



Analysis of the Acceptance of Newly Constructed Mathematical Model for Islamic Unit Trust among Public

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Abstract

A new mathematical model for Islamic unit trust fund was constructed based on the Integration model and the gaps discovered from existing model of Islamic unit trust in Malaysia. The gaps are payment of zakat/tax and additional benefit for investors. The aim of this study is to investigate the acceptance of public on this new constructed mathematical model. A total of 150 respondents were chosen among investors from Terengganu which has at least one unit of Islamic unit trust fund in Malaysia. The questionnaires distributed consist of four variables, where three were independent variables and one was dependent variable and analysed by using Statistical Package for the Social Science (SPSS). By using a Spearman's correlation, it is found that each independent variable has moderate and strong correlation with the single variable. This can be concluded that the public has accepted this new constructed mathematical model. This study suggested that this new mathematical model is implemented by Islamic unit trust management in Malaysia and also, for investors to choose the Islamic unit trust which offer more benefits.

Keywords: Islamic Unit Trust, Mathematical Model, Spearman Correlation and Benefits

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INTRODUCTION

Throughout Islamic unit trust is one of the famous investment products in Malaysia which plays an important role in inspiring Malaysian to have a habit of investing and saving. It is an alternative for conventional unit trust. It is a collective investment scheme which the investors who share the same financial objective, investment strategy and risk will invest their money into this fund. This kind of fund will be collected by the unit trust management company and then will be invested in the diversified portfolio which complies with the Islamic principles (Aziz, et. al., 2019). Therefore, it aims to invest in a portfolio of halal stocks which is Shariah compliance. These funds are allocated in the authorized investments approved by the Security Commission as well as the Shariah Board. This is the main differences between Islamic unit trust and conventional unit trust. One of the advantages of investing in Islamic unit trust is it offers low to medium level of risk by diversifying the investment fund. Thus, this investment is suitable for the low to middle income customers. As Islamic unit trust funds are less risky than conventional unit trust funds, it becomes more popular nowadays among Malaysian not only among Muslim but also non-Muslim. The concept of risks and profits sharing in unit trusts follow the Islamic principles and already being applied in within the Islamic financial system.

The concepts that apply in Islamic unit trust are concept of Mudarabah and Musharakah (Billah, 2019). The concept of Mudarabah generally is a concept of profit-sharing financing where one part provides capital and the other party provides labor. There is one party will act to manage the money. The profit will be shared by both parties according to the agreed ratio. In unit trust, the trust will

provide the capital of venture and the business expertise and management will be the responsibility of the third party, which is the unitholders in this case. Then, the profit is divided between the unitholders and the trust according to the agreement. Besides, the mechanisms used in unit trust are the same with the concept of Musharakah. Within this concept, two or more financiers will engage in a new project or participate in an established project. All the partners have a right to share total profits from a venture as in the agreement. The managers who manage a fund will be compensating in the form of a service charge (Billah, 2019).

In addition, the main difference between Islamic unit trust and conventional unit trust is the return or profit distribution for investors. The return or profit distribution in Islamic unit trust should go through the purification process of wealth, by means of zakat and charity. Zakat is one of the pillars in Islam and compulsory for every Muslim who possesses the nasab to pay the Zakat. Therefore, in Islamic unit trust, the profit distribution is distributed after deducting payment of zakat. However, it is carried out differently between one country and another. There are two approaches for the payment of zakat. The first approach is the fund manager is responsible for the purification process. Thus, the payment of zakat is deducting from the profit distribution before distributed to investors. the second approach is by investors themselves. The investors responsible to pay the zakat after receiving the profit distribution. Currently in Malaysia, most of the unit trust management company in Malaysia use the second approach where the purification process is voluntarily done by investor themselves (Salleh & Zakaria, 2018). Therefore, the profit

distribution of Islamic unit trust in Malaysia mostly does not include the payment of zakat.

LITERATURE REVIEW

Most of existing Islamic unit trust in Malaysia did not have any differences and uniqueness between conventional unit trusts especially in terms of formulation had been used. The mainstream government unit trust in Malaysia which is Amanah Saham Bumiputera (ASB) currently used Average Lowest Balance concept in order to calculate the dividend earned by the investors (Wahab et. al., 2018). According to Wahab et. al. (2018), the lowest balance of each month in a year will add up to obtain the average balance for the year. The simple interest formula is used to calculate the dividend earned using the average balance. This concept of calculation can only be done yearly. Besides, the profit distribution is not including the payment of zakat since they used the approaches where the investors need to pay the zakat by themselves to purify their wealth. This calculation also used by another Islamic unit trust like Public Mutual, HSBC Amanah and most of the famous Islamic unit trust.

There are many researchers studied about public awareness on Islamic unit trust. Mohammed Kamil et. al. (2018) studied about the factors in choosing the unit trust funds among 140 retail investors across Malaysia. The study found that the important factors for retail investors to choose the unit trust funds is the funds' commitment to Syariah compliance while past performance and risk tolerance does not influence them in choosing the unit trust fund (Mohammed Kamil et. al., 2018). This study supported by Yusuff and Mansor (2016). They found that the most crucial factors in selection of unit trust is the fund that meet the Syariah guidelines (Yusuff and Mansor, 2016). Therefore, it is important to make sure that Islamic unit trust follows the Syariah guidelines and meet the investors' needs.

The new mathematical model for Islamic unit trust used integration model found by Ghazali et. al. (2012a, 2012b, 2012c, 2012d, 2015, 2017, 2019a and 2019b). According to Ghazali et. al. (2019a), integration can be used to derived a new formulation of home financing and mortgage takaful model. The profit is calculated based on one-third of the total amount of financing. In order to compensate those who are losing effort to work, the researchers derived the new model of mortgage Takaful. This new model is suitable for low to medium income earners (Ghazali et. al., 2019a). Integration model also can help all categories of income earners with more reasonable plan in Family Takaful which offers affordable price for all consumers and also includes almost complete riders. The new model of family takaful is believed can attract the lower income earner to higher income earner especially Muslim in order to save money for their children health and education (Ghazali et. al., 2019b). In addition, blue colour medical family integration takaful model (Ghazali et. al., 2017) and integration model in auto takaful insurance (Ghazali et. al., 2015) is constructed in order to provide all required benefits and better package for the consumers. The researchers proved that the integration model is more inclusive for clients to earn money in the future compared to the existing model in premium life tables (Ghazali et. al., 2012c). In conclusion, integration model can be used in order

to modify the existing model to make it a more practical plan for all classes of income earners.

The Keynesian approach of demand for money tells the important of holding money for precautionary, transactions and speculative purposes. People need money as a precaution if there is uncertain event occurs. Besides, money is important for daily basis transaction. Lastly, people need money for speculative demand, arises because of uncertainty of future interest rate (Davidson, 2014). Hence, based

on the Keynesian Theory, people might accept this new model as it gives more profit and benefits for them. Besides, general Takaful demand also plays an important role in attracting people to accept this new model as it gives protection and compensation for investors in difficult time (Salleh & Zakaria, 2018). General Takaful demand is a consumer's willingness, desire and ability to pay a general takaful certificate in order to protect them from financial losses that caused by events which lead to damage of legal liability and physical property. Besides, it also protects consumers for any undesirable events which may cause bodily injury or death (Kadir, 2013).

METHODOLOGY

A field study was conducted to investigate the acceptance of public on the new constructed mathematical model of Islamic unit trust. A total of 150 questionnaires were distributed into eight district of Terengganu which are Kuala Terengganu, Kuala Nerus, Kemaman, Marang, Hulu Terengganu, Besut, Dungun and Setiu. The respondents are chosen among unit holders which are having at least one unit of any unit trust in Malaysia.

The questionnaire consists of two main parts which are demographic characteristics and questions with 10 Likert scale, where 1 for strongly disagree and 10 for strongly agree. For part one, demographic characteristics is important in order to find the distribution statistic of survey. In this survey, there are seven characteristics which are age, gender, marital status, race, level of education, income per month and place for investment. While for part two, there are four sections which adapted and modified from previous study done by Bakar (2016), Amin et. al., (2011), Aziz et. al., (2019) and Chung et.al., (2013) to suite the local context. There are four variables in this part which are three independent variables and one dependent variable. The three independent variables are knowledge on Islamic unit trust, profit distribution of Islamic unit trust and integrated Takaful into Islamic unit trust. The dependent variable is the reason to participate on the new mathematical model for Islamic unit trust. There were three hypotheses tested in this study, denoted as H1, H2 and H3 which are knowledge of Islamic unit trust has a significant correlation on the acceptance new model of Islamic unit trust, profit distribution of Islamic unit trust has a significant correlation on the acceptance new model of Islamic unit trust and lastly the integrated with Takaful has significant correlation on the acceptance new model of Islamic unit trust. The list of the hypotheses is shown below:

H1 Knowledge of Islamic unit trust has a significant correlation on the acceptance new model of Islamic unit trust.

H2 Profit distribution of Islamic unit trust has a significant correlation on the acceptance new model of Islamic unit trust.

H3 Integrated with Takaful has significant correlation on the acceptance new model of Islamic unit trust.

As the field study was completed, the responds were entered into Statistical Packages for Social Science (SPSS) version 2.5 to be analyzed. The correlation between three independent variable and single dependent variable was analyzed. The finding of the field study is presented in result part of this article.

RESULTS AND DISCUSSIONS

Reliability Analysis

A pilot test Since all the correlation among three independent variables and single dependent variable are more than 0.4, it can be said that all the three hypotheses were accepted. Hence, this shows that public is accepting this new constructed model. This also shows that this new constructed model will get participation among public if it available in market.

Table 1. The Reliability Analysis

Variables	Cronbach's Alpha	Number of Items
Acceptance new model of Islamic unit trust.	0.923	8
Knowledge of Islamic unit trust	0.774	10
Profit distribution of Islamic unit trust	0.950	10
Integrated with Takaful	0.930	10

The value of Cronbach's Alpha of acceptance new model of Islamic unit trust is 0.923 with numbers of items is 8. The value of Cronbach's Alpha of knowledge of Islamic unit trust is 0.774 with number of items is 10. The value of Cronbach's Alpha of profit distribution of Islamic unit trust is 0.950 with number of items is 10. The value of Cronbach's Alpha of integrated with Takaful is 0.930 with number of items is 10. Since the value of Cronbach's Alpha is more than 0.600, it means the questionnaire is reliable.

Normality Test

Normality test was conducted as its prerequisite for inferential statistical techniques (Ghasemi and Zahediasi, 2012). For this study, the normality was assessed by Kolmogorov-Smirnov statistics, with a Lilliefors and the Shapiro-Wilk statistic (Pallant, 2007). Table 2 below shows the result of statistical normality test.

Table 2. The Statistical Normality Test

	Kolmogorov-Smirnov		Shapiro-Wilk			
	Statistic	df	Sig	Statistic	df	Sig
Acceptance of new model	0.084	150	0.011	0.971	150	0.003

From the Table 2, the p-value on the Kolmogorov-Smirnov statistics output for acceptance of new model is less than 0.05. This shows that the data collected for these variables violate the assumption of normality distribution. Hence, we conclude that the data is not normally distributed and non-parametric technique need to be used rather than parametric technique analysis.

Correlation Result

Since the data were non-parametric, this study used Spearman's correlation in order to measure the strength and the relationship between two variables which are independent variable and dependent variable. Table 3 shows the result for Spearman's correlation result.

Table 3. The Correlation Result

Variables	Spearman's Correlation, r_s	p
Acceptance new model of Islamic unit trust	1	
Knowledge of Islamic unit trust.	0.534	0.00
Profit distribution of Islamic unit trust.	0.539	0.00
Integrated with Takaful.	0.689	0.00

From Table 3, the correlation of knowledge of Islamic unit trust is 0.534 and profit of Islamic unit trust is 0.539, this shows that knowledge of Islamic unit trust and profit distribution of Islamic unit trust have moderate correlation towards the acceptance of the new model. While the correlation of integrated with Takaful is 0.689, which means the integrated with Takaful correlated to acceptance of the new model in the condition strong.

Since all the correlation among three independent variables and single dependent variable are more than 0.4, it can be said that all the three hypotheses were accepted. Hence, this shows that public is accepting this new constructed model. This also shows that this new constructed model will get participation among public if it available in market.

CONCLUSION

Based on the correlation result above, it can be concluded that the public has accepted this new constructed model of Islamic unit trust and will be participate if this new mathematical model for Islamic unit trust available in market. This new model was constructed in order to fulfil the criterion of Islamic unit trust which must be in line with Shariah laws and need to follow the process of purification of wealth. Besides, this new mathematical model of Islamic unit trust also constructed in order to fulfil the gaps discovered from existing unit trust model in Malaysia which are the payment of zakat and additional benefits for investors. In addition, the newly constructed mathematical model for Islamic unit trust can help Muslim to fulfil their responsibility as a Muslim. It has potential in the unit trust market in Malaysia since most of investors in Malaysia are Muslim investors. The acceptance of public on this new model shows the awareness of public on having an investment fund which is Shariah compliance.

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