported because they only performed a conceptual interpretation of the subject [24]. On the other hand, empirical studies of [5,34] found a positive association between sustainable business practices and the firm's financial performance in the Islamic banking industry. The stakeholder's theory presented by [31] also postulates the link between sustainable business practices and the firm's performance to be positive.

Two important things to be considered in evaluating the link between sustainable business practices and the firm's financial performance are its impact, i.e., negative, positive or neutral, and the direction of causality. The causality between sustainable business practices and the firm's financial performance is being used bi-directionally in the literature. The authors of [35] put forward two theories—namely good management theory and the slack resource theory—to argue on the direction of causality. Under the slack resource theory, the direction of causality treats sustainable business practices as a dependent variable while a firm's financial performance is considered to be an independent factor. It argues that the firm with slack resources can spend more finance on sustainability practices. On the other hand, under the good management theory, the direction of causality treats sustainable business practices as an independent variable, while the firm's financial performance is considered to be the dependent factor. The theory suggests that a sustainability initiative made by the firm increases its reputation in the minds of various stakeholders, which ultimately helps them to gain more financial benefits. In terms of impact, the trade-off hypothesis assumes the link between sustainable business practices and firm's financial performance to be negative, while the stakeholders' theory assumes a positive impact of sustainable business practices on the firm's financial performance.

In the case of the Islamic banking industry, most of the researchers have followed the good management theory by using banks' firm's financial performance as the dependent and sustainable business practices as an independent variable [4]. Moreover, in terms of impact, researchers are consistent with the view of the stakeholder's theory and assume a positive of the impact of sustainable business practices on a firm's financial performance in the Islamic banking [4,5]. Against the background, this study is consistent with the good management theory for the direction of causality, and with the stakeholders' theory for the positive impact of the subjected relationship. Hence, this study uses banks' financial performance as a dependent, while using sustainable business practices as the independent variable. As shown in Figure 1 below, business sustainability has main three dimensions, i.e., economic, environmental, and social sustainability. This study blended those dimensions with general standards sustainability strategies such as those of the Global Reporting Initiative GRI framework for the financial sectors/banking sector. This study measures banks' financial performance from three different perspectives, i.e., management's perspective, the market's perspective, and the shareholders' perspective. Different researchers have proposed different ratios for measuring management, market and shareholder's perspective in the Islamic banking industry. The authors of [4,11] have used Return on Average Assets (ROAA) to proxy the firm's financial performance of Islamic banks from a management perspective. The authors of [36] have used Tobin's Q ratio for measuring the firm performance of Islamic banks from a market perspective. The authors of [37] used Return on Average Equity (ROAE) ratios to proxy firm's financial performance of Islamic banks from a

shareholder's perspective. This investigation will first illuminate the impact of sustainable business practices on a firm's financial performance of Islamic banks from different perspectives, which will eventually assist the practitioners and management to safeguard and expedite the identified and targeted sustainable business practices that can increase their firm's financial performance positively and vice versa. In a way, this investigation will be helpful for the practitioners of the global Islamic banking for policy formulation. Although the prior studies [4], found this nexus to be positive, in order to see it in comparison with the moderating role of Islamic corporate governance it is necessary to re-examine this link and then to witness whether the moderation has further accelerated the nexus in a positive direction or not. Thus, the following hypotheses are developed.

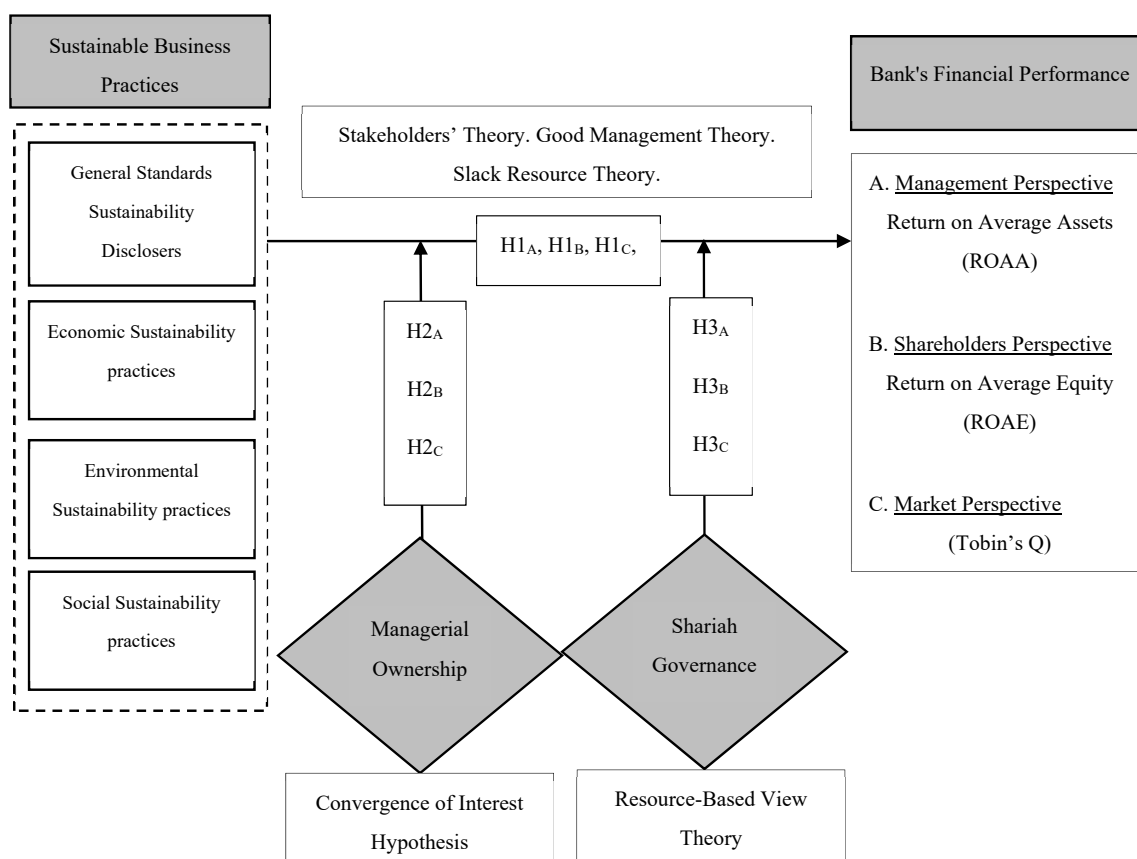


Figure 1. Conceptual Framework of the Study (Graphical Abstract).

Hypothesis (H1_A). *The link between sustainable business practices and the firm's financial performance indicating a management perspective is positive.*

Hypothesis (H1_B). *The link between sustainable business practices and the firm's financial performance indicating a shareholder's perspective is positive.*

Hypothesis (H1_C). *The link between sustainable business practices and the firm's financial performance indicating a market perspective is positive.*

3.2. The Moderating Role of Islamic Corporate Governance on the Link Between Sustainable Business Practices and Firm's Financial Performance

The existing governance framework of the Islamic banks is at least different in theory from the conventional counterpart by a commitment to social justice [11]. The authors of [38] argued that the introduction of Islamic principles and laws makes it different from the conventional corporate governance structure. Islamic corporate governance has two main aspects. Firstly Shariah governance, which ensures Shariah principles by following the rules of Islamic laws in the banking operations. Secondly, the traditional corporate governance mechanism, which ensures the efficiency and performance of the banks through directing, controlling, and management of the banking operations. Shariah Supervisory Board (SSB) is the central feature of Islamic corporate governance under the aspect of Shariah governance, while the management is considered to be one of the main features of Islamic corporate governance under the traditional corporate governance aspect. The SSB represents the total number of members available in the Shariah supervisory committee of the Islamic banks. The SSB has main three roles that are the consulting, controlling, and ensuring [38]. According to the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), the preferred minimum number of the SSB is three. AAOIFI also recommends professional other than religious scholars to sit on the SSB [24]. The purpose of encouraging professionals like bankers and economists (even with little religious knowledge) is to encourage diversity on the SSB and to bring expertise on technical matters like sustainability disclosures blended with Shariah principles. For this to happen, the size of the Shariah supervisory board size must be large. The agency theory and the stakeholders' theories also support the argument that better governance practices ensure a firm's better financial performance. Managerial ownership under the traditional corporate governance aspect of Islamic corporate governance also improves a firm's performance. The convergence of interest hypothesis also supports a positive association between managerial ownership and a firm's financial performance.

Previous studies under the Shariah aspect of Islamic corporate governance were found to have a positive association with sustainable business practices and the firm's performance. The authors of [39] found that the SSB has a positive impact on the sustainability practices of Islamic financial institutions. The SSB was found to have a positive impact on sustainability disclosures [40]. The authors of [11] used the Shariah Supervisory Board Size (SSBS) as a proxy for measuring Shariah supervision and reported its positive association with the Islamic bank's firm's financial performance. The authors of [39] found that the SSBS was positively related to a firm's performance. The authors of [24] also found a positive association between the SSBS and firm's performance of the Islamic banks across 13 countries. The above discussion alludes that under the Shariah aspect of Islamic corporate governance, the link between sustainable business practices and the firm's performance is positive.

The gap identified from the above discussion is that all the previous studies either evaluated the impact of Islamic corporate governance on sustainability practices or on the firm's performance itself. The role of Islamic corporate governance as a moderating variable is an oversight. In addition, tools from the traditional aspect of Islamic corporate governance (the role of management) are also overlooked in evaluating the link between sustainable business practices and a firm's performance. Therefore, this study is proposing a broader role of the Islamic corporate governance covering its Shariah aspect and the traditional corporate governance aspect as a moderating variable in evaluating the link between sustainable business practices and firm's financial performance. The Bank Negara Malaysia (central bank of Malaysia) has also proposed the Shariah governance framework [41], for the Islamic financial institutions in Malaysia. The main objective of the Shariah governance framework is to ensure business follows Shariah principles and to provide guidance to the Shariah board and the management. A further objective of the framework deals with Shariah risk management and Shariah research; this process ensures that the Shariah board and management of the Islamic banks adopt the latest trend in corporate governance, such as promoting sustainability which can eventually affect the firm's performance positively. The securities commission of Malaysia is determined to ensure sustainable business practices through good corporate governance strategies. In line with the

above discussion, this study is proposing the moderating role of Islamic corporate governance for the nexus of sustainable business practices and the firm's financial performance. Details about this are presented below.

3.3. The Moderating Role of Managerial Ownership on the Link between Sustainable Business Practices and Firm's Financial Performance: The Convergence of Interest Hypothesis

The second moderating variable used in this study is managerial ownership. The findings of the impact of managerial ownership on the firm's financial performance are bidirectional. The entrenchment hypothesis argues that when the managers are highly entrenched in the business, they are less likely to work for the shareholder's interest. On the other hand, the convergence of interest hypothesis argues the other way around. It argues that the higher the managerial ownership in the firm, the stronger the firm's performance. This is because the high shares motivate managers to work devotedly for increasing share prices because of their own high stake in the shares. At this point, the interest of managers converges with the interest of the firm, and in the process, the firm's value gets better. The past studies of [42,43] proxied managerial ownership through the director's ownership. In Malaysia [44] the director's ownership was also as a proxy for measuring managerial ownership. Director's ownership refers to the percentage of shares held by the directors of the company. These directors are highly motivated towards the better decisions made by their board, because due to their stake in the company's shares, they are directly affected by decisions made by the board. This convergence of interest motivates them for better decision making to increase the firm's financial performance of the firm. Against this background, it suggests that the higher the director's ownership in the firm, the higher the firm's financial performance will be [45]. The convergence of interest hypothesis presented by DeAngelo and DeAngelo [46] and some past studies also assumes a positive association between managerial ownership and firm's financial performance of firms [43,47–49]. Hence, in the context of the above discussion, the following hypotheses are designed.

Hypothesis (H2A). *Managerial ownership positively moderates the link between sustainable business practices and the firm's financial performance proxied through a management perspective.*

Hypothesis (H2B). *Managerial ownership positively moderates the link between sustainable business practices and the firm's financial performance proxied through the shareholders perspective.*

Hypothesis (H2C). *Managerial ownership positively moderates the link between sustainable business practices and the firm's financial performance proxied through the market perspective.*

3.4. Moderating Role of Shariah Governance on the Link between Sustainable Business Practices and Firm's Financial Performance: The Resource-Based View Theory

The authors of [50] presented the Resource-Based View (RBV) theory, which argues that the basis of competitive advantages for a firm lies primarily in the application of a bundle of valuable tangible and intangible resources available at the firm's disposal. In short, the RBV suggests that improving and accelerating the internal activities of the firm can help the company to obtain an external competitive advantage, which ultimately increases the value of the firm. Shariah governance is measured through the Shariah supervisory board size. The RBV theory has already been used for the moderating role between sustainable business practices and the firm's financial performance. This study uses RBV theory in the Islamic banking context for the moderating role of Shariah governance between sustainable business practices and the firm's financial performance of Islamic banking. This study expects a positive moderating role of Shariah supervisory board size between sustainable business practices and the firm's financial performance. This is because, due to the big Shariah supervisory board size, the capacity of monitoring increases, which facilitates better decision making, and better

decision making increases a firm's performance. In the conventional context, [51] found a negative association between board size and firm performance.

On the other hand, from the Islamic perspective, past studies also found the association between Shariah supervisory board size and firm's financial performance to be positive. The SSB was found to have a positive impact on sustainability disclosures [40]. The authors of [11] used Shariah Supervisory Board Size (SSBS) as a proxy for measuring Shariah supervision and reported its positive association with the Islamic bank's firm's financial performance. The authors of [39] found that the Shariah supervisory board size was positively related to a firm's performance. The authors of [24] also found a positive association between the Shariah supervisory board size and firm's performance of the Islamic banks across 13 countries. Hence, in the context of the above discussion, the following hypotheses are designed.

Hypothesis (H3_A). *Shariah governance positively moderates the link between sustainable business practices and the firm's financial performance proxied through a management perspective.*

Hypothesis (H3_B). *Shariah governance positively moderates the link between sustainable business practices and the firm's financial performance proxied through the shareholders perspective.*

Hypothesis (H3_C). *Shariah governance positively moderates the link between sustainable business practices and the firm's financial performance proxied through the market perspective.*

The detailed theoretical discussion is graphically abstracted in Figure 1 below.

4. Methodology

4.1. Sample and Population

Malaysia has the second-highest Islamic banking assets in the world [34]. In order to offer a true picture of world Islamic banking, this study selected all 16 Islamic banks from Malaysia; hence, this is a population data in nature.

4.2. Collection of Data

This study collected sustainability data from the annual reports of the Islamic banks in Malaysia for the decade of (2008–2017) using a weighted content analysis method.

4.2.1. Weighted Content Analysis Method

The weighted content analysis technique beyond the dummy codes of only 0–1 allows further weight in the quality of disclosure. The authors of [52], while measuring sustainability practices of the top global corporations used the dummy codes 0–4. The authors of [53] used the dummy codes of 1–3. The authors of [54], in line with the Global Reporting Initiatives GRI guidelines, used the dummy codes of 0–2 for measuring corporate sustainability practices of the nine selected public firms in Turkey. For data collection, this study followed the Islamic bank's sustainability measurement index extended by the author of [4] (refer to Table A1). The index has a total of 65 items divided into general standards disclosures (7 items), economic sustainability (10 items), environmental sustainability (12 items), and social sustainability (36 items). The index used the dummy code 0–2 using the wording about each item in the annual report. The study gave code (2) for a significant positive contribution to an item in the annual reports of the Islamic banks. A significant positive contribution of the Islamic banks about an item must be in the form of measurability, such as monetary measurement, weight, and volume of an item, etc., The dummy code of "0" was given when no wording about an item was found in the annual report of the Islamic banks. The dummy code of "1" was given for partial reporting about an item. For instance, in line with the item of "energy reduction and preservation" under the

environmental sustainability dimension (refer to Table A1), the CIMB bank annual report 2008 page. 180, highlighted that “The Group encourages employees to adopt energy-saving practices internally such as switching off the lights, air-conditioners, and equipment when leaving the office.” This study gave the code (1) because a measurement scale in terms of reduction was missing. Similarly, the dummy code of (2) was given when the Islamic banks made a significant positive contribution to an item. For instance, in line with the item of “energy reduction and preservation” under the environmental sustainability dimension (refer to Table A1), the CIMB bank citizenship report 2017 page 107, highlighted a “40% reduction in paper consumption through Managed Print Services (MPS) at Menara CIMB; Fuel consumption reduced by >41%, electricity and water consumption reduced by >5%, and >4% respectively”.

4.2.2. Content Validity and Reliability

This study established the content validity of the items used in this study with the measurement criteria for each item as per the Global Reporting Initiatives GRI index for the banking sectors (refer to Table A1). The GRI index provides different measurement criteria for each item as used in this study. We used the same measurement criteria in the Islamic banks, as reported by the GRI index. Which made the content analysis process of this study to be valid. Content reliability refers to obtaining the same results after repeating the measurement process for an item over a period of time [52]. In order to evaluate reliability of the content analysis, firstly a decade sustainability data was collected for two random Islamic banks. Secondly, to check the consistency of the data, the same banks were given to two expert coders in the respected field along with the measurement index (refer to Table A1). The same process was repeated over the period, and some minor changes were incorporated into the data collection process as per the suggestion of the expert coders to enhance reliability of the content analysis process of this study.

4.3. Independent Variables Explanation

This study used four independent variables, namely general standards sustainability disclosures, economic sustainability, environmental sustainability, and social sustainability (see Figure 1).

4.3.1. General Standards Sustainability Disclosures

The first independent variable used in this study is the general standards sustainability discourse, which is also called as the integrated sustainability strategies. The Global Reporting Initiative (GRI) has used this variable specifically for the banking sector. A total of 7 items are used for measuring this dimension (refer to Table A1). This study measures the general standards sustainability disclosures and the proceeding independent variables using a weighted content analysis method with the help of dummy codes of 0–2 for the decade of 2008–2017, where ‘0’ is used for no reporting, ‘1’ is used for partial reporting, and ‘2’ is used for fully reporting about an item. Annual reports of the subjected banks were used for data collection with the help of the following Equation (1),

$$\text{General Standards sustainability disclosure} = \frac{\text{Summation of total disclosures per section}}{\text{Total possible disclosures per section}} \quad (1)$$

Later, the ten (10) years mean average of all the seven (7) items from this dimension was taken for sampled banks to form a general standards sustainability disclosures score.

4.3.2. Economic Sustainability

The economic dimension of sustainability concerns the organization’s impacts on the economic conditions of its stakeholders, and economic systems at local, national, and global levels [55]. A total

of 10 items are used for measuring this dimension (refer to Table A1). Annual reports of the sampled Islamic banks were used for data collection with the help of the following Equation (2).

$$\text{Economic Sustainability Formula} = \frac{\text{Summation of total disclosures per section}}{\text{Total possible disclosures per section}} \quad (2)$$

Later, the ten (10) years mean average of all the ten (10) items from this dimension was taken for the sampled Islamic banks to form a general standards sustainability disclosures score.

4.3.3. Environmental Sustainability

The environmental dimension of sustainability concerns the organization's impact on living and non-living natural systems, including land, air, water, and ecosystems [55]. A total of 12 items are used for measuring this dimension (refer to Table A1). Annual reports of the subjected banks were used for data collection with the help of the following Equation (3).

$$\text{Environmental Sustainability Formula} = \frac{\text{Summation of total disclosures per section}}{\text{Total possible disclosures per section}} \quad (3)$$

Ten (10) years mean average of all the 12 items from this dimension was taken for the sampled banks to form a general standards sustainability disclosures score.

4.3.4. Social Sustainability

The social dimension of sustainability concerns the impacts the organization has on the social systems within which it operates [55]. A total of 36 items are used for measuring this dimension (refer to Table A1). Annual reports of the subjected banks were used for data collection with the help of the following Equation (4).

$$\text{Social Sustainability Formula} = \frac{\text{Summation of total disclosures per section}}{\text{Total possible disclosures per section}} \quad (4)$$

Later, the ten (10) years mean average of all the 36 items from this dimension was taken for the sampled banks to form a general standards sustainability disclosures score.

4.3.5. Total Sustainability Score (Formative Variable)

The ten (10) years mean values of the above independent variables are added to form a total sustainability score. The variable of total sustainability was used for empirical testing. Consistent with [56], for measuring sustainability scores the following formula was used, i.e., $\sum = \frac{d_j}{N}$, where, N means the total number of disclosures while d_j are the numbers of discourses performed by the banks. The formative variable of total sustainability is considered as an endogenous variable by the previous studies [57]. The authors of [58] also suggest that evaluating the link between sustainable business practices and a firm's financial performance may be biased if it does not account for endogeneity. Consistent with the past study of the author [57], this study for setting an instrumental variable gave a dummy code of "1" to the Islamic banks, which had their sustainability score above the industry median and a code of "0" otherwise. The instrumental variable was then verified through the orthogonality condition test and the first-stage regression summary statistics summary test before being used in the GMM model.

4.4. Dependent Variables Explanation

This study measures the financial performance from three different perspectives, i.e., market, management, and the shareholder's perspective (refer to Figure 1). For the operationalization of each perspective, see Table 1 below.

4.5. Moderating Variables Explanation

4.5.1. Managerial Ownership

It represents the share held by the top management of the firm. This study used the “director’s interest” to measure managerial ownership of the Islamic banking industry in Malaysia. It can be measured using the following Equation (5). The Equation (5) used for this variable is consistent with the author of [59].

$$\text{Formula of Director's ownership} = \frac{\text{No of shares held by directors}}{\text{Total ordinary shares}} \quad (5)$$

4.5.2. Shariah Supervisory Board Size (SSBS)

It represents the total number of members available in the Shariah supervisory committee of the Islamic banks. The author of [11] used the average of SSB, while [56] used the number of SSB members to proxy this variable. This study will use the log of the total number of Shariah scholars on the board.

4.6. Control Variables Explanation

4.6.1. Bank Age

Older banks ages are generally considered to be more profitable and larger [60]. This old age, large size, and high profit brings them into the spotlights of policymakers, media groups, and different public groups, and they are often criticized by different interest groups due to their visibility. In order to avoid their criticism and pacify these interest groups, the banks adopt more sustainable measures and practices for the environment and society in general [61]. Adoption and disclosures of more sustainability measures further improve their firm’s financial performance. It shows that bank age does affect the link between sustainable business practices and a firm’s financial performance; therefore, this study controlled it.

4.6.2. Debt Ratio/Risk Ratio

A higher debt ratio gives more freedom to the management of firms to access more capital and vice versa [62]. The managers with more capital can invest more finance in sustainable business practices, which will ultimately improve their firm’s financial performance [4]. Hence in order to control the expected variation, this study uses risk ratio/debt ratio as a controlled variable.

4.6.3. Capital Ratio

The high capital ratio implies that the banks have sufficient internal funding available [63]. Banks with high funding can invest more in sustainable business practices, which will ultimately improve their firm’s financial performance. As this ratio can affect the link between sustainable business practices and the firm’s financial performance, this study has used the ratio as a controlled variable during statistical testing.

4.7. Regression Models

This study has a total of six regression models, three for each objective. The first objective deals with evaluating the impact of sustainable business practices (TotalSus) on a firm’s financial performance measured from three different perspectives, i.e., Management (ROAA), Shareholders (ROAE), and the Market perspective (Tobin’s Q). Similarly, the second of the study deals with evaluating the moderating role of managerial ownership proxied through Director’s Ownership DO and the moderating role of Shariah governance proxied through Shariah Supervisory Board Size (SSBS) between sustainable business practices and the firm’s financial performance subsequently. For details about the variable used in all regression models see Table 2 below.

Table 2. Variables operationalization summary.

| Dimension | Variables | Symbol | Formula |
|--|---|-----------------------------|---|
| Sustainability Practices (Independent) | 1. General Standards Sustainability Disclosers 2. Economic sustainability 3. Environmental Sustainability 4. Social Sustainability | TotalSus Formative Variable | $\Sigma X/N$ $\frac{\text{Number of disclosed items per section}}{\text{Total number of items per section}}$ |
| Firm Performance (Dependent) | Management's Perspective | ROAA | $\frac{\text{Net income before zakat and tax}}{\text{Average Assets}}$ |
| Firm Performance (Dependent) | Shareholders' Perspective | ROAE | $\frac{\text{Net income before zakat and tax}}{\text{Average Book value of equities}}$ |
| Firm Performance (Dependent) | Market's Perspective | Tobin's Q | $\frac{\text{Market Value of Equity}}{\text{Total Assets}}$ |
| Managerial Ownership (Moderating) | Director's Ownership | DO | $\frac{\text{Number of Shares held by Directors}}{\text{Total Ordinary Shares}}$ |
| Shariah Governance (Moderating) | Shariah Supervisory Board Size | SSBS | Log of the total Number of Shariah scholars on board |
| Age (Controlled) | Bank Age | BankAge | Log of Bank Age |
| Risk (Controlled) | Debt Ratio | DR | $\frac{\text{Long term debt}}{\text{Total Assets}}$ |
| Capital Adequacy (Controlled) | Capital Ratio | CR | $\frac{\text{Total Equities}}{\text{Average Total Assets}}$ |

4.7.1. Regression Models for the Moderating Role of Managerial Ownership

$$\text{ROAA} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{DO} + \beta_3 \text{TotalSus} * \text{DO}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (6)$$

$$\text{ROAE} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{DO} + \beta_3 \text{TotalSus} * \text{DO}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (7)$$

$$\text{Tobin's Q} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{DO} + \beta_3 \text{TotalSus} * \text{DO}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (8)$$

4.7.2. Regression Models for the Moderating Role of Shariah Governance

$$\text{ROAA} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{SSBS}_{it} + \beta_3 \text{TotalSus} * \text{SSBS}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio}_{it} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (9)$$

$$\text{ROAE} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{SSBS}_{it} + \beta_3 \text{TotalSus} * \text{SSBS}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio}_{it} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (10)$$

$$\text{Tobin's Q} = \alpha + \beta_1 \text{TotalSus}_{it} + \beta_2 \text{SSBS}_{it} + \beta_3 \text{TotalSus} * \text{SSBS}_{it} + \beta_4 \text{BankAge}_{it} + \beta_5 \text{RiskRatio}_{it} + \beta_6 \text{CapitalRatio}_{it} + \varepsilon \quad (11)$$

5. Results and Discussions

Table 3 shows descriptive statistics of the Islamic banking industry in Malaysia. The mean value of the dependent variables ROAE is 7.344, which is very efficient. It implies that on average the return of an Islamic bank's equity share is very high in Malaysia. The negative values show that the return on equity of a few Islamic banks is inefficient and hence deliver a negative return on equity. The mean values of the other dependent variables of Tobin's Q and ROAA are near to 1. For ROAA it implies that the management is efficiently utilizing the Islamic bank's assets and, as a result delivering an efficient return. For Tobin's Q ratio, the mean value of 0.94—which is near to 1—implies that the market is

fairly rating the Islamic banking assets. On the independent variables, the mean values of the above table show that when converted to percentage the Islamic banks have recorded the lowest disclosures of 30% on social sustainability ($21.793/72 \times 100$). The total possible score for the social sustainability dimension was 72, i.e., 36 items and a maximum score of 2 for an individual item (refer to Table A1). Similarly, considering the mean values and the total possible scores for each dimension, the Islamic banks recorded 32% disclosures and environment sustainability, 58% on economic, 68% on general standards disclosures, and 39% on the total sustainability disclosers. The 39% overall disclosures may be considered to be very low.

Table 3. Descriptive statistics.

| Variables | N | Min | Max | Mean | Std. Dev. |
|---|-----|--------|-------|--------|-----------|
| Dependent Variables | | | | | |
| • Return on Average Equity ROAE | 160 | −23.03 | 69.27 | 7.344 | 10.90 |
| • Tobin's Q | 160 | 0.079 | 1.084 | 0.940 | 0.143 |
| • Return on Average Assets ROAA | 160 | −3.056 | 9.291 | 0.995 | 1.458 |
| Independent Variables | | | | | |
| • General Standard Sustainability Disclosures | 160 | 0 | 14 | 9.556 | 2.990 |
| • Economic Sustainability | 160 | 0 | 17 | 11.68 | 3.559 |
| • Environmental Sustainability | 160 | 0 | 23 | 7.687 | 5.853 |
| • Social Sustainability | 160 | 0 | 58 | 21.793 | 14.45 |
| • Total Sustainability | 160 | 8 | 110 | 50.725 | 23.39 |
| Moderating Variables | | | | | |
| • Managerial Ownership (MO) | 160 | 0.000 | 1.000 | 0.7812 | 0.41 |
| • Shariah Supervisory Board Size (SSB) | 160 | 2.000 | 9.000 | 4.7000 | 1.368 |
| Controlled Variables | | | | | |
| • Risk Ratio | 160 | 0.310 | 1.11 | 0.907 | 0.076 |
| • Capital Ratio | 160 | 0.02 | 1.33 | 0.105 | 0.127 |
| • BankAge | 160 | 1.00 | 34.0 | 9.125 | 6.912 |

The descriptive statistics on moderating variables shows that the means value of SSB is 4.700, while its minimum and maximum values are recorded as 2 and 9, respectively. The authors of [11], by conducting a study on 86 Islamic banks from 25 countries, found the average of SSB at 4.17. Nor and Hashim [64], found the average of SSB with the value of 4.1, while [24] also found the average of SSB with the value of 4.16. These SSB averages are almost the same as of this study, i.e., 4.70. Moreover, the authors of [11] found the impact of an average of 4.70 SSB to be positive on the financial performance of the Islamic banks for the post-crisis period. Hence, we can conclude that the average SSB of this study, which is 4.700, is a perfect average. Furthermore, in line with the past literature, this average may also positively affect the financial performance of Islamic banks in Malaysia as well. The mean value of the director's ownership is recorded at 0.7812, while its minimum and maximum values were recorded at 0 and 1, respectively. The convergence of interest hypothesis suggests that higher managerial ownership helps in achieving higher firm value. Past studies from Malaysia also show that managerial ownership increases financial performance [44]. Against that background, the average mean value of 0.7812 looks satisfactory. Holistically, the higher mean value implies that it may positively affect the financial performance of the Islamic banks in Malaysia. On the controlled variables, the mean values of the variable bank age and risk ratios are found to be satisfactory. This implies that the expected variation during the statistical testing process will be efficiently controlled.

Moderating Role of Islamic Corporate Governance on the Link between Sustainable Business Practices and Financial Performance

To examine the moderating role of Islamic corporate governance in the link between sustainable business practices and a firm's financial performance, this study used the GMM statistical model. Before applying GMM, this study carried out all the basic panel data tests. Starting with the panel unit root tests, this study applied [65–67] panel unit root tests. The results of those tests confirmed that the data taken for this study is stationary. After the panel unit root test, this study applied the basic diagnostic tests on the panel data. For the purpose, this study conducted heteroscedasticity serial correlation and omitted variables diagnostic tests. Results of the Breusch–Pagan test [68] for heteroscedasticity, and the Wooldridge test [69] for serial correlation in panel data confirmed that the panel data used in this study has the problem of heteroscedasticity and serial correlation.

Additionally, the omitted variables test (Ramsey RESET test) [70], confirmed the problem of endogeneity in the data. To further confirm that the variable of sustainability was endogenous, this study carried out the orthogonality condition test in STATA. The results of the test confirmed that the variable of sustainability was endogenous, and it should account for endogeneity. This study, by dealing with the problem of endogeneity, set an instrumental variable. Consistent with the past study of Reference [20], a dummy code of (1) was given to those banks which had their total sustainability scores above the then median of the sample, while a dummy code of (0) was given to those banks which had their total sustainability scores below the then sustainability median of the sample. To test whether the set instrument was efficient or not, this study ran the first-stage regression summary statistics for instrumental variable through STATA, and the results confirmed the instrument used in this study was strong. After dealing with the problem of endogeneity to further fix the problem of heteroscedasticity and serial correlation pursuant to past studies [71], this study used a cluster robust GMM model. The results of the GMM results are shown in Tables 4 and 5.

Table 4. The link between sustainable business practices on firm's financial performance, with the moderating role of managerial ownership.

| Variables | Management Performance (Model I) ROAA: (R2 = 0.42) | | | Shareholders' Performance (Model II) ROAE: (R2 = 0.42) | | | Market Performance (Model III) Tobin's Q: (R2 = 0.38) | | |
|---------------------------|--|-------|-----------|--|-------|----------|---|-------|-----------|
| | Coef. | z | P > z | Coef. | z | P > z | Coef. | z | P > z |
| Total Sustainability (TS) | 0.660 | 4.36 | 0.000 *** | 4.562 | 2.14 | 0.032 ** | 2.623 | 1.09 | 0.277 |
| Managerial Ownership (MO) | 0.408 | 2.43 | 0.015 *** | 3.658 | 2.27 | 0.023 ** | −13.25 | −3.53 | 0.000 *** |
| TS * DO (Moderation) | 0.595 | 3.69 | 0.000 *** | 4.808 | 2.24 | 0.025 ** | 3.033 | 1.99 | 0.046 ** |
| Bank Age | 0.0302 | 2.97 | 0.003 | 0.242 | 1.63 | 0.102 | 0.5321 | 1.81 | 0.070 |
| Risk Ratio | 0.227 | 2.11 | 0.035 | 1.55 | 1.15 | 0.249 | −1.820 | −0.93 | 0.351 |
| Capital Ratio | −0.018 | −0.23 | 0.815 | −0.45 | −0.64 | 0.525 | −10.81 | −3.59 | 0.000 |
| _cons | 0.613 | 4.58 | 0.000 | 4.293 | 2.10 | 0.035 | 87.898 | 25.68 | 0.000 |

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 5. Impact of sustainable business practices on firm's financial performance, with the moderating role of Shariah governance.

| Variables | Management Performance (Model IV) ROAA: (R2 = 0.35) | | | Shareholders' Performance (Model V) ROAE: (R2 = 0.35) | | | Market Performance (Model VI) Tobin's Q: (R2 = 0.19) | | |
|---------------------------|---|-------|------------------|---|-------|------------------|--|-------|------------------|
| | Coef. | z | P > z | Coef. | z | P > z | Coef. | z | P > z |
| Total Sustainability | 0.547 | 3.94 | 0.000 *** | 3.707 | 3.26 | 0.001 *** | 0.0578 | 0.29 | 0.770 |
| Shariah Governance | -0.087 | -0.99 | 0.320 | -0.0633 | -0.97 | 0.334 | -0.922 | -0.53 | 0.593 |
| TS * SSBS (Moderation) | 0.139 | 3.03 | 0.002 *** | 0.950 | 2.65 | 0.008 *** | 3.830 | 2.81 | 0.005 *** |
| Bank Age | 0.036 | 2.58 | 0.010 | 0.029 | 2.84 | 0.005 | 0.02697 | 1.66 | 0.097 |
| Risk Ratio | 0.359 | 2.83 | 0.005 | 2.612 | 2.37 | 0.018 | -2.380 | -1.32 | 0.187 |
| Capital Ratio | 0.053 | 0.67 | 0.505 | -0.00 | -0.00 | 0.997 | -5.919 | -2.41 | 0.016 |
| -cons | 0.627 | 3.56 | 0.000 | 4.4154 | 3.25 | 0.001 | 90.53 | 36.26 | 0.000 |

Note: *** significant at 1%, ** significant at 5%, * significant at 10%.

Table 4 shows that the link between sustainable business practices and financial performance indicating management performance in Model I, and the shareholders' performance in Model II is significant. Hence, the hypotheses H1_A and H1_B are accepted. These results are consistent with [5], and the stakeholders' theory, which assumes a positive association between sustainable business practices and the firm's financial performance. While, the link between sustainable business practices and financial performance indicating the market performance in Model III is insignificant; therefore, the hypothesis H1_C is not supported. These results are in contrast with [72]. In general, the results from the above three models imply that the management and shareholders are convinced of the fact that all the sustainable business practices initiatives started by the Islamic banks will add a financial return to their portfolios. On the other hand, the market is hesitant for their bank's spending on sustainability initiatives, and hence the subjected link was found insignificant. To further investigate this issue, this study proposed the moderating role of managerial ownership (see Section 3.3). Interestingly, under the moderating role of managerial ownership, the market behavior towards sustainable business practices and financial performance became positive. The authors of [73] argued that, during the process of moderation, the independent variable (X) and the moderating variables (M) might be significant individually. Nevertheless, it is not directly relevant to testing the moderating hypothesis. For the moderation process to be accepted, the interaction of independent and moderating variables (XM) should be significant. In line with this, the p-value of the interacting variable (TS * DO) in Table 4 is significant at 1% in Model I, 5% in Model II and at 1% in Model III. It approves the moderation process for all three models and implies that the moderating variable of managerial ownership positively moderates the relationship between sustainable business practices and the firm's financial performance. It shows that a unit increase in the interacting variable will enhance the firm's financial performance by 0.595 units from a management perspective, by 4.808 units from the shareholder's perspective and by 3.033 units from the market perspective. This means that the moderation of managerial ownership will improve firm's financial performance proxied through shareholders, management and the market perspective as well. These results approve the hypotheses H2_A, H2_B, and H2_C. The firm's financial performance indicating the market perspective was insignificant without moderation (see Model III). However, the link became significant with the moderating role of managerial ownership, implying that the high managerial ownership is giving confidence to market stakeholders. Because it is based on the principle of management entrenchment, the market players are convinced of the fact the management will not pursue those policies which can depreciate their own financial returns and vice

versa. Therefore, the role of high managerial ownership may ensure the latest sustainable business practices in the business policies of the Islamic banks which will eventually ensure a higher financial return to its various stakeholders. The results of this study are consistent with the convergence of interest hypothesis and [74].

Table 5 shows that the link between sustainable business practices and financial performance, indicating management performance (Model IV), and the shareholders' performance (Model V) is significant. Hence, hypotheses H1_A and H1_B are accepted. These results are consistent with [5], and the stakeholders' theory, which assumes a positive association between sustainable business practices and the firm's financial performance, while the link between sustainable business practices and financial performance indicating the market performance in Model VI is insignificant. Therefore, hypothesis H1_C is not supported. These results are in contrast with [72]. In general, the results from the above Table 5 imply that the management and shareholders are convinced of the fact that all the sustainable business practices initiatives made by the Islamic banks will add a financial return to their business portfolios and vice versa.

On the other hand, the market is hesitant for their bank's spending on sustainability initiatives, and hence the subjected link is insignificant. To further investigate this issue, this study proposed the second moderating variable of Shariah governance (see Section 3.4). Interestingly, under the moderating role of Shariah governance, the market behavior towards sustainable business practices and financial performance became positive. The p-value of the interacting variable (TS * DO) in Table 5 is significant at 1% in Model IV, 5% in Model V, and 1% in Model VI, respectively. It approves the moderation process for all three models and implies that the moderating variable of Shariah governance positively moderates the relationship between sustainable business practices and a firm's financial performance. It shows that a unit increase in the interacting variable will enhance the firm's financial performance by 0.139 units from a management perspective, by 0.950 units from the shareholder's perspective, and by 3.830 units from the market perspective. It means that the moderation of Shariah governance will improve firm's financial performance proxied through shareholders, management and the market perspective as well. Hence, the following hypotheses H3_A, H3_B, and H3_C are supported. The firm's financial performance indicating the market perspective was insignificant without moderation (see Model VI). However, the link became significant with the moderating role of Shariah governance. It implies that Shariah governance is giving confidence to the market stakeholders along with the other stakeholders (management and shareholders) for obtaining a higher financial return through strong Shariah governance. This is because the strong Shariah governance (Shariah Supervisory Board (SSB) size in this case) facilitates professionals like bankers and economists—even with little religious knowledge—to sit on the board and provide expert opinions on technical matters like sustainability. The Shariah Supervisory Board issues its Shariah committee reports in the annual reports of the banks, which provides Shariah rulings on the conduct of business. This diversity may enrich the level of understanding of the Shariah supervisory committee about sustainable business practices from an Islamic perspective and its subsequent rulings and reporting. This process will give confidence to the various stakeholders that SSB will ensure and enacts sustainability practices, which may eventually increase their financial performance. The results of this study are providing policy insights to the practitioners and policymakers of the Islamic banks for achieving better financial performance for firms through efficient sustainable business practices and reporting. It is also guiding them for the balanced role of Islamic corporate governance practices in the link between sustainable business practices and firm's financial performance.

Table 6 shows the trend in the R-squared during the process of investigation. First, it shows the R-squared results without moderation, followed by the moderation of managerial ownership and the Shariah governance moderation. The trend shows that the value of R-squared has increased during the moderation process. It confirms the accuracy of the moderating variables used in this study.

Table 6. R-Squared trend during the process of investigation.

| R-Squared Trend | Without Moderation | With Managerial Ownership Moderation | With Shariah Governance Moderation |
|---------------------------|--------------------|--------------------------------------|------------------------------------|
| Management Performance | 0.34 | 0.35 | 0.42 |
| Shareholders' Performance | 0.31 | 0.35 | 0.42 |
| Market Performance | 0.17 | 0.19 | 0.38 |

6. Conclusions

This paper examined the moderating role of Islamic corporate governance on the link between sustainable business practices and the firm's financial performance. The results of the study show that the link between sustainable business practices and a firm's financial performance indicating management performance and the shareholders' performance is significant. These results are in line with [5]. This suggests that the management and shareholders are convinced of the fact that the initiation of sustainable business practices by their banks will add financial returns to their business portfolios. On the other hand, the link between sustainable business practices and the firm's financial performance indicating the market performance was found to be insignificant. These results are in contrast with [72], and imply that the market stakeholders of the Islamic banks are hesitant toward their bank's spending on sustainable business practices, i.e., economic, social, and environmental business sustainability practices. To further investigate this issue and to understand why the market is reluctant for their bank's spending on sustainable business practices, this study conducted further analysis by proposing a moderating role of managerial ownership and Shariah governance. Interestingly, the proceeding analysis found an insignificant link between sustainable business practices and firm's financial performance measured from the market perspective became significant during the moderation process. Therefore, management entrenchment and Shariah governance supervision is positively influencing the market stakeholders of the Islamic banks for their intuition about sustainable business practices and the financial performance of firms. This is because the high management entrenchment ensures the inclusion of those sustainability initiatives, which may positively impact the financial performance of the firm and vice versa. Otherwise, the management itself will suffer a huge loss due to their higher stakes in the business. This factor motivates the market stakeholders to change their intuition positively in favor of sustainable business practices initiatives made by their Islamic banks. Secondly, Shariah governance is also giving confidence to the market stakeholders for obtaining a higher financial return through strong Shariah governance. This is because the strong Shariah governance (Shariah Supervisory Board (SSB) size in this case) facilitates professionals like bankers and economists—even with little religious knowledge—to sit on the board and provide expert opinions on technical matters like sustainability. This diversity may enrich the understanding level of the Shariah supervisory committee about sustainable business practices from an Islamic perspective and its subsequent rulings and reporting. This process is giving confidence to the various market stakeholders that SSB will ensure and enacts sustainability practices, which may eventually increase their financial performance. These results may provide insight to several policymakers of the Islamic banking industry about integrating vital sustainability practices in their business models and about the balanced moderating role of Islamic corporate governance in the link between sustainable business practice and a firm's financial performance. This research is providing a roadmap to the Islamic banking industry for efficient management of sustainability practices from an Islamic perspective and subsequently improving financial performance through it.

7. Future Work and Directions

The study selected only Malaysian Islamic banks for studying the link between sustainable business practices and the firm's financial performance from the Islamic perspective. Other countries can also be sampled to study the comparative behavior of the subjected link. Further Islamic items can also be added to the adopted sustainability measurement index of the author of Reference [4] to make it more reliable and compatible with the Islamic banking industry.

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Appendix A

Table A1. Index Used for Measuring Sustainability Practices in The Islamic Banks.

| Aspect | Parameters for Measurement of an Individual Items Fully Reported = (02), Partially Reported = (01), No Reporting = (0) |
|--|---|
| (A). General Standards Disclosures (Integrated Sustainability Strategies) | |
| 1. Strategy and analysis | CEO/ Chairman's statement with its relevance to sustainability, key events, and achievements regarding sustainability during the reporting period |
| 2. Organization profile | An organizational chart including name, location, and countries of operations |
| 3. Identified material aspect and boundaries | Joint ventures, subsidiaries, Consolidated statements, data measurement techniques, significant changes from the previous reporting period |
| 4. Stakeholder engagement | List of stakeholders group engaged by the organization |
| 5. Report profile | Reporting period (fiscal or calendar) reporting cycle (annual or biannual) |
| 6. Governance | The governance structure of the organization |
| 7. Ethics and Integrity | Codes of conduct and codes of ethics for the organization |
| (B). Economic Sustainability Indicators | |
| 8. Shariah screening during the investment | Reporting about Shariah screening process for investment in the Shariah Committee's report |
| 9. Allocation of profit based on Shariah principles | Certification of distribution of profit/loss complying with Shariah in the Shariah Committee's report |
| 10. Economic performance | Direct economic value generated and distributed: Community investment |
| 11. Market presence | Reporting about minimum wages paid |
| 12. Indirect economic impact | Reporting about the investment made in infrastructural development and services supported/ commercial investment |
| 13. Procurement practices | Percentage of product and services purchased from local suppliers |
| 14. Zakat payment | Procedure and disclosure about the total amount of zakat paid |
| 15. Qardh-e-Hassan | Amount of Qardh-e-Hassan/ Benevolent fund paid |
| 16. Charity - Sadaqah - Waqaf | Reporting about total Charity - Sadaqah - Waqaf paid by the banks |
| 17. Disclosure of earnings prohibited by Shariah | Disclosure of earning prohibited by Shariah in the Shariah committee's report |

Table A1. Cont.

| Aspect | Parameters for Measurement of an Individual Items Fully Reported = (02), Partially Reported = (01), No Reporting = (0) |
|---|--|
| (C). Environmental Sustainability Indicators | |
| 18. The material used and recycled by the Islamic banks | Reporting about the total weight and volume of the material used, and the percentage of material recycled |
| 19. Energy reduction and preservation initiatives made by Islamic banks | Reporting about methodologies used for the reduction of energy consumption required for heating, cooling and steaming purposes of the banks |
| 20. Water recycling initiatives made by the Islamic banks | The total volume of water recycled and reused by the Islamic banks |
| 21. Biodiversity | Reporting about habitat protected or restored due to green investment |
| 22. Emission (reducing greenhouse gas /carbon emission) | Accounting for the greenhouse gas emission resulting from the business travel and the courier services of banks |
| 23. Effluents and Waste cleaning | Reporting about waste management techniques applied to the papers and IT products used by the banks |
| 24. Product and services impact on the environment | The extent of impact mitigation of environmental impacts of banks products and services |
| 25. Compliance with Islamic laws for the environment | Reporting on compliance with Islamic laws for the environment in the annual report of the bank |
| 26. Transport (mitigation impact, responsible automation) | Reporting about how the environmental impacts of transporting the bank's members/workforce, and other goods and services are mitigated |
| 27. Overall environmental expenditure | Total environmental expenditure by type |
| 28. Supplier environmental assessment | Reporting about new suppliers that were screened using environmental criteria |
| 29. Environment grievance mechanisms | Reporting about the total number of grievances about environmental impacts filed, addressed and resolved through a formal grievance mechanism |
| (D). Social Sustainability Indicators | |
| D1: Labor Practices and Decent Work | |
| 30. Employment | Reporting about the total number and rate of new employee hires during the reporting period, by age group, gender, and region |
| 31. Labor management Relation | Reporting about minimum time period required for notice prior to the implementation of operational change |
| 32. Occupational health and safety | Reporting about policies designed for reducing bank robberies and money laundering used for terrorism |
| 33. Islamic training and education to staff | Reporting about Islamic training and education provided to the staff in the annual report of the banks |
| 34. Diversity and equal opportunity | Reporting about the diversity and equal opportunity provided for the bank's staff |
| 35. Equal remuneration for women and men | Reporting about the ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation |
| 36. Supplier assessment for labor practices | Reporting about the percentage of new suppliers that were screened using labor practices criteria |
| 37. Labor practices grievance | Number of grievances about labor practices filed, addressed and resolved through formal grievance mechanisms |

Table A1. Cont.

| Aspect | Parameters for Measurement of an Individual Items Fully Reported = (02), Partially Reported = (01), No Reporting = (0) |
|--|--|
| D2: Human Rights | |
| 38. Investment | The total investment made by the banks to train its employees in human rights policies and procedures |
| 39. Non-discrimination | Reporting about the total number of incidents of discrimination and corrective actions taken by the bank |
| 40. Freedom of association and collective bargaining | Reporting about the measures taken by the banks to support the right to exercise, freedom of association and collective bargaining |
| 41. Child labor | Reporting about the identification of child labor in the banking operations and supplier activities and effective measures are taken |
| 42. Forced or compulsory labor | Reporting about the identification of forced and compulsory labor in the banking operations and supplier activities and effective measures are taken |
| 43. Security Practices | Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations |
| 44. Indigenous rights | Total number of incidents of violations involving rights of indigenous peoples and actions taken |
| 45. Assessment | Report the total number and percentage of operations that have been subject to human rights reviews or human rights impact assessments, by country |
| 46. Supplier human rights assessment | Report the percentage of new suppliers that were screened using the human rights criteria |
| 47. Human rights grievance mechanism | Number of grievances about human rights impacts filed, addressed and resolved through formal grievance mechanisms |
| D3: Society | |
| 48. Local communities | Initiatives to improve access to financial services for disadvantaged people |
| 49. Anti-corruption | Percentage of operations assessed for risks related to anti-corruption and action taken. Training provided on anti-corruption policies and procedures |
| 50. Pilgrimage | Reporting about the total number of subjects sent for pilgrimage |
| 51. Scholarships | Reporting about the total sum of money spent on offering scholarships |
| 52. Public policy | Report the total monetary value of financial and in-kind political contributions made directly and indirectly by the banks by country and recipient/beneficiary |
| 53. Anti-competitive behavior | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes |
| 54. Compliance | The monetary value of significant fines and the total number of non-monetary sanctions for non-compliance with laws and regulations |
| 55. Supplier assessment for impact on society | Percentage of new suppliers that were screened using criteria for impacts on society |
| 56. Grievance mechanism for impact on society | Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms |
| D4. Product Responsibility | |
| 57. Consumer health and safety | Reporting about the percentage of significant product and service categories for which health and safety impacts are assessed for improvement |
| 58. Product and service labeling | Policies for the fair design and sale of financial products and services |
| 59. Products and services labeling (approved by the Shariah Committee) | Reporting about the approval about product and service labeling in the Shariah committee's report |
| 60. Marketing communications | Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes |

Table A1. Cont.

| Aspect | Parameters for Measurement of an Individual Items Fully Reported = (02), Partially Reported = (01), No Reporting = (0) |
|-----------------------|---|
| 61. Customer privacy | Reporting about the total number of substantiated complaints received concerning breaches of customer privacy |
| 62. Compliance | The monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of product and services |
| 63. Product Portfolio | Policies with specific social components applied to business lines |
| 64. Audit | Coverage and frequency of audits to assess implementation of social policies and risk assessment procedures |
| 65. Active Ownership | Percentage and number of companies held in the bank's portfolio with which the bank has interacted on social issues |

Source: [4]

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