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JSTARD

http://publisher.uthm.edu.my/ojs/index.php/jstard
e-ISSN : 2682-9142

Journal of Social Transformation and Regional Development

The Effect of Sustainability Certification Towards Firms' Profitability: The Case of Malaysian Shariah Compliant Palm Oil Companies

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DOI: https://doi.org/10.30880/jstard.2023.05.02.002
Received 30 July 2023; Accepted 22 September 2023; Available online 4 December 2023

Abstract: In Islam, the preservation of environment is one of the fundamental in *maqasid al-shariah* (objectives of shariah). As world's leading hub of Islamic finance and the second largest palm oil producer, a positive respond on environment preservation had been given by Malaysia towards sustainable palm oil industry. Moreover, almost 70% of Malaysian palm oil companies are complied with shariah. It is necessary to the shariah compliant companies to put into consideration regarding environment sustainability in their main objective of the firms. Therefore, Malaysia urges these companies to adopts Roundtable on Sustainable Palm Oil (RSPO) and Malaysian Sustainable Palm Oil (MSPO) certifications which ensure sustainable operation and production of certified palm oil. However, these companies have concern on profitability over sustainability due to additional cost to subscribe the certification. Therefore, this study is conducted to identify the effect of the sustainability certification on the profitability of 29 shariah-compliant palm oil companies listed in Bursa Malaysia from 2013 to 2017. It is important to provide evidence on certified companies' profitability to encourage more adoption of sustainability certification, promote sustainable practices and increase production certified palm oil among shariah compliant companies. The results of generalized least squares (GLS) regression show that certified companies enjoy profits that are 2.3% higher than those of non-certified companies. These findings support the sustainability policy in palm oil industry by the Malaysian through MSPO certification which became mandatory in late 2019.

Keywords: environment sustainability, maqasid shariah, MSPO, palm oil, RSPO, sustainable development

1. Introduction

Sustainability certification for the palm oil industry has been established to enhance production of sustainable palm oil. The main objective of sustainability certification is in line with the Sustainable Development Goals (SDGs) by United Nation. The SDGs highlighted the importance of environmental protection and sustainability which is one of the most important and topical issues throughout the world. Interestingly, twelve out of seventeen goals highlighted on environmental sustainability[1]. Environment preservation also considered as a major ethical issue by many religions. For instance, Islam encourage people to manage properly natural resources and respect all living things as highlighted in the sixteen verses of al-Quran [1]. Surah Al-Syu'ara'[2] (verse 183) highlights that people are prohibited from causing

[1] Goals no. 3, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 and 17.

[2] Surah Al-Syu'ara' verse 183:

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damage to the earth. Hence, sustainability certification is one of the ideas for the Malaysian palm oil companies to operate sustainably and support the SDGs.

Environmental impacts occurred in the development of palm oil industry [2]. The impacts happen in the pre-construction, construction and operational stages. Therefore, the Roundtable on Sustainable Palm Oil certification (RSPO) was introduced in November 2008 as a credible international standard to promote the growth and use of sustainable palm oil products [3]. Malaysia also launched her own certification in 2013 namely, the Malaysian Sustainable Palm Oil certification (MSPO). The MSPO helps to improve and implement the production of Malaysian sustainable palm oil. It is a stepping-stone on the path to Malaysia's long-term commitment to the sustainable production of palm oil [4]. The MSPO also helps to prove that the Malaysian palm oil industry does not adversely affect the environment and mitigates the pressure from the anti-palm oil lobbyists and Western NGOs [5]. Therefore, the Malaysian government declared to mandatory MSPO certification by the end of 2019.

Due to the importance of the palm oil industry, many firms have taken the opportunity to become one of the palm oil players. In 2017, most (74.4%) of the palm oil companies complied with *Shariah*[3]. Given their *shariah-compliant* status, these companies should also fulfil the *shariah-compliant* manners as well as the higher objectives of *shariah* (*maqasid al-shariah*), the fundamentals of which are the preservation of religion, life, mind, offspring and wealth [6,7]. In addition, the preservation of the environment is also fundamental for appreciating the role and place of the higher objectives of Shariah in the modern era of globalization [8]. The environment is a gift to humankind by God and people are bound to protect it from pollution or damage [9,10,11]. Therefore, it is important for them to adopt the sustainability certification to create a balance between earning profits and fulfilling the objectives, especially regarding the preservation of life and the environment during the production of palm oil. Indeed, Islam permits people to earn profits on the condition that the business does not affect the *maqasid al-shariah* [12].

However, the problem is that *shariah* compliant palm oil companies need to bear sustainable certification costs yet maximizing profits. This is illustrated by the fact that companies with RSPO or MSPO account for only 51.7% or 15 companies. As of 2017, six (6) companies had adopted both certifications, while four (4) companies had RSPO, and five (5) companies complied with the principles of MSPO. This indicates that approximately 48.3% or 14 companies have yet to obtain a certificate. The non-certified companies may have concerns regarding the additional operating costs of certification. This is because the costs associated with the certification might affect the firms' profitability [13]. Moreover, the current announcement regarding mandatory MSPO certification has highlighted the possible additional costs of compliance with the requirements [14] which would reduce firms' profitability. For example, the cost of adopting MSPO and RSPO is approximately RM3,000 to RM4,000 per hectare [15]. Meanwhile, the average membership fee for RSPO is RM9,583 biannually [15,16] the MSPO is currently subsidized. The non-adoption of sustainability certification may signal a companies' ignorance about environmental preservation which affects their shariah-compliant status. Therefore, the question is whether shariah-compliant palm oil companies will remain profitable after accounting for the cost of sustainable certification.

This study will help to promote sustainable practices among shariah-compliant palm oil companies through the adoption of sustainability certification and help to provide a better understanding of certification. This will lead to the increased number of companies with certification and directly contribute to higher production of certified palm oil in Malaysia. Previous studies on the relationship between sustainability certification and a firms' profitability are inconclusive. The empirical evidence in the literature shows a positive relationship between certification and profitability [17,18,19], while some studies find no relationship [21,22,23]. Surprisingly, there is lack of quantitative evidence empirical research focuses specifically on the RSPO and MSPO in the Malaysian palm oil industry context. Previous studies have examined empirically on the effect of sustainability certification towards profitability, but it was not in palm oil industry, MSPO and Malaysian context [18, 19, 22]. Hence, this study intends to fill the gaps in the research by examining the effect of sustainability certification on the profitability of shariah-compliant palm oil companies in Malaysia.

This paper is conducted with part I that describes the research background, problem statement, objective, and significance of the study. Next, the paper reviews the relevant literature. The methodology and findings of this study are discussed in Part III and IV. Finally, Part V provides the conclusion and some implications of the study.

2. Literature Review

The higher objectives of *shariah* (*maqasid al-shariah*) guide humankind in managing the earth and utilizing all the resources of the land to ensure protection for present and future generations. The principles direct and protect human life regarding the preservation of life, religion, lineage, wealth, and intellect [24]. The preservation of the environment is an additional fundamental that appreciates the role and place of the higher objectives of Islamic law in the modern era of globalization [8]. As the steward (*khalifah*) of the environment, conservation is important and is related to the preservation of life. Alongside performing religious duties such as praying, people must sustain the relationship between Allah, humanity and the environment [10, 25]. Therefore, people must preserve the environment and create

'And do not deprive people of their due and do not commit abuse on earth, spreading corruption'.

[3] The word of Shariah refers to Islamic religious law based on al-Quran and Hadith.

peace and trust (*amanah*). This is highlighted in Islam, as previously mentioned, in the Surah Ar-Rum verse 41[4]. Preservation of the environment is a religious practice in all communities [26]. This is because the religious belief system provides more influential guidance regarding moral values and for shaping individual attitudes towards the environment [27, 28].

Concerns about environmental protection also become one of the important matters for investors when considering Islamic investments along with jurisprudence (*fiqh*) injunctions and other economic aspects [29]. Moreover, Ibrahim et al. [30] opine that the environment must be sustained first before sustainable economic achievement. This is supported by [31] and [32], who say that environmental degradation is significant to economic reduction. The author stresses that unmanaged land and water violates the economic principle and economic sustainability is unachievable. This is in keeping with the view of [33] who says that where Islam requires traders, society at large and individuals must strike a balance between profit and social responsibility.

However, a study by Lim & Biswas [34] found that the production of Malaysian palm oil is still below the sustainability threshold. Certain companies are unable to perform good environmental practices due to significant investment, treatment and insurance cost [35]. This finding is supported by Nawawi et al. [36]. The study suggests that those companies that operate closely following the environmental regulations are given tax incentives for their effluent treatment processes to motivate them to operate sustainably. Meanwhile, Kadarusman and Herabadi [37] opined that a reward system will be able to encourage more parties to comply with RSPO principles. Ignorance from companies regarding environment protection performance exposed with a penalty action, financial and properties insecurities [38]. Thus, environment sustainability policies should be gazette in reducing the environmental impact of the palm oil industry [39].

Regarding sustainability certification and profitability, previous studies prove that environment certification gave a positive effect towards financial performance of the firms. A recent study by Preusser [40] finds a positive correlation between certified plantation area and the price of crude palm oil (CPO). Specifically, firms that certified at least 40% of their plantation area with RSPO are able to sale their CPO at higher price compared to non-certified firms. Joshua et al. [41], in their analysis of incremental financial costs and benefits of RSPO compliance, indicate that RSPO-certification reduces the cost of sales expenses and labor turnover by 6%, and improves revenue. This finding is consistent with that of Gijs et al. [19] where the Forest Stewardship Council (FSC) certification has a positive impact on the net present value of tropical forest producers and small/medium growers. Companies receive significant benefits by having FSC certification such as tax incentives, research fees and government support.

Also, Humphries and Kainer [42] show that FSC certification provides better opportunities for forest operators in terms of their access to European markets. Anderson et al. [43] state that companies consider subscribing to sustainable certification due to the export and governmental requirements as well as to improve the quality of their products. This is because international markets consider the environmental management system (EMS) certification to be more important than the price and quality of products. Besides, since awareness of the issues surrounding environmental sustainability has increased, investors are more interested in investing in companies who make their sustainability practices public. Ainia and Deddy [44] support the previous finding of a positive correlation between the disclosure of sustainability practices with the financial profitability of firms. This is because by following sustainability practices a company experiences a positive impact on their operations, profits, and investors' trust, as well as reducing the risks to the reputation of palm oil companies [45]. This is supported by Omar et al. [46], Hussein et al. [47] and Zhao et al. [48]. However, there are some studies that found that economic performance had no relationship with sustainability certification like Rahman et al. [21], Segarra-Oña et al. [22], Nor et al., [23], Yusof and Yew (2016) and Shahida et al. [49].

3. Methodology

This study applies a quantitative research approach by empirically analyzing the effect of sustainability certification on the profitability of shariah-compliant Malaysian palm oil companies. The study uses panel data estimation because the dataset of the study is a cross-sectional and time-series observation. For the empirical model, return on assets (ROA) is appointed as dependent variable in measuring firm's profitability. The study follows Wahab and Ramli [50]. The ROA is the most popular measurement to calculate the profitability of a firm [51-53]. A high ROA figure illustrates that a firm is efficient in managing their assets to earn higher revenues. Good ROA indicates firm has strong financial performance for the long-term [54-56]. The study calculates ROA by dividing the earnings before interest tax (EBIT) by the total assets. Using the EBIT as the nominator rather than the net profit in the ROA is useful for the sample palm oil companies who have different financing structures. EBIT provides a pure measure of the actual value of return on assets [57]. For example, United Plantation Bhd. and IOI Plantation are among companies with foreign shareholders, thus EBIT allows for a more accurate measurement of profitability. In this situation, EBIT ignores the taxes and interest expenses. Indeed, EBIT is more appropriate for measuring the ROA [58].

[4] Surah Ar-Rum verse 41 which means:
'Corruption has appeared throughout the land and sea by (reason of) what the hands of people have earned so He may let them taste part of (the consequence of) what they have done that perhaps they will return (to righteousness)'.

This study appoints SUSC as the independent variables under investigation. SUSC refers to sustainability certification and it is a dummy variable. It takes the value of one for a shariah-compliant firm with RSPO or MSPO otherwise it is 0. A dummy variable is valid to be included as main variable in a regression model [59]. Heras-Saizarbitoria et al. [58] also employed a similar measurement in their study of the impact of ISO certification on financial performance. Besides SUSC, the other independent variables are considered as control variables which are leverage (LEV), liquidity (LIQ), firm size (SIZE), sales growth (GROWTH), and the average price of crude palm oil (P) [60-63]. These control variables help to produce reliable results on the effect of the independent variable on the dependent variable. The regression model used in this study is shown in equation (1).

$$ROA_{it} = \beta_0 + \beta_1 SUSC_{it} + \beta_2 LEV_{it} + \beta_3 LIQ_{it} + \beta_4 SIZE_{it} + \beta_5 GROWTH_{it} + \beta_6 P_t + \varepsilon_{it} \quad (1)$$

3.1 Data and Source of Data

The sample of the study is only on shariah-compliant palm oil companies that listed in Bursa Malaysia 2013- 2017. This is because most of the palm oil companies in Malaysia (74.4%) are complying with shariah. The study uses the sample of 29 shariah compliant palm oil companies listed in Bursa Malaysia with and without sustainability certification. The sample used in this study is the shariah-compliant palm oil companies listed in Bursa Malaysia from 2013- 2017. The period of study begins in 2013 which was when the MSPO was introduced. The study focuses on the palm oil industry because it is important for Malaysia's economy and income. The companies consist of with and without sustainability certification operating from the upstream to downstream sectors. The companies in the upstream industry are categorized as an industry that that involved in planting, harvesting and milling of the oil palm activities. Meanwhile, the downstream industry processed final palm-based products such as cosmetics and cooking oil.

The status of shariah compliant palm oil companies was identified from the List of Shariah-Compliant Stock for November 2017 by the SAC. The financial data of ROA, leverage, liquidity, firm size and sales growth are retrieved from Datastream. Meanwhile, the average price of CPO price is obtained from the MPOB website. The non-financial data i.e., sustainability certification of RSPO and MSPO is obtained from respective websites.

3.2 Data Analysis

The study runs for multiple regression analysis to examine the significance of sustainability certification on the profitability of shariah-compliant palm oil companies in Malaysia. The study also applies panel data model since the data contains time series and cross-sectional observations. Due to several factors of non-normality data distributed issue and autocorrelation problem, Ordinary Least Square (OLS) estimation is not relevant [59,64]. Thus, this study uses Generalized Least Square (GLS) estimation method which is an extension of the OLS estimation [59].

4. Result and Discussion

This section reports the mean, standard deviation, skewness, kurtosis, and Shapiro-Wilk test of the study. The data is considered as normally distributed when the value of skewness is equal or near to 0 and the kurtosis is equal or near to three [65]. The results in Table 1 show that all the variables have values of skewness and kurtosis near to zero and three, subsequently, except for LIQ and GROWTH. It is important to have normality in data distribution as it allows for reliable explanation and inference [66]. The findings indicate that the OLS estimation method could not produce a better result. Therefore, the GLS method is more appropriate to use in this study [61].

Table 1 - Descriptive statistical analysis

Variable	Mean	Std. Dev.	Skewness	Kurtosis	N
ROA	0. 0467	0. 0525	1.2379	7.7006	144
SUSC	0. 4653	0. 5005	0.1392	1.0193	144
LEV	46.1272	37.3627	0.7324	2.8306	144
LIQ	4.0780	9.7785	2.8306	26.4593	144
SIZE	14.3701	1.2426	0. 3327	2.6479	144
GROWTH	12.4649	70.6398	9.2020	100.8738	144
P	7.8101	0.0890	0.0213	1.7947	144

4.1 Pearson Correlation Matrix

Correlation analysis is used to explain the strength and direction of the linear relationship between the variables. A multicollinearity problem exists when the correlation coefficient is larger than 0.8 [67]. Pearson correlation analysis is

used to explain the strength and direction of the linear relationship between continuous variables. Table 2 shows that the correlation coefficient of each variable is well below 0.8 which indicates the absence of a severe multicollinearity problem. Hence, all variables can be used for estimation.

Table 2 - Pearson's correlation results

	ROA	LEV	LIQ	SIZE	GROWTH	P
ROA	1.0000					
LEV	-0.2797	1.0000				
LIQ	0.2468	-0.4887	1.0000			
SIZE	0.2422	0.0227	0.0887	1.0000		
GROWTH	0.0457	0.0166	-0.0723	0.0138	1.0000	
P	0.3435	-0.0930	0.0206	-0.0752	0.1916	1.0000

4.2 Findings

The White test and the Wooldridge test are conducted to detect heteroscedasticity and autocorrelation problems. The result of the White test shows that the value of the chi-square (chi2= 7.27, p-value = 0. 9999) is not significant at 1%. Hence, the study fails to reject the null hypothesis which indicates that there is no heteroscedasticity problem. Autocorrelation occurs when the error terms of the observations in the regression model are related. Consequently, the standard errors are inconsistent. The Wooldridge test shows there is a serious autocorrelation problem where the f-statistic is 22.162, and the p-value is 0.0001.

As the data is not normally distributed and exposed to the autocorrelation problem[5], an estimation using the OLS becomes less efficient. GLS can tackle these issues [68]. The GLS can handle the data better by giving it equal weight and the error of the models is not correlated [69]. Therefore, this study employs GLS to estimate the relationship between sustainability certification and profitability. In the GLS estimation, the goodness of fit is determined by the Wald test; an alternative to the R-squared method [70]. The Wald test evaluates the significance of independent variables in a statistical model. The significance of this test indicates that the parameters associated with the independent variables are not zero; hence the variables should be involved in the model. The information in Table 3 shows that The Wald test is significant at 1% level (chi2: 58.51, p-value: 0.0000), which demonstrates that all the parameters of the explanatory variables are not zero and should be included in the model.

Table 3 - GLS estimation results

Variables	Beta Coefficients
C	-0.7429**
	(0. 3280)
$SUSC_{it}$	0.0228***
	(0.0087)
LEV_{it}	-0.0004***
	(0.0001)
LIQ_{it}	0.0002
	(0.0004)
$SIZE_{it}$	0.0149***
	(0.0037)
$GROWTH_{it}$	-0.0001
	(0.0005)
P_t	0.07466*
	(0.0416)
Observation	144
Wald-test (Chi2)	58.51***

Notes: Value in the parentheses are the standard errors (SE),
***, ** and * denote 1%, 5% and 10% significant levels respectively.

Based on the regression result in Table 3, the SUSC is positively correlated to the ROA, at 1% significant level, after controlling LEV, LIQ, SIZE, GROWTH and P. Meanwhile, all control variables are significant at 10% significant

[5] Cluster-robust standard errors had been conducted should have imposed cluster-robust standard errors as part to remedy the problem of autocorrelation and non-normality data.

level except for the LIQ and GROWTH. This indicates that shariah-compliant palm oil companies who certified their palm oil with a sustainability certification have profitability that is 2.3% higher than non-certified companies. Although the LEV is highly significant, the effect on the ROA is rather minimal at a negative 0.004. The variable of firm size (SIZE) has a positive relationship with shariah-compliant palm oil companies which signifies that a 1% increase will improve ROA by around 1.5%. Meanwhile, 1% increases in the average price of crude palm oil increases a shariah-compliant Malaysian palm oil firms' profitability by 7.5%.

Table 3 shows that the SUSC sustainability certification has a positive relationship with the profitability of shariah-compliant palm oil companies of 2%. The result indicates that shariah-compliant palm oil companies with at least one sustainability certification have higher profits than non-certified companies. This result is consistent with the findings of Humphries and Kainer [42] and Gijs et al. [20] who found that having Forest Stewardship Council (FSC) certification helped to improve the performance of forest operators. This result is also consistent with that of Ferron et al. [19] who concluded that Brazilian companies with environmental management system certificates tended to be more profitable than firms without such certification. The result was similar to Haslinda and Glen [18], Perry et al. [71] and Hafizuddin et al. [72] where leveraging on sustainability certification especially the RSPO and/or the MSPO certification not only maximizes environmental protection but also increases a firms' profitability. The significance of the RSPO and MSPO for producing higher profits for palm oil companies shows that the announcement by government of a mandatory MSPO in 2019 is relevant. The Malaysian government also gives financial incentives to all Malaysian palm oil supply chain companies to reduce the burden of subscription costs. This empirical evidence provides a response to the concerns of non-certified companies about the additional costs associated with sustainability certification subscription.

When shariah-compliant palm oil companies certify their plantation areas, they are able to sell their CPO at a higher price. Preusser [40] found the same results for firms with at least a 40% plantation area certified by the RSPO who were able to sell their CPO at RM2468 per ton compared to firms with a 20% or less certified area at RM2,310 per ton. In addition, RSPO-certification is significant for reducing the cost of sales expenses and labor turnover by 6% while also increasing the revenue of these companies [41,73]. By producing certified pam oil, Malaysia can counter the claim that her palm oil industry adversely affects the environment and mitigate the pressure from the anti-palm oil lobbyists and Western NGOs. Besides, there are advantages for certified palm oil companies who disclose their sustainability practices in their annual reports [44]. Islam encourages people to earn profits as a motive to increase the productivity and quality of a business, on the condition that the business does not harm the *maqasid al-shariah* [13]. This is part of business ethics and is a most important principle to follow [74]. Hence, shariah-compliant palm oil companies tend to perform and operate transparently to fulfil the objectives of the *maqasid al-shariah* regarding the preservation of the environment. In addition, some investors prefer to invest in Islamic investments who fulfil their social obligations by not ignoring environmental protection requirements [30]. This is because the environment must be sustained first before sustainable achievement in an Islamic economy [31] as mentioned in the Al-Quran[6]. In short, it is important for shariah-compliant palm oil companies to comply with the principles of the RSPO and MSPO.

As expected, the price provides a positive indicator of a firms' performance as represented by the EBIT. The results of Ramasamy et al. [75] support the finding that the annual average CPO price has a positive relationship with profitability. The price is determined by world markets, and the performance of firms is affected because higher prices are associated with higher profits. Accordingly, Deng and Luo [76] suggest that the commodity price has a positive relationship with total palm oil exports and increases the profitability of the producer companies. Firm size is also positively and significantly related to firm profitability. This finding is consistent with other studies by Muritala [77] and Rahim [78]. Islamic finance requires Shariah-compliance to acquire funds from a lender and they must charge their assets as collateral [79-80]. Hence, larger firms have greater potential than small firms to obtain more debt from external financiers or sukuks [81]. It is suggested that these companies invest more in tangible assets such as land and equipment due to cheaper funding compared to the cost of intangible assets [80]. However, the assets must comply with the requirements of Shariah and not be used for any activities prohibited by Shariah such as major tenants operating conventional banking on the land or the building of shariah-compliant companies [82]. Hence it is suggested that shariah-compliant palm oil companies in Malaysia increase their assets to enjoy the benefits of credibility which makes it easier to obtain more capital.

Among the other variables, only financial leverage negatively influences the shariah-compliant palm oil companies' profitability. A study by Katherine and Subiak [83] and Adlina [84] also found a negative relationship between leverage and plantation companies' profitability. This indicates that shariah-compliant companies should avoid too much leveraging to obtain higher profits. If the shariah-compliant palm oil companies acquire too much debt, this has the potential to reduce their performance and risk bankruptcy [85]. Hence, shariah-compliant companies must take on no more than 33% of debt [86-88]. Otherwise, more equity is suggested to finance the business [89].

[6] Surah Ar-Rum verse 41.

5. Conclusion and Recommendation

This study examines the effect of sustainability certification on the profitability of shariah-compliant palm oil companies in Malaysia. The study employs a panel regression method based on 29 shariah-compliant palm oil companies listed in Bursa Malaysia from 2013 to 2017. The findings show that sustainability certification, (i.e., RSPO and MSPO), is important for these companies. Companies with sustainability certification enjoy 2.3% higher profitability than the non-certified companies. Hence, shariah-compliant palm oil companies should consider subscription to either the RSPO or MSPO certification to boost their profitability and to fulfil the requirements of *maqasid al-shariah* regarding the preservation of the environment and life.

Since the sustainability certification positively affects the financial profitability of Malaysian palm oil companies complying with Shariah, it is relevant to support the Malaysian government's decision to impose mandatory MSPO-certification by the end of 2019. Companies with less financial capability could start with the MSPO certification which is cheaper than the RSPO. Besides, the government may introduce tax incentives and subsidies on related items for certification. These incentives will help to reduce the cost of certification and attract more companies to comply with the MSPO and RSPO, which should lead to an increase in production of certified palm oil in Malaysia. Awareness campaigns on sustainability certification to the community should be done through seminars, mass media and publications. The combination of environmental awareness, economic benefits and social commitment demonstrates progress toward sustainability [90].

This study enriches the existing literature by providing empirical evidence on the relationship between the sustainability certification and the profitability of shariah-compliant palm oil companies. Future research may consider including other palm oil producing countries such as Indonesia and Thailand to provide a better insight into sustainability certification empirically. Besides companies, it is also important to study the effects of sustainability certification on small farmers as there is evidence of trade-offs between sustainable improvements and the inclusion of small farmers in global value chains [91]. The trade-offs between the socio-economic and environmental dimensions of development within the context of transnational business governance and sustainability standards, as exemplified by smallholder certification in the palm oil sector act to improve both sustainability and the inclusion of small farmers.

Acknowledgement

This article was part of research activities funded by MPOB-UKM Endowment Chair Grant. The authors would like to express gratitude to the publisher for the opportunity to publish this article. We thank our colleagues from UKM and MPOB who provided insights and expertise that greatly assisted the research. We are also immensely grateful to the reviewers for their comments on the manuscript.

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