

# Malaysian consumers' willingness to choose Islamic mortgage products

## An extension of the theory of interpersonal behaviour

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### Abstract

**Purpose** – The purpose of this paper is to understand consumers' willingness to choose Islamic mortgage products as a way to help Islamic banks tap into the Islamic mortgage sector in Malaysia.

**Design/methodology/approach** – Using the Theory of Interpersonal Behaviour as a point of departure, this study proposes a framework that examines factors influencing consumers' willingness to choose Islamic mortgage products. A total of 282 usable surveys are obtained from customers of Islamic banks and the data were analysed using partial least squares.

**Findings** – The results indicate that affect, social factors, and facilitating conditions influence willingness to choose Islamic mortgages. Besides these factors, the added factors, namely, perceived risk and perceived financial benefit, significantly influence consumers' willingness to choose Islamic mortgages.

**Research limitations/implications** – This study is confined to two public universities in Malaysia. Further testing of the proposed model across different population groups is necessary to determine the generalisability of this study's findings. This study applies consumer factors such as affect, social factors, facilitating conditions, perceived risk and perceived financial benefit. Further testing on other factors is needed to expand the findings in this area.

**Practical implications** – The results could help bank managers make improved decisions about the factors which they need to effectively market Islamic mortgage products. This study provides insights and guidance for bank managers to manage Islamic mortgage products.

**Originality/value** – The main contribution of this paper is a proposed framework of consumers' willingness to choose Islamic mortgage products which takes into account the key factors necessary to predict consumers' demand.

**Keywords** Consumer behaviour, Housing, Malaysia, Consumer finance

**Paper type** Research paper



### Introduction

Purchasing a home is the largest financial decision of consumers (Hjalmarsson and Hjalmarsson, 2009). Furthermore, a house is essential to a consumer for it is a basic need. Owing to this, a consumer must meet this need first, because it is imperative

to the individuals' well-being, culture and civility of the community (Hasan, 2011). With an improved house condition, valuable family activities and worship can be enhanced while improving residents' state of mind and intelligence (Baharum, 1991). Therefore, owning a house suiting one's need is an aspiration for many consumers. At a young age however, one has limited financial resources to purchase a house with cash. This is in consonance with Mishkin and Eakins (2008) and Baharum (1991) who assert that consumers have limited financial resources, making it difficult to buy houses immediately using cash term. As such, the consumer needs to accumulate savings for a longer period in order to purchase a house. Thus, mortgage facilities are of relevance and encourage consumers to approach banks or financial institutions for the purpose of purchasing homes. Since in the Islamic banking system borrowing money from the government and private banks involves *riba* (i.e. interest), which is forbidden among Muslim consumers, consumers typically prefer Islamic banks. Islamic banks offer Islamic mortgage products which are free from *riba*, *gharar* (i.e. uncertainty) and any prohibited elements in Islamic banking, consistent with *Shariah Islamiyyah*.

However, criticisms about the operations of Islamic mortgage products in Malaysia do exist. Criticisms are derived from negative consumer perceptions (Rosly, 1999) that call for a paradigm shift for Islamic banks to fully focus on consumers' preference. A contemporary statistic recorded that the Islamic banking system received at least 4,000 complaints since 2003, which concern consumers' dissatisfaction towards Islamic banking products, namely, Islamic mortgage products (Md-Yusop, 2012). These figures explain why the Islamic mortgage system has poor acceptance and low market share in the Malaysian mortgage industry. Consumers are likely to choose conventional home loans due to the low interest regime and shorter loan tenure.

It is critical, therefore, to understand what factors facilitate or inhibit consumers' willingness to choose Islamic mortgage products. Drawing upon the theory of interpersonal behaviour (TIB), this study postulates that affect, facilitating conditions, social factors, perceived risk and perceived financial benefit influence the consumer willingness.

### **The TIB**

In order to understand consumers' willingness to purchase Islamic mortgage products, a consumer theory is needed to increase our understanding of factors influencing willingness. Hence, the TIB is selected. This theory was developed by Harry C. Triandis (1971) and is termed as the TIB. The theory postulates that the probability of performing an act is a function of habit, intention to perform the act and facilitating conditions (Chang and Cheung, 2001). The TIB asserts that behaviours result from behavioural intention, that behavioural intention is a direct function of affect, perceived consequences, and social factors and, that beliefs regarding "the presence or absence of requisite resources and opportunities" (i.e. enabling resources) are the antecedents of facilitating conditions.

To date, this theory has yet to be tested in the context of Islamic mortgage products, perhaps due to its complex nature compared with the theory of reasoned action (TRA) and the theory of planned behaviour (TPB), making it under-researched (e.g. Moody and Siponen, 2013; Pee *et al.*, 2008). The extant literature suggests limited effort has been done to extend the theory to the Islamic mortgage context (e.g. Alam *et al.*, 2012). Hence, the current study closes the gap.

The more logical reasoning on selecting TIB is based on the following:

- (1) First, the TIB provides an exact definition of “attitude” that is composed of perceived consequence and affect. The TPB and the TRA explain attitude from the context of perceived consequence which is a cognitive aspect of attitude, while the affective aspect of attitude is generally untapped. The TIB’s affect often yields independent information and empirical results rather than perceived consequence (Pee *et al.*, 2008).
- (2) Second, the TIB provides a comprehensive definition for social factors. According to Moody and Siponen (2013), the TIB is more socially oriented than either the TRA or the TPB, and it proposes several sources of social influence beyond social norms. The current study extends those sources of social influence.
- (3) Third, the TIB provides a broader understanding of facilitating conditions that may lead to personal use of the internet in the workplace (e.g. Moody and Siponen, 2013; Pee *et al.*, 2008). In the current context, however, facilitating conditions are related to the actual controls existing among consumers prior to the selection of the mortgage providers.

Importantly, the TIB has been flexible to expound behaviour in different settings, not only general behavioural decisions in the internet, but also raising specific disciplines such as online legal services (e.g. Cho, 2006), workplace computing (e.g. Pee *et al.*, 2008) and internet piracy (e.g. Ramayah *et al.*, 2008, 2009). In contrast, to our knowledge, there is no study in the area of Islamic mortgage extending the TIB (e.g. Amin *et al.*, 2013, 2014a, b; Alam *et al.*, 2012). Owing to the parsimonious nature of the TIB and its wider empirical supports, the current study is making a first attempt to extend the theory and expects to generalise it within the context of Islamic mortgage. Hence, this effort extends the theory to the current context while closing the gap.

### **Literature review on Islamic mortgage studies**

Extant literature describes that Islamic mortgage studies are developed in five primary topics: the legal context, theory testing, market survey without theory adaptation, qualitative study and comparative analysis. The following are the details.

First, several studies examine Islamic mortgage in a legal context (Mohd-Yasin, 1997; Abu-Backer, 2002). Mohd-Yasin’s (1997) study explains *bai bithaman ajil* from two cases occurring in connection with the Islamic banking system, namely, Bank Islam Malaysia Berhad vs Adnan Omar and Dato Hj Nik Mahmud Daud. These cases reveal the real flaws of *bai bithaman ajil* practice in Malaysia. For instance, in the case of Adnan Omar, no rebate (*ibra*) is offered to relieve his liability. In fact, the bank asks the full selling price, which is considered *unIslamic*. The *bai bithaman ajil* practice of Islamic banking is also criticised by Abu-Backer (2002), who views it as a blot on the administration of Islamic justice. This is because no reference is made to any *Shariah* expert during the hearing on the features and rules applicable to a *bai bithaman ajil* transaction. The bank also does not exercise its discretion to give a rebate to the customer that leads to accusations against Islamic finance, being abusive and expensive – thereby this case creates inconsistency on the spirit and intent of justice and equity under the *Shariah* law (Abu-Backer, 2002). In all, these studies share the same view that many Islamic financial instruments are parallel to conventional banking instruments, which may not be within the spirit and intent of the *Quranic* injunctions.

Second, several studies examine Islamic mortgage from a context of theory testing. A study by Md-Taib *et al.* (2008) tests the TRA model for *musharakah mutanaqisah* (i.e. partnership based mortgage) mortgage, in which, their findings suggest that the behavioural intention for the mortgage is determined by attitude and social influence. However, the measures used are scant and warrant further investigation to explore the patronage factors for Islamic mortgage products. Given the limited factors tested, consumers' acceptance of Islamic mortgage is difficult to understand and therefore, depending on two factors alone may insufficient. Likewise, Abdul-Razak and Abduh (2012) examine the effects of attitude and subjective norm on the adoption of *musharakah mutanaqisah* mortgage. Similar to Md-Taib *et al.* (2008), this study does not examine factors beyond attitude and subjective norm. The inclusion of new factors is essential to capture a complex consumer behaviour, which, in turn, offers an improved insight with regards to the effects of varying factors on consumer behaviour. Thus, this permits improved future planning of Islamic mortgage preference. In contrast, a study by Alam *et al.* (2012) extends the TPB by testing the religiosity factor as an added predictor. The study discovers a significant effect of religiosity on individual's decision to choose Islamic mortgage products. The TPB's constructs are also supported. In line with Alam *et al.* (2012), Amin *et al.* (2014a) also extend the TPB by including Islamicity of product to understand consumer acceptance of Islamic mortgage. Besides attitude, subjective norm and control, Islamicity of product is statistically significant in motivating consumers to choose Islamic mortgage products. The same authors also extend the theory to examine consumers' willingness in choosing *musharakah mutanaqisah* mortgage. Unlike Alam *et al.* (2012) and Amin *et al.* (2014a, b) choose covariance-based structural equation modelling and discover attitude, subjective norm and perceived behavioural control are instrumental in the formation of consumer's willingness.

Third, several studies are conducted based on market survey without theory adaptation. Based on literature analyses, two studies are examined (i.e. Tameme and Asutay, 2012; Abdul-Razak and Md-Taib, 2011). Tameme and Asutay's (2012) study explains that social factors and lifestyle are important for the selection of Islamic mortgage products. This study replicates Dar's (2002) study examining the effective demand for Islamic mortgage in the UK Islamic mortgage market. The only difference is that it extends a quantitative survey to test Dar's (2002) theory. Relatively, Abdul-Razak and Md-Taib (2011) conduct a similar study but with a different scope. Unlike Tameme and Asutay (2012), Abdul-Razak and Md-Taib (2011) explain perceptions of postgraduate students of *bai bithaman ajil* and *musharakah mutanaqisah* mortgages. Tameme and Asutay (2012), however, do not explore this specific topic, perhaps because of a different research paradigm. The study explains that the respondents are discontent with the prevailing mode of *bai bithaman ajil*, owing to the fact that the bank's profit is computed upfront, resulting in high price, unfairness and thus burdening society.

Fourth, studies in Islamic mortgage have been qualitative in nature. For instance, Shuib *et al.* (2011) choose such a method to examine Kuwait Finance House's *musharakah mutanaqisah* mortgage. The study asserts that there are three essential benefits of offering such a financing product. First, there exists a profit sharing element in the product offering between the bank and the customer. Second, there is the availability of cash assistance in which the customer can receive cash through share selling to the bank of the share which they possess. Third, the product offers early settlement for customers who have the capacity to do so. The author's argument is in

consonance with Abdul-Razak and Md-Taib's (2011) study, in which Abdul-Razak and Md-Taib (2011) argue that *musharakah mutanaqisah* is a potential alternative in Islamic mortgage.

Fifth, several studies have focused on comparative analysis between *musharakah mutanaqisah* and *bai bithaman ajil* (e.g. Osmani and Abdullah, 2010; Yaakob and Abdul-Rahim, 2009; Mydin-Meera and Abdul-Razak, 2005). A study by Osmani and Abdullah (2010) compares *bai bithaman ajil* with *musharakah mutanaqisah*. This study, however, replicates a work by Mydin-Meera and Abdul-Razak (2005), in which this work asserts that *musharakah mutanaqisah* is a better alternative in comparison to a conventional mortgage or *bai bithaman ajil*. Osmani and Abdullah (2010) confirm Mydin-Meera and Abdul-Razak's (2005) assertion, which claims that *musharakah mutanaqisah* is the optimal alternative compared with *bai bithaman ajil* mortgage. This being that it is more flexible for the customers as they can pay rentals according to the market price, while Yaakob and Abdul-Rahim's (2009) study offers a thoughtful justification with respect to the permissibility of *bai bithaman ajil* and *musharakah mutanaqisah* mortgage. The study discovers that the modus operandi of *musharakah mutanaqisah* mortgage in Kuwait Finance House, Maybank Islamic Berhad and RHB Islamic Bank is the same but different in terms of implementations. For instance, Kuwait Finance House incorporates *ijarah mawsufah fi dhimma* in its *musharakah mutanaqisah* mortgage. Furthermore, the permissibility of the *bai bithaman ajil* based on the majority of *fuqaha (jumhur fuqaha)* in which they argue that fixing of a higher price is permissible and is not *riba* when payment is deferred, since the opportunity cost facing Islamic bank when funds are lent out to the customer. The current practice of the *bai bithaman ajil*, however, deviates slightly for it is used to finance residential projects under construction instead of ready property. Nevertheless, the National Shariah Advisory Council and the Security Commission confirm that *bai bithaman ajil* is a valid contract. This thoughtful justification is not provided by Osmani and Abdullah (2010) and Mydin-Meera and Abdul-Razak (2005). In all, although *bai bithaman ajil* is openly criticised by the contemporary scholars (e.g. Mydin-Meera and Abdul-Razak, 2009; Osmani and Abdullah, 2010), Yaakob and Abdul-Rahim's (2009) assert that *bai bithaman ajil* meets the *maqasid al-Shariah* (i.e. Shariah objectives), making it permissible.

## Hypothesis development

### *Affect*

Consumers' decision to choose Islamic mortgage is expected to be facilitating, interesting, gratifying and comforting. There exist empirical supports pertinent to the relationship between affect and behavioural intention (e.g. Woon and Pee, 2004; Karaiskos *et al.*, 2008; Ramayah *et al.*, 2008). Woon and Pee (2004) find a strong relationship between affective factor and intention in the context of internet abuse. Similarly, Karaiskos *et al.* (2008) find that affective factor has a significant relationship with intention. In a Malaysian context, Ramayah *et al.* (2008) discover that affect influences intention towards internet piracy. To a certain relevance, affect deems appropriate in the current context. In the current context, consumers assume to perform information seeking before adoption because mortgage has long-term financial implications on them which affect their emotion or feeling. Given such an information search, consumers can feel whether Islamic mortgage products are facilitating, comforting or not. Koklic and Vida (2009) have proven information search before taking a mortgage can improve confidence and gratification intrinsically motivating

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consumers to take up mortgages. Compared with other settings such as internet piracy (Ramayah *et al.*, 2008) and internet abuse (Woon and Pee, 2004), the environment of Islamic mortgage products is distinct, riskier, time consuming and expensive for a breadwinner intending to give a shelter to his family. Thus, affect plays an important role in understanding consumer's willingness to choose Islamic mortgage products. Thus:

*H1.* There is a positive relationship between affect and willingness to choose Islamic mortgage products.

#### *Social factors*

Social factors are defined as an individual's assessment of the reference group's culture and the specific interpersonal agreements that the individual has made with others in specific social situations (e.g. Moody and Siponen, 2013; Woon and Pee, 2004). Prior studies argue that social factors have a significant effect on behavioural intention in various settings (e.g. Chang and Cheung, 2001; Pee *et al.*, 2008; Moody and Siponen, 2013). Moody and Siponen's (2013) study discovers a significant effect of social factors on intention, explaining the crucial role of social factors on the formation of behavioural intention. Nevertheless, the effect of this construct on Islamic mortgage adoption has fallen short. For this purpose, the current study extends the factor to provide a better understanding with regards to Islamic mortgage adoption in Malaysia. This is because home ownership in Malaysia is synonymous with the status of independence and economic stability in society. Generally, individuals take up mortgages due to the reference group's agreement which argues that home ownership is a norm and most needed by all. Thus:

*H2.* There is a positive relationship between social factors and willingness to choose Islamic mortgage products.

#### *Facilitating conditions*

Facilitating conditions are defined as objective factors, out there in the environment, that several judges or observers agree make an act easy to perform (Triandis, 1980). Previous studies demonstrate that facilitating conditions are a key factor in promoting the use of a particular system (e.g. Chang and Cheung, 2001; Pee *et al.*, 2008). Chang and Cheung (2001) and Pee *et al.* (2008) find that facilitating conditions have a significant effect on intention to use internet/WWW at work and non-work related computing in the workplace, respectively. In the current context, the provision of support for potential clients of Islamic mortgage may be one type of facilitating conditions that influence preference of the financing product. It is described that when an individual perceives there are enough supports and resources, his willingness to choose Islamic mortgage products will be stronger. As such, providing the relevant and sufficient technical support is essential to market Islamic mortgage products effectively to consumers. Thus:

*H3.* There is a positive relationship between facilitating conditions and willingness to choose Islamic mortgage products.

#### *Perceived risk*

In the current context, perceived risk is defined as uncertainty existing in the Islamic mortgage products. Various studies examine the effect of "perceived risk" on

consumer's willingness to accept a particular system (e.g. Lee, 2009). Such a relationship is explored in the Islamic mortgage literature. The applicability of perceived risk to the Islamic mortgage preference remains largely fragmented and is under-researched (Md-Taib *et al.*, 2008; Abdul-Razak and Abduh, 2012). The perceived risk in the context of Islamic mortgage is related to court cases involving bank customers who are unable to repay their mortgages (e.g. unemployed/laid-off), leading to the multiple amount of loans because the customers default on payments (Abu-Backer, 2002). This situation creates fear for consumers which inhibits the acceptance of the mortgage. Hence, Islamic banks are viewed *unIslamic* as far as transparency, where ethical aspects of *muamalat* are not in place (e.g. Khan, 2010). Given these arguments, however, it is expected that risk perceptions have an inclination to influence one's response to choose Islamic mortgage. Existing literature reports that perceived risk is one of the key predictors in influencing one's intention. For instance, a study by Eastin (2002) finds perceived risk to be instrumental in determining the adoption of e-commerce. Similarly, Yiu *et al.* (2007) find perceived risk to be significantly related to behavioural intention. Because of these findings, the current study examines the effect of perceived risk on Islamic mortgage adoption. Hence:

*H4.* There is a negative relationship between perceived risk and willingness to choose Islamic mortgage products.

#### *Perceived financial benefit*

In the current context, perceived financial benefit is defined as the value-added financial services that exist in the Islamic mortgage products. Lee (2009) defines perceived financial benefit as lower transaction handling fees, higher deposit rates, opportunities to win prizes and extra credit card bonus points. Consumers usually evaluate a number of additional features in products or services before adoption. In the current context, however, it is described that providing interesting financial benefits for mortgage can attract consumers to choose Islamic mortgage products. Giving necessary financial benefits to consumers may help bank managers meet their target to improve the performance of the products. Prior research, however, does not examine the effect of financial benefit on consumer willingness to choose Islamic mortgage products (e.g. Tameme and Asutay, 2012). However, studies in other disciplines have proven that financial benefit is important. For instance, Ramayah *et al.* (2006) and Lee (2009) confirm the significance of value-added benefits for existing services to improve adoption. Thus:

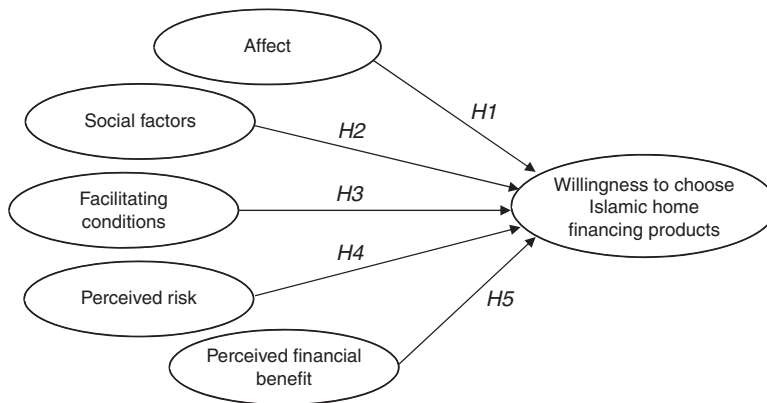
*H5.* There is a positive relationship between financial benefit and willingness to choose Islamic mortgage products.

Figure 1 identifies the five proposed hypotheses in a conceptual framework.

## **Research method**

### *Subjects*

The participants used in this study are university staff who are also customers of Islamic banks. Two universities are selected, namely, International Islamic University Malaysia and Universiti Malaysia Sabah. University staff are composed of both professional and non-professional groups, reflecting the actual population of customers of Islamic banks. Reasonably, our sampling using university staff deems appropriate. The university staff are selected using a judgement sampling based



**Figure 1.**  
Conceptual framework

on two requirements. First, they should have experiences in Islamic mortgage transactions. Second, they should have intentions to purchase houses in the future. These requirements help to control the selection of the respondents chosen in this study. Owing to the restrictions of the Islamic Financial Services Act 2013, no population of users of Islamic mortgage products is reported. Concerning the sample size, this study considers Comrey and Lee’s (1992) recommendation and argue that a sample size of 300 respondents is sufficient. For this purpose, a total of 300 questionnaires are distributed. Of these, 282 questionnaires are usable while 18 questionnaires are discarded due to incompleteness. The response rate is 94 per cent. Given Comrey and Lee’s (1992) recommendation, the sample size of 282 is considered acceptable. Table I reports the demographic characteristics of the respondents.

*Measures*

Constructs’ items are adapted from previous studies. Affect is operationalised using three items adapted from Pee *et al.* (2008), Ramayah *et al.* (2009) and Moody and Siponen (2013). Social factors are operationalised using three items adapted from

Demographic items	Description	Frequency	Percentile
1. Gender	Male	136	48.2
	Female	146	51.8
2. Marital status	Single	71	25.2
	Married	211	74.8
3. Monthly income	< 2,500	11	3.9
	2,501-3,500	35	12.4
	3,501-4,500	66	23.4
	4,501-5,500	80	28.4
	5,501-6,500	24	8.5
	6,501-7,500	33	11.7
4. High education attained	> 7,500	33	11.7
	High school certificate (HSC)/diploma	3	1.1
	Degree	74	26.2
	Master	170	60.3
	Doctorate/PhD	35	12.4

**Table I.**  
Profile of the respondents



Pee *et al.* (2008), Ramayah *et al.* (2009) and Moody and Siponen (2013). Facilitating conditions are operationalised using three items adapted from Chang and Cheung (2001). Perceived risk is measured using three items adapted from previous studies (Lee, 2009; Featherman and Pavlou, 2003). Perceived financial benefit is operationalised using three items adapted from (Lee, 2009). All items representing the constructs are modified for adaptation to the Islamic mortgage context. A five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5) is used to evaluate each statement for all constructs. Five experts of Islamic banking are invited to comment on the measurement constructs’ items (Churchill, 1979). Accordingly, the measurement items are revised. Subsequently, a pilot test is conducted to evaluate the content validities of the constructs’ items using bank customers who have experience in Islamic mortgage services. A total of 30 actual bank customers rate the measurement items. Hence, a final revision is taken to the measurement items.

## Results

This study employs partial least squares using two-step approach, namely, measurement model and structural analysis (Chin, 2010).

### *Measurement model*

Measurement model analysis is conducted for construct validity. Construct validity is made of two components, notably convergent validity and discriminant validity. Convergent validity is composed of factor loadings, average variance extracted (AVE) and composite reliability (CR). Table II indicates that all factor loadings for the dimensions are greater than the threshold value of 0.7, confirming their convergent validity. Factor loadings for willingness to choose Islamic mortgage products are greater than the threshold, making the three items valid in representing this construct. Concerned with perceived financial benefit, three items in representing the construct

	WTC	PFB	AF	FC	PR	SF
WTC1	0.93	0.48	0.59	0.45	-0.54	0.63
WTC2	0.88	0.51	0.65	0.62	-0.58	0.69
WTC3	0.77	0.40	0.39	0.35	-0.37	0.45
PFB1	0.52	0.94	0.46	0.32	-0.53	0.49
PFB2	0.43	0.89	0.35	0.37	-0.49	0.51
PFB3	0.53	0.91	0.50	0.53	-0.42	0.54
AF1	0.66	0.37	0.94	0.50	-0.47	0.64
AF2	0.55	0.32	0.92	0.51	-0.47	0.68
AF3	0.52	0.65	0.84	0.39	-0.43	0.56
FC1	0.40	0.28	0.53	0.77	-0.37	0.47
FC2	0.59	0.46	0.48	0.96	-0.50	0.57
FC3	0.49	0.41	0.40	0.90	-0.42	0.51
PR1	-0.58	-0.47	-0.56	-0.32	0.88	-0.49
PR2	-0.54	-0.46	-0.36	-0.46	0.87	-0.53
PR3	-0.27	-0.36	-0.29	-0.53	0.75	-0.26
SF1	0.64	0.51	0.67	0.51	-0.44	0.89
SF2	0.64	0.48	0.56	0.53	-0.50	0.94
SF3	0.65	0.56	0.68	0.58	-0.55	0.92

**Table II.**  
Factor loadings

**Notes:** WTC, willingness to choose Islamic home financing products; PFB, perceived financial benefit; AF, affect; FC, facilitating conditions; PR, perceived risk; SF, social factors

are found valid, exceeding the threshold. Similarly, items representing affect, facilitating conditions, perceived risk and social factors are also found valid.

Moreover, the factor structure matrix shows that the majority of the items exhibit high loadings on their constructs and no items are loaded higher on constructs which they are not intended to measure (Golicic *et al.*, 2012). This suggests that all items capturing their constructs are reported valid, describing their appropriateness in the current context.

Table III presents AVE, CR and Cronbach's  $\alpha$ . The reported CR exceeds the recommended value of 0.7. The AVE values for all constructs are greater than the threshold value of 0.5, meeting the convergent validity (Fornell and Larcker, 1981). Besides, Cronbach's  $\alpha$  values for all indicators exceed the recommended value of 0.6, suggesting that the dimensions representing the constructs have high internal consistency.

Table IV presents discriminant validity for all constructs. Discriminant validity is tested by comparing the shared variance among indicators of a construct using AVE with the variance shared between constructs (e.g. Golicic *et al.*, 2012). The test for discriminant validity is met when the square root of AVE for the construct is greater than its correlations with other constructs (e.g. Fornell and Larcker, 1981). Table IV presents the correlations between the constructs with the square root of the AVE (italic values). Reading down the columns and or across the rows in Table IV, the square root of AVE for each construct is greater than the correlation with other constructs, meeting the test for discriminant validity.

*Structural analysis*

Figure 2 and Table V present the results for the relationships between independent variables and willingness to choose Islamic mortgage products. Evidently, "affect" is significantly related to willingness to choose Islamic mortgage products ( $\beta = 0.21, p < 0.01$ ).

	AVE	Composite reliability	Cronbach's $\alpha$
AF	0.81	0.93	0.88
FC	0.78	0.91	0.85
PFB	0.84	0.94	0.90
PR	0.70	0.87	0.79
SF	0.84	0.94	0.91
WTC	0.74	0.89	0.82

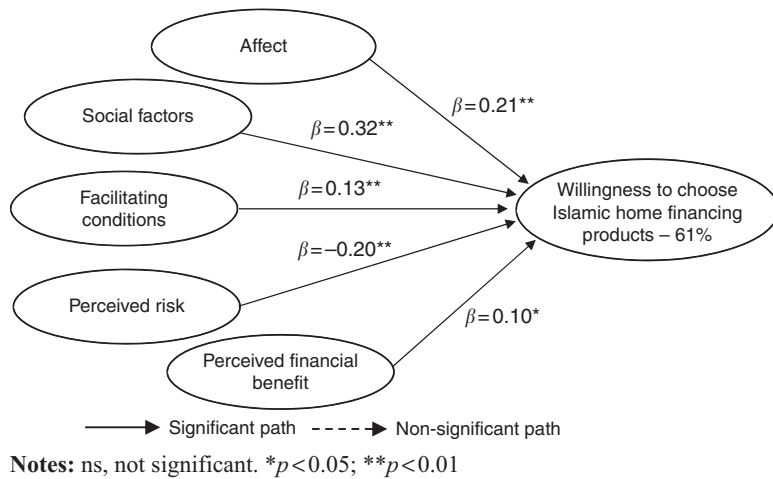
**Table III.**  
AVE, Composite Reliability and Cronbach's  $\alpha$

**Notes:** WTC, willingness to choose Islamic home financing products; PFB, perceived financial benefit; AF, affect; FC, facilitating conditions; PR, perceived risk; SF, social factors

	AF	FC	PFB	PR	SF	WTC
AF	<i>0.90</i>					
FC	0.52	<i>0.88</i>				
PFB	0.49	0.45	<i>0.91</i>			
PR	-0.51	-0.49	-0.52	<i>0.84</i>		
SF	0.69	0.59	0.56	-0.54	<i>0.92</i>	
WTC	0.65	0.57	0.54	-0.59	0.70	<i>0.86</i>

**Table IV.**  
Discriminant validity

**Notes:** WTC, willingness to choose Islamic home financing products; PFB, perceived financial benefit; AF, affect; FC, facilitating conditions; PR, perceived risk; SF, social factors



**Figure 2.**  
The estimated model

Pathway	<i>B</i>	<i>t</i> -value	Supported
AF → WTC	0.21	4.08**	Yes
FC → WTC	0.13	2.77**	Yes
PFB → WTC	0.10	2.53*	Yes
PR → WTC	-0.20	4.33**	Yes
SF → WTC	0.32	5.94**	Yes

**Notes:** WTC, willingness to choose Islamic home financing products; PFB, perceived financial benefit; AF, affect; FC, facilitating conditions; PR, perceived risk; SF, social factors; ns, not significant. \* $p < 0.05$ ; \*\* $p < 0.01$

**Table V.**  
Hypothesis testing

The relationship between affect and willingness to choose Islamic mortgage product is positive, indicating that the higher the extent of affect, the better is one's willingness to choose the products. "Facilitating conditions" are significantly associated with willingness to choose Islamic mortgage products ( $\beta = 0.13, p < 0.01$ ). Facilitating conditions are positively related to willingness to choose Islamic mortgage products. This means that the more positive facilitating conditions, the more likely that Islamic mortgage products are chosen by consumers. "Perceived financial benefit" is positively related to willingness to Islamic mortgage products ( $\beta = 0.10, p < 0.05$ ). Thus, the more positive perceived financial benefit, the more likely that Islamic mortgage products are selected by consumers. "Perceived risk" is negatively associated with willingness to choose Islamic mortgage products ( $\beta = -0.20, p < 0.01$ ). The greater the extent of perceived risk, the less likely that consumers choose Islamic mortgage products. Further, "social factors" are significantly associated with willingness to choose Islamic mortgage products ( $\beta = 0.32, p < 0.01$ ). The relationship is positive, meaning that the more positive social factors, the more likely one's willingness to choose the products. Hence, *H1, H2, H3, H4* and *H5* are supported.

**Discussion and implication**

This study discovers that affect plays an important role in the formation of one's behavioural decision towards Islamic mortgage products. Importantly, this

finding is consistent with previous studies of Karaiskos *et al.* (2008) and Ramayah *et al.* (2008) that find a strong relationship between affective factor and intention in the context of internet abuse, mobile data services and internet piracy, respectively. Thus, the current study extends the generalisability of affect to Islamic mortgage products, which allows new practical implications. As such, it is crucial to develop Islamic mortgage products with valuable functions of affect which improve the feeling of consumers. This can be achieved if the product information made available and is accessible to consumers anytime, anywhere. In addition, bank managers need to tap potential home buyers from the Generation Y who are generally techno-savvy by providing a positive information searching experience on social networks (e.g. Facebook) to them. Consequently, consumers will feel that Islamic mortgage products are comfortable, pleasant and interesting to be chosen.

Unlike affect, social factors are found to be the most important predictor. This outcome is in line with previous studies of Chang and Cheung (2001) in the context of internet/WWW at work, Pee *et al.* (2008) in the context of non-work-related computing in the workplace and Moody and Siponen (2013) in the context of non-work-related personal use of the internet at work. Typically, peers, family, teachers and others influence consumers to choose the best mortgage provider. Hence, bank managers may work on improving the roles of social factors by building a network with house developers, public departments and schools. This helps Islamic banks to market Islamic mortgage products via social networks, thus accelerating the rate of adoption.

The current study provides a significant result for the effect of facilitating conditions on willingness to choose Islamic mortgage products. The result concurs with the findings of Chang and Cheung (2001) and Pee *et al.* (2008) pertinent to the significant effect of facilitating conditions on behavioural intention. In the current context, however, consumers' willingness to choose Islamic mortgage products is stronger when they have sufficient financial resources and supports. To address this, bank managers may improve the roles of facilitating conditions by strengthening their resources that are available to consumers. This explains that bank managers should provide not only easy access to the products, but also offer adequate technical supports for improved consumer learning. These supports should be made known to consumers via bank's advertisements and flyers.

The current study discovers that two factors beyond affect, social factors and facilitating conditions have a significant influence on willingness to choose Islamic mortgage products. Perceived risk is found to be instrumental in determining consumers' willingness to choose Islamic mortgage products. The result is consistent with previous studies of Eastin (2002), Yiu *et al.* (2007) and Lee (2009), and so extends its generalisability to Islamic mortgage products. Given the adverse effect of risk associated with Islamic mortgage products to consumers, bank managers are expected to plan the products effectively. Bank managers should ensure that their mortgage policies are in line with the *Shariah* in order to make the consumers feel secure about Islamic mortgage products. Given the issue of credit risk and the non-delivery risk of houses, the banks should focus on building confidence and satisfaction in their potential home buyers by developing new strategies which handle those risks effectively. Bank managers should also cultivate confidence among consumers by ensuring that the performance of the product is continuously monitored and improved by their *Shariah* advisors to promote

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*maslahah* (i.e. public interest) for consumers. Bank managers should also customise their product offerings according to the repayment capacity of customers. This helps to promote *maqasid al-Shariah* in Islamic mortgage transactions between customers and banks. In turn, this measure would help Islamic banks to improve consumers' willingness positively for better consumers' preference for the Islamic mortgage products.

Perceived financial benefit is instrumental in explaining consumers' willingness to choose Islamic mortgage products. The result is consistent with previous studies of Ramayah *et al.* (2006) and Lee (2009). It is described that consumers will choose mortgage products that offer more benefits to them since home ownership investment is a lifetime decision and takes a large fraction of one's monthly income. Given the importance of financial benefits to consumers, bank managers should offer a flexible tenure, a higher financing margin, better service and a competitive financing rate to consumers. Considering these offerings with caution will help bank managers to improve consumers' willingness to choose Islamic mortgage products effectively.

In terms of theoretical implications, in particular, three factors derived from the TIB, namely, affect, social factors and facilitating conditions are empirically tested and proven valid besides the two additional factors. Our results strongly support the appropriateness of using this extended TIB to understand the willingness of bank customers to choose Islamic mortgage products. Hence, this study has broadened the scope of the TIB to include Islamic mortgage products, which, in turn, offers future debates in this area.

### **Limitations of the study and future research**

Several caveats for the study should be noted. First, the sample is confined to two universities. The generalisability of the findings to other respondents in other universities remains to be determined. To address this, future studies should enlarge the selection of respondents involving other universities in order to produce findings that are more comparable. Second, the findings of the current study are confined to five selected factors. Future studies may consider a richer set of variables, including not only consumer factors but also institutional factors as predictors to provide improved explanatory power for consumer willingness to choose Islamic mortgage products. Despite these setbacks, this study appears as an eye-opener of applying the theory of Triandis (1980) at the individual level to Islamic mortgage products.

### **Conclusion and contributions**

This study uncovers factors determining consumers' willingness to choose Islamic mortgage products using a theory proposed by Triandis (1980) as a baseline theory and integrates it with two relevant factors, namely, perceived risk and perceived financial benefit. Further, our contributions to theory and practice are threefold. First, this study investigates the importance of affect, social factors and facilitating conditions in the context of Islamic mortgage products. Second, it integrates perceived risk and perceived financial benefit into the TIB's framework, expanding its generalisability to the current's context of study. Third, it offers practitioners with insights into approaches that the issues of consumers' willingness can be tolerably understood and improved.

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### Appendix. Questionnaire items

#### Affect

- (1) I feel that choosing Islamic mortgage is something that is comforting.
- (2) I feel that choosing Islamic mortgage is something that is facilitating.
- (3) I feel that choosing Islamic mortgage is something that is gratifying.

#### Social factors

- (1) My family thinks that I should choose Islamic mortgage.
- (2) My family who are important to me would think that choosing Islamic mortgage is a good idea.
- (3) Most people important to me think that choosing Islamic mortgage is a wise idea.



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**Facilitating conditions**

- (1) I have the knowledge to choose Islamic mortgage.
- (2) I have the ability to ask bank officer assistance with Islamic mortgage difficulties.
- (3) I have control in selecting the best mortgage providers of Islamic mortgage.

**Perceived financial benefit**

- (1) I believe Islamic mortgage offers better financial benefits.
- (2) I believe Islamic mortgage offers a flexible tenure.
- (3) I believe Islamic mortgage offers a higher financing margin.

**Perceived risk**

- (1) I am worried about my inability to pay monthly instalment.
- (2) I am concerned about the non-delivery of the house.
- (3) I am worried about the amount of debt I have.

**Willingness to choose**

- (1) I am willing to choose Islamic mortgage products.
- (2) My willingness to choose Islamic mortgage products is greater.
- (3) I would make an effort to choose Islamic mortgage.

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