UNCOVERING THE FACTORS DRIVING MSMES TO EMBRACE GREEN FINANCE: A STUDY IN SABAH, MALAYSIA

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ABSTRACT

Green economy is an alternative path to accomplish sustainable development using green financing. Despite the Malaysian government has introduced various green funding, the participation from the Micro, Small and Medium-sized industries (MSMEs) is still considerably low. Therefore, this study sought to explore the predictors that influence the purchase of green financing among services and manufacturing MSMEs owners in Sabah. Guided by the theory of planned behavior (TPB), a research model was established, consisting of attitude, subjective norm, and perceived behavioral control. In addition, the theory of decision-making under uncertainty and theory of environmental attitude were incorporated in the present research model to build and measure the general attitude within the TPB framework. Using purposive sampling technique, the data was collected from a cross-sectional sample of 147 MSME owners through an online self-administered questionnaire. Moreover, the research model was assessed using a PLS-based structural equation modelling technique to examine the hypothesized relationships. The findings highlighted that the constructs of TPB exert significant relationship on the behavioral intention except for subjective norm. Perceived behavioral control was also evidenced as a highly significant predictor of behavioral intention, followed by attitude.

Keywords: Green finance, purchase intention, micro, small-and-medium-sized enterprises (MSMEs), theory of planned behaviour (TPB), theory of decision-making under uncertainty, theory of environmental attitude.

INTRODUCTION

The environmental stress of unsustainable business conducts impacted the longevity human health and environment. (Biswas and Roy, 2015; Chen and Hung, 2016). As an early step to bridge the environmental gap in between ambition and practice (Sameera Mohamed Al Zaidi et al., 2022), green economy serves as an alternative path to overcoming it and accomplishing

environmental, social and economic sustainability (Zysman et al., 2012).Larger firms, particularly the manufacturing industries were fully aware of environmental influences. Compared to other industry counterparts, they are the largest primary consumers of natural resources. According to Tatoglu et al. (2015), the industrial sectors have produced about 36% of carbon footprint and consumed one-third of the energy globally. The carbon emissions from energy consumption in Malaysia surpassed prior years' levels in 2022, reaching 272.9 million tone metric (Statista, 2023). The micro, small and medium-sized enterprises (MSMEs) sectors are quite often being disregarded due to their modest size of operation. Even though MSMEs may appear to have minor environmental impacts, but Hillary (2000) argued that their aggregate impacts should not be undermined. It is believed that MSMEs released at least 50% greenhouse gases (GHG) globally and consumed about 30% to 60% of the energy in the manufacturing processes (OECD, 2022).

Green finance is rapidly being recognised as a means of facilitating the development of green economy model. Green finance, by definition, is a type of financial instrument that used to grant all development projects that will contribute benefits to both the environment and community. Scholars describe green finance as a long-term fund investment for development projects that serves as initiatives and policies to ensure the economy becomes more sustainable (Hohne et al. (2012); Amidjaya and Widago (2019); Dorry and Schulz, 2018). In this study, the concept by PricewaterhouseCoopers (2013) is applied, which states that green finance is specifically designed as environmentally beneficial investments that are used to strengthen the economy by promoting the low-carbon technology, projects, industries, and businesses.

Indeed, the Malaysian government has introduced various initiatives to promote green financing, such as the Green Technology Financing Scheme (GTFS), for industry players to support green economy. The numbers of registered green companies in Malaysia expanded significantly from 2015 to 2022 (MyHijau, 2023). However, Yacob et al. (2013) noted that the MSMEs players in Malaysia are still generally unprepared for undertaking green business model transition. As reviewed by OECD (2022), the mobilising to green involves complicated procedures and resource consuming. Due to limited financial and non-financial resources, this may impede their ability to grow and contribute to environmental sustainability (Bryson et al., 2018). As a result, the green financing adoption remains low, as MSMEs struggle to understand the requirements and procedures of the various financial options (Mohd Fauzi et al., 2021). Considering the global push towards sustainability and the growing demand for environmentally friendly products and services, it is imperative for Malaysians MSMEs to recognize the value of sustainable practices and the advantages of green finance. This would not only provide them with financing but also improve their reputation and competitiveness among environmentally sensitive consumers (Schaper & Volery, 2014). Unfortunately, every investment involves certain level of risk. According to OECD (2022), poor knowledge and capabilities are important limitations that restrain MSMEs from demanding green investment, particularly in the face of uncertainty.

PROBLEM STATEMENT

Previously, secondary data was prioritised for investigating green financing (Chen et al.,2023; Chin et al., 2022; Quang and Thao, 2022). The methodologies incorporated only

measured the supply of green financing while the demand perspective was overlooked. Majority of the studies addressing the influences of green financing on the sustainable development (Muhammad Asif Khan et al., 2022; Su et al., 2022; Ngo et al., 2022). Therefore, an extensive study was conducted to determine factors that can drive the MSME players to embrace green financing especially in the manufacturing and service using the underpinning theory of planned behaviour (TPB) especially in Sabah.

LITERATURE REVIEW

Theoretical foundation.

Behavioural intention study is widely applied to measure the consumers' willingness to adopt specific products/ brands by taking the psychological factors into account. TPB concept is assessed based on the combination of three main variables such as attitude, subjective norm, and perceived behavioural control. TPB was commonly used to examine the intentional study across various study backgrounds, including technology-based products (Yousafzai et al., 2010), green consumerism (Chen et al., 2022), and public healthcare (Pourmand et al., 2020). Chen et al. (2022) discovered that attitude has a mediation role in altering the relationship between perceived behavioural control (e.g., green product knowledge and green product orientation), social influence and the behavioural intention. In addition, there were limited studies that was carried out in green financing especially in Malaysia.

The outcome of attitude.

Shook and Bratianu (2010) argued that the attitude of an individual is formulated based on the beliefs of the possible outcomes that one has. The attitude construct is shaped based on the theory of environmental attitude as well as theory of decision-making under uncertainty. It is believed that individual with positive attitude towards the impact their decision has made towards the environment, then it can create a positive impact on the intention to adopt green financing for their business. If the MSME owners does not have such knowledge and the creditworthiness, then the uncertainty can create risk. The risk can influence the intention to adopt green financing. Therefore, the risk of the owners due to the awareness and financial constraints is measured under attitude in this study. Based on the past literature, the construct of attitude can be explained using awareness, trust, and perceived risk consequences. (Albaity and Rahman, 2019; Abi Huraira Rifas et al., 2022; Memon et al., 2020). Simply said, the increased of positive preference for certain behaviours is triggered by consumers who are aware of and concern about the perceived environmental implications. Therefore, the research hypothesis developed for attitude was as follows:-

H$_1$: The attitude significantly influences on the intention on the adoption of green finance among MSMEs.

The outcome of subjective norm (SN)

Generally, the perceptions and practices of a group of individuals as well as commercial media typically impact the societal behaviours (Chen et al., 2022). In other words, to achieve social desire, individuals will alter their attitude as well as conduct certain socially accepted acts. This

form of changes usually can be seen resulting from the influence of peer pressures, obedience, conformity, and others that shape the intention of an individual. Empirical findings show that SN has a direct effect with the construct of purchase intention (Taneja and Ali, 2020; Kijkasiwat, 2021; Mohammad Muhib Ullah et al., 2022; Purwanto et al., 2022; Rasheed and Siddiqui, 2022; Thanki et al., 2022; Abi Huraira Rifas et al., 2022; Nguyen-Phuoc et al., 2022; Shahida Suleman et al., 2021). For instance, Kijkasiwat (2021) discovered that SN displays a significant role in customer decision-making towards the use of private finance among western small-and-medium sized enterprises. Likewise, to adopt Islamic microfinance, Purwanto et al. (2022) acknowledged that friends, family members and colleagues were the significant predictor of customer behaviour.

Meanwhile, some studies document that SN was not associated with the behavioural intention (Farah Nur Shahirah Kolek et al., 2022; Kachkar and Djafri, 2021; Memon et al., 2019; Maulana et al., 2017). It implies that the decision made by an individual to perform certain acts is not affected by social peers. Study by Farah Nur Shahirah Kolek et al. (2022), for instance, discovered that subjective norm is opposed with the subscribe intention of sustainable finance especially among Malaysian millennials. In fact, they are more concern on the current environmental issues and taking responsibility to invest in green companies. Moreover, Maulana et al. (2017) realised that the participation in Islamic microfinance from micro-entrepreneurs do not influence by social environment because the micro-entrepreneurs were well-equipped with knowledge and experiences to support their financial decision-making. Though there are mixed findings in between the relationship of subjective norm and behavioural intention and yet this study hypothesized it as:

H$_2$: The subjective norm significantly influences the intention on the adoption of green finance among MSMEs.

The outcome of perceived behavioural control (PBC)

Under the theory of TPB, PBC is assigned to examine the individual's perceived ease of performing certain behaviour and tasks (Ajzen, 1991. Thanki et al. (2022) demonstrates that investors are more likely to demand green investments because they have a higher level of PBC. Moreover, Shahida Suleman et al. (2021) also discovered that the purchase intention of halal food among Muslim and Non-Muslim communities were depending on the perceived control belief. Another case by Nguyen-Phuoc et al. (2022) details that PBC was the significant predictor of customers' intention to use shared ride-hailing services.

Meanwhile, Rasheed and Siddiqui (2022) found that there was no relationship between PBC and intention to adopt Islamic finance among MSME owner-managers in developing nation like Pakistan. Similarly, the intention to purchase sustainable finance among Malaysian millennials does not affect by the PBC (Farah Nur Shahirah Kolek et al., 2022). In Bangladesh, Chanda et al. (2023) realised that PBC does not have a significant effect on the purchase intention of eco-friendly property. In this study, however, PBC refers to the perceived ability of MSMEs to engage in green financing adoption. This includes their financial capabilities,

knowledge about green financing, and access to relevant resources. Therefore, this study hypothesized that as follow:-

H3: The perceived behavioural control significantly influences the intention on the adoption of green finance among MSMEs.
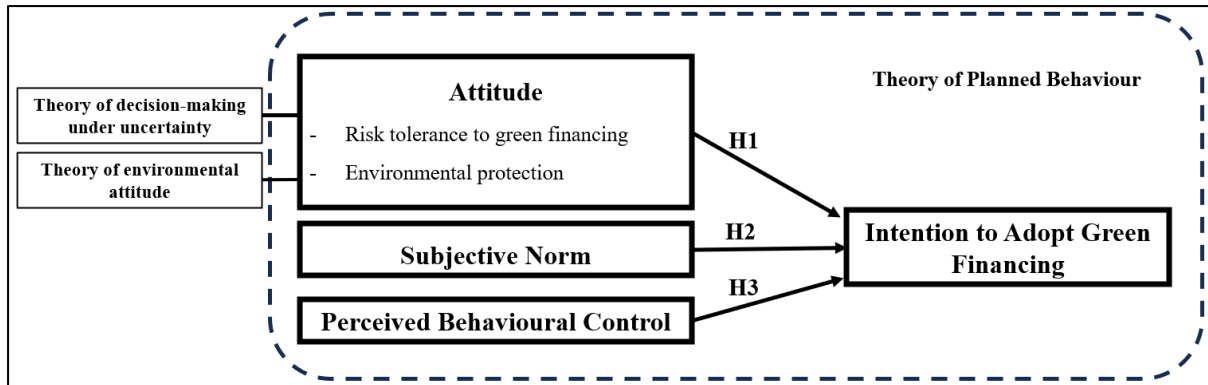

Figure 2: Research Model

METHODOLOGY

Participants and procedures

The present study employed a cross-sectional research design to determine factors associated the MSMEs players to demand green financing for their own business. As depicted in Figure 2, the research model was established by incorporating the TPB framework with the theories of environmental attitude and decision-making under uncertainty. To verify the research model, an online self-administered questionnaire was deployed. The survey was conducted within three (3) months from May to July 2023 via the Google Form. Purposive sampling technique was used to enrol study participants since several inclusion criteria were established. They are (1) MSME players are in the manufacturing and services industries, and (2) the MSME enterprise currently operating in the Sabah region. This study only confines to the manufacturing, and services sectors of MSMEs because they contribute the most to the national and state economy. According to the Department of Statistics Malaysia [DOSM] (2023), the contribution of MSMEs to the national gross domestic product (GDP) in 2022 has increased to nearly 38.4 percent, slightly higher than previous year at 37.4 percent (2021). Meanwhile, power analysis was utilised to calculate the sample size (Hair et al., 2019; Uttley, 2019), along with requirement of medium effect size, and power required as 0.95. It was found that the minimum sample size required for the study is 119. Following that, out of 163 questionnaires 147 copies were valid for further analysis, resulting in the sample efficiency of 90.2 per cent. Furthermore, the Statistical Package for Social Science (SPSS) 29 was utilised to detail the study respondent characteristics as shown in Table 1. Accordingly, about 55.1% of the MSMEs players were involved in the manufacturing sector while the services sector only contributed 44.9%. In addition, microenterprises (89.1%) led the list, followed by the small-sized and medium-sized enterprises with 7.5% and 3.4%, respectively. This supported the fact that majority of the responding MSME enterprises had fewer than 5 employees and an annual

income of less than RM300,000. In terms of primary business activity, just over half of the MSME respondents (59.2%) reported producing food and beverages products, which is followed by apparel, textile and handcraft (15.0%), wholesale and retail trade (10.9%) and others. Besides, the responded MSMEs enterprises were considered as startup companies because with 62.6% of the enterprises were established less than 5 years. Lastly, more than half of the respondents (55.8%) were in their early 40s and business owners.

Table 1: Characteristics of Study Respondents ($n = 147$).

Characteristics	n(%)	$Mean$ (SD)
Business Sector		
Manufacturing sector	81(55.1%)	
Services sector	66(44.9%)	
Size of Business Operation		
Microenterprise	131(89.1%)	
Small-sized enterprise	11(7.5%)	
Medium-sized enterprise	5(3.4%)	
Business Activity		
Apparel, textile, and handicraft	22(15.0%)	
Cleaning services	1(0.7%)	
Education	1(0.7%)	
Food and beverages products	87(59.2%)	
Health and cosmetic product	6(4.1%)	
IT and technology	1(0.7%)	
Machinery and equipment	6(4.1%)	
Printing services	1(0.7%)	
Transportation and storage	2(1.4%)	
Wholesale and retail trade	16(10.9%)	
Wood and furniture	4(2.7%)	
Firm Age		
Less than 5 years	92(62.6%)	
More than 5 years	55(37.4%)	
Business Location		
Kudat Division	14(9.5%)	
Sandakan Division	16(10.9%)	
Tawau Division	19(12.9%)	
Interior Division	16(10.9%)	
West Coast Division	82(55.8%)	
Job Designation		
Owner	82(55.8%)	
Manager	38(25.9%)	
Owner-Manager	27(18.4%)	
Age of respondents		39.1(11.4)

Study Measures

To perform data collection, an online self-completion questionnaire with two sections was designed. Section A measured the predictors of green financing purchase intention whereas Section B examined the characteristics of study respondents which including the respondents' age, current designation, current business location, nature of business sector, types of business activity, and firm age. In addition, this research instrument was modified after being adopted from several sources. Particularly, the measurement for attitude and behavioral intention were derived from the work of Emeritus (2023). Meanwhile, subjective norms were drawn from Popescu et al. (2019) and perceived behavioral control from Maichum et al. (2016). All measuring items require respondents to indicate their level of agreement using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). A minimum sample size of 30 local MSMEs respondents was used for pilot testing as suggested by Johanson and Brooks (2010). The mean analysis and normality tests of all the measures that were demonstrated in Table 2.

Table 2: Data statistics.

Constructs	N	Min	Max	Mean	S.D.	Kolmogrov-Smirnov		Shapiro-Wilk	
						t-value	*p*-value	*t*-value	*p*-value
AT	147	1.10	5.00	3.77	0.60	0.08	0.02	0.96	< 0.001
SN	147	1.10	5.00	3.54	0.78	0.08	0.01	0.97	0.002
PBC	147	1.00	5.00	3.67	0.70	0.13	< 0.001	0.97	0.004
BI	147	1.00	5.00	3.79	0.73	0.09	0.004	0.95	< 0.001

Notes: AT: attitude, SN: subjective norm, PBC: perceived behavioural control, BI: behavioural intention

FINDINGS

Analysis and Results

The partial least square structural equation modelling (PLS-SEM) technique was applied to discover the relationships appeared in the research model. To perform PLS-SEM, Anderson and Gerbing (1988) propose to undertake two-stage analytical procedures. Firstly, the outer model (measurement model) is assessed to ensure that the measures are valid and reliable. Followed by assessing the inner model (structural model) to determine the significance of the hypothesized direct or indirect relationship through bootstrapping procedure of 5,000 resamples. Before proceeding with the PLS analysis, CMB has been assessed to determine the present of response biases in the dataset.

Common method bias (CMB)

CMB test was necessitated and both procedural and statistical approach was being deployed. In terms of procedural approach, a precise definition of green finance and disclaimer statements was attached in the cover letter for the reference of respondents to minimize the

ambiguous level. Meanwhile, for statistical remedies, a full collinearity test as recommended by Kock and Lynn (2012) and Kock (2015) was utilised through the examination of variance inflation factor (VIF) coefficient. Findings revealed that (as per Table 5) all constructs have VIF value less than the suggested value at 3.3, implying that CMB was absent in the data set.

Assessment of measurement model

In the first stage of PLS analysis, the reliability and validity of the data were examined. The analysis was begun with the confirmatory factor analysis (CFA) also known as factor loadings as highlighted in Table 3. Following Hair et al. (2022), factor loadings with more than 0.7 were maintained while loadings below 0.4 were automatically eliminated from the analysis. Using the above-mentioned criteria, this study has excluded some indicators with loadings less than 0.7 except the attitude construct. As argued by Hair et al. (2022), indicators with loadings in between 0.4 and 0.7 indeed can be retained unless it enhances the composite reliability of the measurement model. To measure the internal reliability, Cronbach's alpha and composite reliability tests were deployed. Aburumman et al. (2023) indicates that the cut-off value for both tests should be in between 0.70 and 0.95. In this case, the results exhibit that all constructs have achieved the recommended value, ranging from 0.88 to 0.95. Therefore, the internal consistency for the measurement model has been attained. Meanwhile, the average variance extracted (AVE) is examined to address the convergent validity. As recommended by Hair et al. (2017), all AVE are required to surpass the minimum value of 0.5. Based on the findings, all constructs have attained the minimum benchmarking values, signifying that convergent validity is achieved.

Table 3: Analysis of measurement model.

Constructs	Items	Loadings	Cronbach's Alpha	CR (rho_a)	CR (rho_c)	AVE
Attitude (AT)	AT1	0.644	0.883	0.889	0.906	0.519
	AT3	0.671				
	AT4	0.757				
	AT5	0.776				
	AT6	0.642				
	AT7	0.680				
	AT8	0.690				
	AT9	0.806				
	AT10	0.792				
Subjective Norm (SN)	SN1	0.754	0.924	0.937	0.936	0.621
	SN2	0.849				
	SN3	0.836				
	SN4	0.780				
	SN6	0.712				
	SN7	0.792				
	SN8	0.748				
	SN9	0.790				

Construct	Item	Loading				
	SN10	0.824				
Perceived Behavioural Control (PBC)	PBC1	0.747	0.922	0.929	0.935	0.617
	PBC2	0.790				
	PBC3	0.738				
	PBC4	0.826				
	PBC6	0.815				
	PBC7	0.729				
	PBC8	0.773				
	PBC9	0.808				
	PBC10	0.838				
Behavioural Intention (BI)	BI1	0.826	0.945	0.947	0.954	0.696
	BI2	0.820				
	BI4	0.862				
	BI5	0.841				
	BI6	0.812				
	BI7	0.794				
	BI8	0.829				
	BI9	0.848				
	BI10	0.876				

Additionally, Table 4 illustrates the results of discriminant validity through the Heterotrait-Monotrait Ratio (HTMT). As suggested by Henseler et al. (2015), all HTMT values have to be less than 0.9. Based on the findings, all the upper threshold values were found to meet the HTMT criterion which implied that discriminant validity was achieved. In view of the measurement model analyses, all constructs were considered reliable and valid.

Table 4: Discriminant validity (HTMT).

Constructs	AT	BI	PBC	SN
Attitude (AT)				
Behavioural Intention (BI)	0.696			
Perceived Behavioural Control (PBC)	0.774	0.753		
Subjective Norm (SN)	0.630	0.513	0.685	

Assessment of structural model

The structural model assessment is the second analytical stage. This assessment aims to investigate the model predictive capabilities and the interrelationship between constructs. According to Hair et al. (2022), the assessment of structural model involves coefficient of determination (R^2), variance inflation factor (VIF), effect size (f^2), and path coefficient through the bootstrapping approach with 5,000 sub-samples. Table 5 summarizes the results of the structural model. Findings evident that the VIF score for each construct is lower than the threshold value at 3.3, signaling that the present model is absent from multicollinearity issue. Apart from that, empirical findings (Table 5 and Figure 4) reveal that behavioral intention was significantly influenced by attitude ($\beta = 0.27, t = 2.75, p < 0.05, CI = [0.07, 0.46]$) and

perceived behavioural control ($\beta = 0.52, t = 6.41, p < 0.05, CI = [0.37, 0.69]$). To put it in another way, both constructs have a direct relation to behavioral intention. Thereby, these findings support H_1 and H_3 respectively. However, subjective norm was found insignificant to behavioural intention since p-value was greater than 0.05 and the t-value was less than 1.96. Moreover, the confidence interval for subjective norm construct was straddle in between the zero. Hence, there was sufficient statistical evidence to show that there was zero association in between subjective norm and behavioural intention (H_2 is not supported).

Table 5: Analysis of structural model.

| Relationships | Std. Beta | S.D. | t-value | p-value | CI | | VIF | R^2 | f^2 |
					LL	UL			
H_1: AT -> BI	0.269	0.098	2.745	0.006 *	0.073	0.456	2.118	0.552	0.076
H_2: SN -> BI	0.007	0.089	0.081	0.936	−0.167	0.177	1.824		0.000
H_3: PBC -> BI	0.523	0.081	6.412	0.000 *	0.373	0.693	2.434		0.250

Notes: AT: attitude, SN: subjective norm, PBC: perceived behavioural control, BI: behavioural intention, S.D.: standard deviation, CI: confidence interval, LL: lower level, UL: upper level, VIF: variance inflation factor
Note: *: p<0.05

Besides that, the coefficient of R^2 demonstrates 0.552 or 55.2% of behavioural intention was explained by attitude, subjective norm, and perceived behavioural control. It possesses that each construct has its ability to explain the purchase intention of green financing among the MSMEs. Moreover, the effect size, f^2, for each predictive construct was evaluated on the endogenous construct. In this study, perceived behavioral control (0.25) has a medium effect on behavioural intention, followed by attitude (0.076) with small effect and zero effect for the subjective norm. Additionally, PLSpredict as suggested by Shmueli et al. (2019) are assessed and its findings were exhibited in Table 6. Before undertaking the prediction statistics assessment, Evermann and Tate (2016) opted that the investigation should began with the interpretation of the Q^2 statistics. The findings demonstrated that all measuring items of behavioural intention have Q^2 coefficient of larger than zero, signalling that the PLS path model outperforms the most naïve benchmark. Besides that, this model exhibited that the PLS-SEM analysis outperforms the naïve LM model benchmark since all the RMSE coefficients produced by PLS-SEM analysis are less than the LM model benchmark. In other words, this research model possesses a higher predictive power.
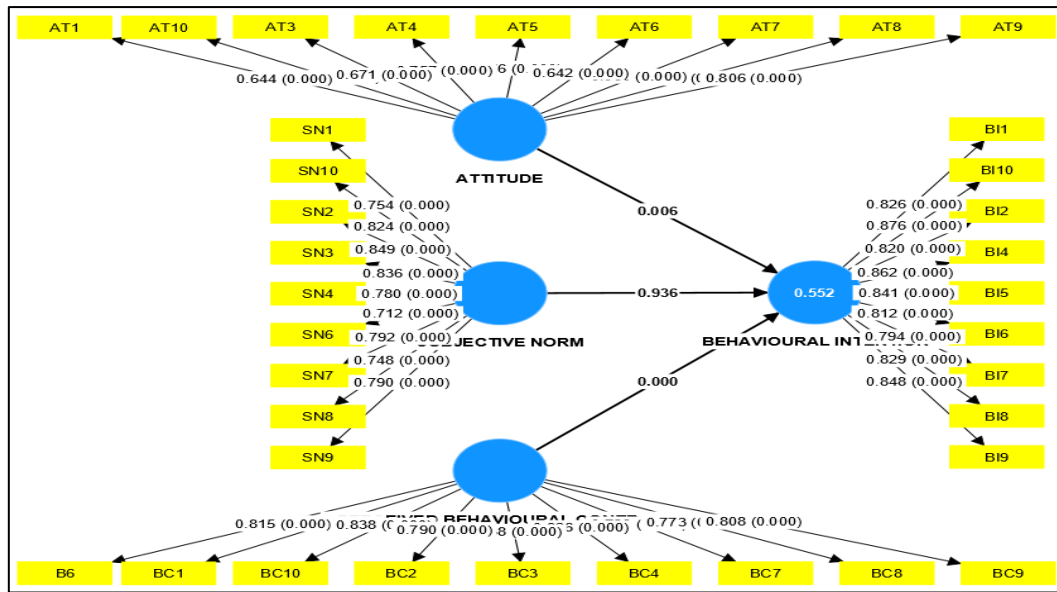
Figure 4: Structural model.

Table 6: Analysis of PLSpredict

| Items | Q^2 predict | Root Mean Square Error (RMSE) | |
		PLS-SEM	LM
BI1	0.383	0.685	0.796
BI2	0.396	0.694	0.791
BI4	0.367	0.715	0.822
BI5	0.436	0.666	0.701
BI6	0.331	0.699	0.794
BI7	0.259	0.814	0.940
BI8	0.292	0.750	0.786
BI9	0.322	0.774	0.867
BI10	0.384	0.710	0.797

Note: BI: Behavioural intention

Discussion of the study

The central idea of the present study is to understand the perception of Sabah MSMEs sectors on green financing adoption using the theory of planned behaviour. In fact, all the TPB constructs were found significantly influence the behavioural intention of MSMEs in purchasing green finance, except subjective norm. Accordingly, attitude was found positively associated with behavioural intention. This finding is consistent with past literature implying that attitude is a significant predictor of behavioural intention such as Taneja and Ali (2020), Kijkasiwat (2021), Purwanto et al. (2022), and Farah Nur Shahirah Kolek et al. (2022). Meanwhile, in this study, the measuring of attitude is unique as compared to another research framework using the TPB model. This is because the construct is being measured by two sub-elements, namely environment protection and risk tolerance towards green financing, rather than measuring from a broad perspective. Based on the results, the significant findings could explain that every individual has the sense of obligation to safeguard the environment while operating businesses. This suggests that a higher level of environmental protection awareness

exists among respondents. Secondly, the perceived higher level of risk tolerance for green financing is more likely to have contributed to the significant findings. However, environmental consciousness contributes far more than risk tolerance. This suggests that respondents have positive attitude towards green financing are a result of their higher level of environmental consciousness. This statement is supported by Taneja and Ali (2020) that bank customers are more concerned on environmentally sustainable services when they gain sufficient information and thus developing a positive attitude. In these regard, policy makers or bankers are required to pay extra attention in keeping with the above-mentioned statement. Though the results show that environmental awareness is the factors that shapes the favourable attitude from respondents, the perceived risk tolerance yet cannot be ignored. As Rasheed and Siddiqui (2022) determined that the attitude formation of the MSMEs is significantly influenced by having financial knowledge and the perceived risk. Therefore, there is a stress for policy makers and bankers to design a constructive financing scheme promotion activity that have the necessary elements to foster a favourable attitude among the potential stakeholders.

Besides that, perceived behavioural control was realised to be the main significant predictor of behavioural intention. Put differently, there is a strong direct relationship between perceived behavioural control and purchase behavioural intention of green financing, which align with the studies of Taneja and Ali (2020), Purwanto et al. (2022), and Abdullah Mohammed Awn et al. (2020). Referring to the context of study, respondents are willing to participate in green financing nonetheless they are newly exposed to the topic with minimal level of knowledge. Thus, they are believed to have a higher level of confidence and are committed to using green financing for their own business. Aside from that, supporting factors such as perceived ease of access to information, institutional support and simple application procedure could further build up the intention actively seeking for green financing scheme. As demonstrated in the present finding, about 60% of the respondents evinced a positive perceived behavioural control because of the above-mentioned reasons. Moreover, Khan et al. (2022) agreed that complete information coupled with perception of being able to achieve certain goals could prompt the adoption of practice increases. Along this line, government and other stakeholders should disseminate adequate information and designing an easy and quick financing scheme application to encourage the MSMEs players to retrieve its advantages.

Conceptually, subjective norms are being measured by looking at the changes from the social influence on MSMEs players in purchasing the green financing scheme. Somehow, this study revealed that subjective norms does not influence the behavioural intention. In another words, social factors are not considered as an essential predictor of the willingness to purchase green financing among the MSME owners (Taneja and Ali, 2020; Kijkasiwat, 2021; Purwanto et al., 2022; Thanki et al., 2022; Mohammad Muib Ullah et al., 2022). In view of this study context, the possible reason to justify the contradict finding could be the public awareness on green financing among Sabah is still considerably low. Since the public has limited understandings on this particular topic that concerning on the environmental from the financial perspective. Moreover, the emergence of green financing scheme by the local financial institutions yet situated at its infant stage. Consequently, limited knowledge from the public does not bring a significant social impact to the MSMEs owners while making investment

decision. Likewise, Akhtar and Das (2019) determined that knowledge indeed improves subjective norms as it encourages the ability of others to counsel or advice one on the need to improve certain financial management skills. To that extent, the participation of MSMEs in green financing could be due to personal norm and personal objective as being highlighted by Osman (2019) and Taufique and Vaithianathan (2018) but not from the social entities, such as family relatives, friends, and business community.

Theoretical implications

The theory of decision making under uncertainty is useful in this context because MSMEs often have limited information about new financial products, unsure of how they are different than traditional financing products, and about the effectiveness of greener methods to achieve greater financial stability. This level of uncertainty can lead to hesitancy about adopting sustainable financial products unless there is a clear and straightforward information and communication program about the added value that such financing products can provide. The theory of environmental attitude helps to evaluate the characteristics of the respondents towards their concern in preserving the environment while maximizing wealth.

The theory of planned behaviour is also useful in understanding why MSMEs choose to adopt sustainable financing products. It provides a framework for identifying the attitudes, subjective norms, and perceived behavioural control that influence MSME decision-making when it comes to sustainable finance. By examining these factors, researchers can better identify the motivations that drive MSMEs' intentions to adopt sustainable financing products, which will help improve policy decisions and streamline educational tools to spur their adoption. Overall, the theoretical contribution of using the theory of decision making under uncertainty and the theory of planned behaviour provides a sound foundation for researchers and policymakers to understand and predict the behaviour of MSMEs in transitioning to more sustainable financing options.

Managerial implications

Empirical results revealed that MSMEs with positive attitude were more likely to be environmental conscious. However, risk tolerance toward green financing was part of the measures used to capture the attitudes, but it was placed second. Therefore, policymakers should include adequate knowledge about the risks that investors may face while performing promotional activities. At the same time, policymakers can target environmentally sensitive markets and promote initiatives for MSME to embrace sustainable practices. For example, tax exemption can be given to MSMEs that adopt renewable energy or use energy efficient devices in their daily operations. All of these managerial implications make it easier and affordable for MSME businesses to adopt green practices.

CONCLUSION

Indeed, this study emphasizes on the important predictors of intention to adopt green financing among the MSMEs sectors from Sabah perspective. Utilising the theory of planned behaviour (TPB) model, perceived behavioural control was found a significant predictor of purchase intention towards green financing, followed by the attitude of individuals. Though subjective

norms present an insignificant finding, yet the present study still supported the TPB model in explaining the customer intention regarding demanding green financing. With that, the present findings provide comprehensive insights to all policymakers, regulatory bodies and other relevant parties while structuring effective interventions in encouraging more stakeholders to participate in purchasing the green finance.

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