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Effectiveness of *Zakat* Community Development Program: A Case Study in West Sumatera

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Abstract

This research aims at assessing the effectiveness of *zakat* community development program, a community-based development program funded mainly through *zakat*, undertaken at *Tanah Datar* District, West Sumatera. The program was intended to establish a center for superior goat breeding in the district which was expected to enhance the quality of life of the program beneficiaries (*zakat* recipients) and to transform them to become *zakat* payers. The program was designed as four years program which was started in 2016 and ended in 2020. The research was designed as case study research involving in-depth interviews, site observations, and documentary analysis. The time spent for conducting the case study research was two years and 9 Months (December 2018- October 2021). The findings of the study showed that the program can be categorized as ineffective program due to the following reasons. First, the program had been introduced as a top-down approach. The program attempted to create a totally new community, a breeder community, in the selected village while the residents do not have qualities required to become a good breeder. The program could have been a successful one if the program focusses on developing the existing local economy potency. Next, the *Zakat* Board of *Tanah Datar* District has no institutional capacity to implement the program. The implementation had relied on the assistance from a research center in North Sumatera Province. Once the support was withdrawn, *Zakat* Board of *Tanah Datar* could not do much with the program. Finally, the program was lacked stakeholders' support and lacked transparency and accountability.

Keywords: *zakat community development, effectiveness, West Sumatera, Indonesia*

1. Introduction

Performance measurement has really taken hold in government over the past several years, and over the past few years in the nonprofit sector as well. The interest on performance measurement in public and non-profit organizations (NPOs) can be associated with two factors; (1) increased demands for accountability on the part of governing bodies, the media, and the public in general, and (2) a growing commitment on the part of managers and agencies to focus on results and to work deliberately to strengthen performance (Poister, 2003). Specific to the context of NPOs, performance measurement is critical because of the tighter competition to attract donors. The distinction between public and NPOs can be made by defining the two from an accounting perspective. Public organizations or public sector organizations are organizations that get its source of finance from taxes, and provided goods and services (Jones and Pendlebury, 2010). Meanwhile, NPOs are organizations that get its source of finance from donors or sometimes from government. Private sector or business organizations get their source of finance from the owners. Performance measurement has its origin from the private sector to search for efficiency (Lee, 2006). The idea was then transplanted into public sector organizations in 1930. The idea was also adopted by NPOs and even a crucial role as pointed by Poister (2003).

There is another type of institution which is not recognized in Western literature, that is *Zakat* institution. *Zakat* is a levy on wealth, imposed divinely on Muslims. *Zakat* is neither a tax payment nor a charitable

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donation. Charitable donation is optional, nonetheless, *zakat* is an obligatory, while taxes can be expanded on any purposes. The ways *zakat* can be distributed are detailed in the *Qur'an* (9:60). *Zakat* is a welfare contribution but not a charitable donation. *Zakat* has uniquely different dimensions compared to common Western political notion of taxes and levies. The obligation to pay *zakat* is one of the most important religious duties of a Muslim, ranking in importance second only to the obligation to perform five times *solah* (prayers). On the other hand, "a tax is almost universally perceived to be an unwelcome expropriation of wealth, tax to be avoided at all costs and it seems by whatever means possible, legal and illegal, crude or sophisticated, opportunistic and contrived" (Clarke et al., 1996: p. 196-197). Five times *solah* is an act of worship expressing a Muslim gratitude for the blessing bestowed by God while *zakat* is an act or worship expressing a Muslim gratitude for God's financial gifts. *Zakat* is, therefore, a financial cornerstone of Islamic economics. The purpose of *zakat* is to purify the surplus wealth of the relatively well-to-do by redistribution to the destitute and needy, and "neither conventional taxes nor levies can lay claim to such specific function" (Clarke et al., 1996: pp. 196-197).

According to the classical *fiqh* (Islamic jurisprudence), *zakat* is imposed on the most common items comprising wealth, namely, livestock, gold and silver, articles of trade, buried treasures and mines, and specific agriculture produce. The contemporary *fiqh*, however, includes *zakat* on profession and corporate. Collection and distribution of *zakat* is done by so called *amil* (*zakat* collector) (Shiddieqy, 1987). As the largest Muslim-majority country in the world, Indonesia recognized two types of *amil*. First is *amil* which is established by the government, and second independent *amil*. The first type of *amil* is known as BAZNAS (*Badan Amil Zakat Nasional*), established based on Presidential Decision Number 8 of 2001. The second type of amil is formed and established by groups of society such as *Dompet Dhuafa Republika* and *Rumah Zakat*. BAZNAS is a non-structural governmental organization which is independent and directly responsible to the President through the Minister of Religion. BAZNAS is therefore, responsible to guard *zakat* management in Indonesia. The issuance of Law number 23 of 2011 strengthens the position of BAZNAS as the authorized body to manage *zakat* nationally. The latest data shows that BAZNAS has been set up in 34 provinces and 463 municipalities throughout Indonesia (BAZNAS RI, 2019a) and as for LAZs, there are 27 registered LAZs in Indonesia (PPID BAZNAS RI, 2021).

Distribution of *zakat* in Indonesia used to adopt a 'hit and run' approach (Minarti, 2016). As a result, for long *zakat* has not shown tangible impact on the *zakat* recipients (*mustahik*). For years, *mustahik* remain as *mustahik* because *zakat* fund was usually used for consumption purposes. To widen the impact of *zakat* distribution, one of the prominent LAZs in Indonesia (i.e., *Dompet Dhuafa Republika*) invented a concept in distributing *zakat* fund which was community-based (Hanum, 2019). The idea was then adopted by BAZNAS in 2013 with the introduction of a feature program so called '*Zakat* Community Development' (ZCD). The distinct feature of ZCD concept introduced by BAZNAS was that the program integrates several aspects which included education, health, religion, environment, economy and social of the targeted communities. The ultimate objective of the program through ZCD is to create a prosperous and independent society.

After the introduction of ZCD program by central BAZNAS in *Sukabumi* on 17 January of 2013, West Sumatera was among the nine provinces in Indonesia that firstly responded to the idea, in which ZCD program was officially launched in *Tanah Datar* District on 29 December 2013. Following that, after seven years, ZCD programs have been implemented in over 100 villages throughout Indonesia. Some scholarly articles have also described and discussed ZCD implementations in some places. Farikhatusholikhah et al. (2018) for instance describe the ZCD program implemented in *Bedono* village, *Demak* District, Central Java. The study attempted to determine the correlation between *Zakat* Village Index and ZCD program implemented in the village (*Bedono*). Fadilah et al. (2019) describe the various ZCD programs implemented in West Java. An evaluative study was conducted by Ramadhini (2019) that assesses ZCD program from the perspective of sociology. The study uses the classical theory of Weber about Value, the flow of Institutional by Veblen and the concept of Cultural Capital by Bourdieu. Her study then clarifies the relationship between the values contained in the utilization of *zakat* which associated with the stakeholders. Nurhasanah (2019) in her study described and discussed ZCD program implemented in *Garut* District, West Java. In contrast to the previous studies, the current study focuses on a ZCD program implemented in *Tanah Datar* District called '*Boerka* Breeding Center Development' which afterwards will refer to 'BBCD' program. Specifically, this study aims to describe what BBCD program is, discussing the use of non-financial measures in BBCD program, and assessing whether the BBCD program is effective or otherwise, and the reasons for effectiveness or ineffectiveness and lessons to be learned from the BBCD program. The current study therefore adds to the body of knowledge on ZCD implementation in Indonesia by providing case study evidence from *Tanah Datar* District, West Sumatera. This study will also help us understand how the same program elsewhere can be determined as a success or failure depending on the measures used to determine the success of the program.

2. Methodology

This research is designed as a case study research that allows researcher to obtain an in-depth and comprehensive understanding (Yin, 2009; Ryandono and Wijayanti, 2019) of the ZCD program implemented in *Tanah Datar* District. In doing case study research, it is important to clearly define what is the case of the study. The case can be an organization, a unit, a program, a city, a village, and others, depending on what we are looking for or the focus of the study (Yin, 2009).

There are different forms of ZCD programs undertaken by BAZNAS *Tanah Datar*. This study focuses on a particular ZCD program (i.e., BBCD). This program is implemented in a few villages spread in four sub-districts of *Tanah Datar*, West Sumatera. However, the program is centered in one village, named *Nagari Andaleh*, located in *Batipuh* Sub-District. The unit of analysis is therefore a village. If the unit of analysis is a program, data should be collected from different villages spread out in four sub-districts. This option was rather difficult because in depth understanding of the case study is very much influenced by the availability of access to the case. Since the access is available to only one village (i.e., *Nagari Andaleh*) where the program is centered, it is rationale to study *Nagari Andaleh* as the case of this study.

The advantage of case study method is the possibility to use multiple data collection methods. Having this as the advantage, the current study employs data collection techniques involving interviews, observations and documentary analysis. In-depth interviews were used to collect data from key informants who were beneficiaries of the ZCD program, a customary leader and a resident in the village (who is not a beneficiary of the program). Similar approach is adopted by (Ryandono and Wijayanti, 2019) in their case study on ZCD program in East Java. Table 1 describes the details of the key informants participated in this study.

Table 1: Key Informants

No.	Informants (Pseudonym)	Roles	Type of Information Provided
1.	Mr. Emi	Beneficiary of the program	Recruitment of beneficiary, implementation process, challenges, expectations
2.	Mr. Malin	Beneficiary of the program	Recruitment of beneficiary, implementation process, challenges, expectations
3.	Mr. Lano	Beneficiary of the program	Recruitment of beneficiary, implementation process, challenges, expectations
4.	Mr. Panduko	Beneficiary of the program	Recruitment of beneficiary, implementation process, challenges, expectations
5.	Mr. John	Beneficiary of the program	Recruitment of beneficiary, implementation process, challenges, expectations
6.	Mr. Malagam	Customary leader	Recruitment process
8.	Mr. Sati	Non-beneficiary of the program	Recruitment process

Source: Researcher's observations

Direct visits to the location of the program were required to observe the implementation of the program. This is also to get the feeling on how program's beneficiaries and other stakeholders think of the program. The period spent for conducting this case study research was two years and 9 months (early December 2018 – October 2021). There were around 20 observations made during the entire case study. The sequence of main interviews and observations is presented in Table 2. The rest were in the form of a quick visits and short interviews to ask the progress of the program. Field notes were used in this study because they are 'an essential component of rigorous qualitative research' and therefore, are widely recommended in qualitative research as a means of documenting needed contextual information (Phillipi and Lauderdale, 2018). Field notes serve many functions, as Phillipi and Lauderdale, (2018) stated: “they aid in constructing thick, rich descriptions of the study context, encounter, interviews, focus group, and document’s valuable contextual data” (p. 381). All interviews and observations were immediately recorded in the notes. Other official documents were also collected such as the program report prepared by *Zakat* Board of *Tanah Datar*, publications issued by the Indonesian National *Zakat* Board through their website and articles or news on ZCD programs.

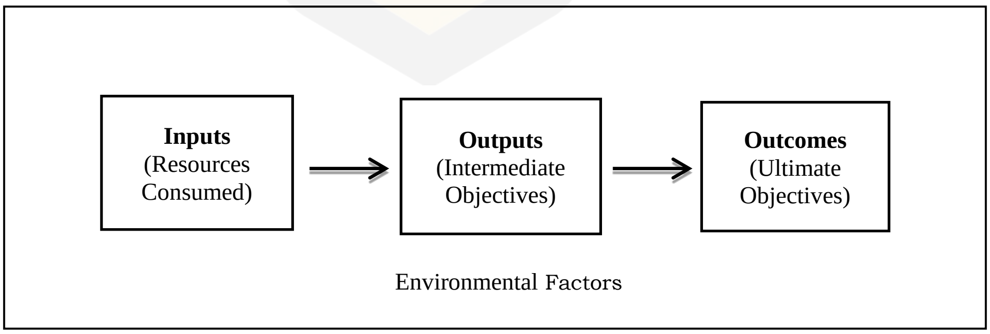
Table 2. Sequence of the Main Interviews and Observations

No.	Date	Activities	Information Obtained
1.	The end of November/early December 2018	Interview with Mr. Sati and Mr. Malagam	A villager (Mr. Sati) and the customary leader (Mr. Malagam) had never known about the program.
2.	3 December 2018	Interviews with and observation on goat pens of Mr. Emi and Mr. Malin/Mrs. Malin.	How beneficiaries finally participated in the program, what kind of supports received, what they thought of the program, challenges faced, conditions of the goat pens.
3.	23 Juni 2019	Interviews with and observation on goat pens of Mr. Emi, Mr. Lano, and Mr. Jon.	How beneficiaries finally participated in the program, what kind of supports received, what they thought of the program, conditions of the goat pens.
4.	22 September 2019	Observation on goat pen of Mr. Panduko	Conditions of the goat pen.
5.	5 October 2019	Interview with Mr. Lano	Progress of the program.
6.	13 October 2019	Observation to *mushalla* built by the program beneficiaries and interview with Mr. Panduko	Activities undertaken by program beneficiaries at *mushalla* (i.e., *zuhur* and *ashar* prayers)
7.	7 December 2019	Interview with Mr. Panduko	Unresolved challenges.
8.	14 March 2020	Interview with Mr. Lano	Progress of the program.
9.	21 June 2020	Observation on rented farmland of Mr. Malin at *Jorong Jirek*.	How goat manure benefited agricultural activities.
10.	23 October 2021	Observation on the main location of program (area where goat pens of 4 beneficiaries are located) and interview with Mr. Lano.	The current state of program and the beneficiaries.

Source: Researcher’s field notes

Analyzing a case study evidence is one of the least developed and most difficult aspects of doing case study (Yin, 2009). There are five analytical techniques mentioned by Yin (2009); pattern matching, explanation building, time series analysis, logic model, and cross-case synthesis. The technique adopted in this study is logic model which is suitable to the nature of the study (i.e., an evaluative case study). Logic model means matching empirically observed events to theoretically predicted events (Yin, 2009). The logic model of a program undertaken by a public sector organization or non-profit organization is presented in Figure 1.

Figure 1: Program Logic Model



Source: Adapted from McLaughlin and Jordan (2010) and Treasury (1988)

Inputs represent ‘resources consumed’ by ZDC program, measured primarily using cost but also non-financial measures. Next, ‘outputs’ represent short-term results of ZCD program; they are mainly measured using non-financial measures. Finally, ‘outcomes’ also mean results of ZCD program, but they can only be seen in long-term and they are measured primarily using qualitative judgments (Jones and Pendlebury, 2010). A useful explanation about the difference between outputs and outcomes can also be found in a much earlier study (see, Treasury, 1988): outputs reflect the achievement of intermediate objectives (objectives when accomplished, are assumed to contribute to the ultimate objectives). ‘Outcomes’ manifest the achievement of the ultimate objectives (what an organization or a program is actually trying to achieve) (Treasury, 1988). Achievement of the ultimate objective(s) also refers to effectiveness (Jones and Pendlebury, 2010).

3. Results and Discussion

3.1 What is the BBCD program?

As mentioned in the Introduction, BBCD program is a form of ZCD program implemented in the district of *Tanah Datar*, West Sumatera Province. BBCD aims to set up a center in *Tanah Datar* District where breeding of ‘*Boerka*’ can take place. The next question will be ‘what is ‘*Boerka*’? *Boerka* is a new strain (species) of goat resulted from the cross-breeding between *Boer* male goat (from South Africa) and local strain female goat, called *Kacang* or Hainan goat. *Boerka* therefore combines the good characteristics of both *Boer* and *Kacang* and easily adapted to the local environment (characteristic of *Kacang*) and having a fast growth rate with excellent carcass qualities (characteristic of Boer), making it one of the most popular breeds of meat goat in the world (Azis et al., 2020).

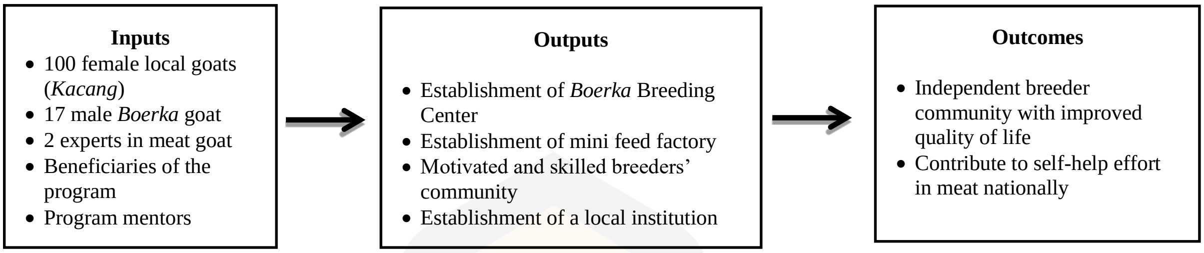
BBCD is centered in a village named *Andaleh* (*Nagari Andaleh*, *Batipuh* Sub-District). *Andaleh* is a small and beautiful village located in the slope of Mount Marapi with a total area of only about 21 square kilometers. The village is about 7 km from the city of *Padang Panjang* or about 22 km from *Batusangkar* (the capital city of *Tanah Datar* District). The village has a population of less than 2,000 people and consists of four *jorong* (hamlets); *Jirek*, *Batukadurang*, *Koto Gantiang* and *Subarang*. Beneficiearies of the BBCD program are centered in two hamlets; *Koto Gantiang* and *Subarang*.

The decision to run BBCD program as ZCD program was driven by the fact that high quality goat breeds were rarely available in the local market. The local BAZNAS of *Tanah Datar* has always been struggling to get quality goat breeds since 2011 when they attempted to distribute *zakat* in a more productive way. Instead of giving cash to *zakat* recipients, the local BAZNAS of *Tanah Datar* decided to provide something that can grow; and therefore, *zakat* recipients can develop and improve their economic condition from time to time. The expectation was that *mustahik* (*zakat* recipients) can transform themselves to become *muzakki* (*zakat* payers) at some point. The local BAZNAS of *Tanah Datar* then decided to provide goat breeds to *mustahik* who were interested in becoming goat breeders. However, the local BAZNAS of *Tanah Datar* often experienced difficulties to find good quality goat breeds. As a result, the quality of goat breeds given to *mustahik* were not standardized. The local BAZNAS of *Tanah Datar* sometimes just gave cash to *mustahik* and then *mustahik* had to purchase the goat breeds themselves as experienced by the Key Informant 1 (Mr. Emi).

The local BAZNAS of *Tanah Datar* had confidence to run BBCD program because there was a commitment from a research center located in the North Sumatera Province, belongs to the Ministry of Agriculture that focuses on developing goat meat (*Sei Putih* Research Center), to collaborate. At that time, researchers in the North Sumatera Research Center were working on a cross-breeding goat project between *Boer* and *Kacang* to produce a new strain (species) of goat (i.e., *Boerka*). Collaboration with the local BAZNAS of *Tanah Datar* provided an opportunity for researchers in *Sei Putih* Research Center to apply into practice what has been developed in the laboratory environment. On the other hand, the local BAZNAS of *Tanah Datar* saw BBCD program as an opportunity to provide high quality goat breeds in *Tanah Datar* and the surrounding regions, besides fulfilling its own needs.

At the beginning of 2016, the Memorandum of Understanding (MoU) was signed between the local BAZNAS of *Tanah Datar* and *Sei Putih* Research Center of North Sumatera. The local BAZNAS of *Tanah Datar* was responsible to provide funding through *zakat* (to procure 100 female local goats) and to recruit beneficiaries of the program and program mentors. Meanwhile, *Sei Putih* Research Center was responsible to provide male *Boerka* goats and experts in *Boerka* breeding. The model of the BBCD program is shown in Figure 2.

Figure 2: Model of the Program (BBCD)



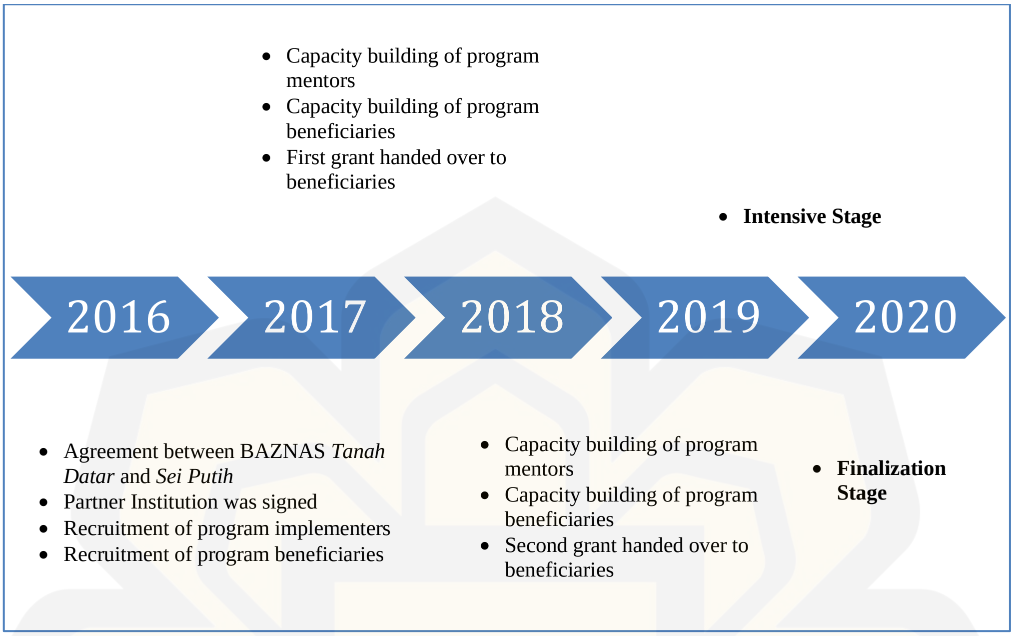
Source: Processed from unpublished report of BAZNAS *Tanah Datar* on ZCD Program

As Figure 2 shows, inputs of the program consist of 100 female local goats, *Kacang* (procured by BAZNAS *Tanah Datar* through *zakat* fund), 17 male *Boerka* goats (granted by North Sumatera Research Center), 2 experts in *Boerka* goat (provided by North Sumatera Research Center), beneficiaries of the program who would be trained as breeders (should meet the criteria of eligible *zakat* recipients) and program mentors. The details of inputs were mentioned in the unpublished report of BAZNAS *Tanah Datar* on the BBCD Program. Using the inputs, BBCD Program was intended to achieve some intermediate objectives or termed as outputs (Jones and Pendlebury, 2010). The intermediate objectives include (i) establishment of *Boerka* Breeding Center (ii) establishment of mini feed factory (iii) creation of motivated and skilled breeder community, and (iv) establishment of a local institution accommodating the interests of breeder community. The ultimate objective of the program is to create an independent breeder community in the selected village with improved quality of life. It is also aimed that the program can contribute to the effort of gaining self-help meat at the national level.

The MoU between the local BAZNAS of *Tanah Datar* and *Sei Putih* Research Center of North Sumatera was for four years (2016-2020). Therefore, the BBCD program was also designed as a four-year program. Beneficiaries of the program were recruited from those who were involved in raising goats distributed by the local BAZNAS *Tanah Datar* during the period of 2011-2015. Candidates who were eligible to be the beneficiaries of the BBCD program should meet the following criteria: (i) able to maintain the quantity of goats previously granted by BAZNAS *Tanah Datar* (ii) being a practicing Muslims (perform daily five times *solah*), showed commitment to avoid forbidden behavior in Islam such as drinking alcohol and smoking and showed commitment to avoid some undesirable acts such as spending time for hours in coffee shop and hunting pig. The milestone (timeline) of the program is presented in Figure 3.

Figure 3 shows the milestones of BBCD Program implemented by the local BAZNAS of *Tanah Datar*. The milestones were divided into five (5) stages. Stage 1 (2016) was the preparation stage. In this stage, as mentioned earlier, the local BAZNAS of *Tanah Datar* signed an MoU with *Sei Putih* Research Center to design and to implement BBCD Program in *Tanah Datar* District. Stage 2 (2017) focused on building capacity of both program mentors (implementers) and program beneficiaries. A series of trainings were arranged for both groups. Trainings for program mentors were aimed at preparing them to become mentors in the field, as the first contact of program beneficiaries whenever they encountered problems related to the goats raised. Meanwhile, trainings for program beneficiaries are aimed at stimulating their motivation to get out of poverty and to be a good Muslim. In this stage, four key informants who were the beneficiaries of the program received 10 female local goats. One beneficiary, Mr. Lano started to join the program in 2017 after observing the other beneficiaries.

Figure 3: Milestones of BBCD Program



Source: Processed from unpublished report of BAZNAS *Tanah Datar*

Stage 3 (2018) is the building capacity for both program mentors and program beneficiaries. Program mentors were brought to conduct visits to *Padang Mangateh* in *Payakumbuh* and to *Sei Putih* Research Center in North Sumatera. For program beneficiaries, trainings were continued to prepare them to become good breeders. They were given basic breeding skills and more advanced skills such as how to process fermented feed, to detect and prevent some common goat disease, and how to process compost from goat manure. In the same year, the local BAZNAS *Tanah Datar* again handed over seeds to program beneficiaries (each beneficiary received 10 female local goats). Stage 4 (2019) was intended as intensive stage where 30 beneficiaries of the program would be selected and closely monitored. The eligible beneficiaries for intensive stage are those who meet the following criteria:

Table 3: Beneficiaries' Criteria for Intensive Stage (2019)

1.	Own minimum 40 goats
2.	Own a decent goat-pen (enclosure) for goat breeding
3.	Own recording for each goat
4.	Breeders have known, understood and applied feed processing
5.	Breeders have understood and applied disease preventing
6.	Breeders have prepared to be a mentor for others

Source: Unpublished report of ZCD program

Finally, 2020 was planned as a finalization stage of ZCD program in *Tanah Datar* District where the expected achievements of program beneficiaries are as follows:

Table 4: Expected Achievement of Beneficiaries in the Finalization Stage (2020)

1.	Have owned minimum 40 goats
2.	Have owned a representative goat-pen
3.	Have possessed breeding skills

4. Have received extra income of 4 million rupiah per month
5. Have transformed from *mustahik* to *muzakki*
6. A legal local institution to accommodate the interest of breeder community in *Nagari* has been set up
7. A center for *Boerka* Breeding has been set up
8. Mini factory for feed processing has been set up
9. A center for new breeder community has been set up

Source: Unpublished report of ZCD program

Figure 4: One of Beneficiaries and His Goats

Source: Researcher's observation on 23 June 2019

3.2 What have been achieved?

In terms of goat ownership by beneficiaries of the program, three beneficiaries (Mr. Emi, Mr. Malin and Mr. Jon) owned 40 goats and therefore, they were expecting to pay *zakat* on goat by early 2019 (*nisab* for *zakat* on goat is 40 goats). Mr. Lano owned 27 goats and Mr. Panduko owned only 15 goats. In our second observation to the field (during January – February 2019), two key informants (Mr. Emi and Mr. Lano) still enthusiastically talked about activities undertaken related to the BBCD program such as a visit from program mentors and experts from the North Sumatera Research Center.

Beginning of the middle of 2019 however, we no longer heard about any activity related to the BBCD Program. Beneficiaries of the program performed their activities as usual in taking care of their goats. Other activities involving program mentors or program experts ceased in this year. There was no more visit either from the local BAZNAS of *Tanah Datar*, experts from North Sumatera Research Center or officials from the central BAZNAS in Jakarta. There was no more regular meeting and discussion undertaken between beneficiaries and program mentors. Relying on whatever level of skills possessed, beneficiaries of the program run their live as usual following their daily routine activities. This condition continued up to the end of 2019 where observations to the field took place almost every week.

By the end of 2019, we met Mr. Emi and discussed what was going on with the program. He mentioned about North Sumatera Research Center that seemed to have withdrawn their support to the program due to the change in leadership at the center. In other words, the new head of *Sei Putih* Research Center in North Sumatera might not support the program and therefore, there were no more visit from the two experts or researchers previously assigned to assist the BBCD Program. By early 2020, we asked Mr. Lano on the progress of the program. He mentioned about the intention of program mentor to rearrange routine activities (regular meetings and discussions) that had been temporarily ceased for a while. However, by the end of June of 2020, there was still nothing happened.

Mr. Malin who owned 75 goats by July 2020 seemed to be very enthusiastic in his organic farm and utilized the goat manure as organic fertilizer. In the third week of July 2020, we observed how he was successful in growing spring onion by utilizing the organic fertilizer from the goat manure. The spring onion harvested had an extra-large size compared to common spring onion that was not given the goat manure or relying on chemical fertilizer. He and his wife then started a new spring onion farm in a rented land. Meanwhile, Mr. Jon and his wife became more focus on their other business (i.e., flower nursery). Business in flowers just gained its momentum since Covid-19 pandemic where many people started to have a new hobby i.e., taking care of flowers as one way of curbing their boring feeling due to the limited social movement. In an interview with Mr. Jon around middle of 2019, he did mention on his intention to limit the quantity of his goats to not be more than 45. The reason was due to the maximum number of goats that he could manage as he needed to search fresh grass twice a day to feed the goats.

Mr. Jon mentioned about the plan to build a mini feed factory. He also highlighted that it would be difficult for him to rely on the mini feed factory even if the plan is materialized. This is due to the location of Mr. Jon's house and his goat pen is far from the goat pens belong to the other four beneficiaries (Mr. Emi, Mr. Malin, Mr. Panduko and Mr. Lano). Thus, it will not be efficient for him to back and forth from the planned mini factory location. Mr. Lano also intentionally kept the goats owned between 27-30 goats because he allocates time to search for fresh grass 1 hour in the morning (around 7 am) and 1 hour in the afternoon (around 4.30 pm) every day. He prefers to be a farmer as his main job rather than a breeder. His intention to join the program was to support his farming activity, and by having some goats, he can use the goats' manure as organic fertilizer.

Beneficiaries raised goats on their own based on whatever knowledge and skills they have acquired from the previous trainings and coaching. Information from one of the key informants (Mr. Emi) indicated that the North Sumatera Research Center had withdrawn their support to the program. Since then, there was no more regular visit from the two experts as before due to the change in leadership at the research center. By the end of 2019 we again asked Mr. Lano about the progress of the program. His replied was that BAZNAS *Tanah Datar* will resume coaching activities after stopping it for several months. However, there was no any change to the situation following our visit in early 2020.

In June 2020, there were five beneficiaries of the program who still owned goats (Mr. Malin, Mr. Emi, Mr. Lano, Mr. Panduko and Mr. Jon). During this time, Mr. Malin and his wife is getting very much into their farming activities. In August 2020, Mr. Malin and his wife indeed have started a sizeable organic farming in another area which is distance from their goat pen. Mr. Jon and his wife on the other hand, have been more focused on their business (flower nursery), especially with the raise of flower businesses during the Covid-19. Mr. Lano and Mr. Panduko also continued to be in their farming activities. Mr. Emi nonetheless remains in managing his goats and his farming activities.

In our last observation on 23 October 2021, the effect of the program was almost unseen. All program beneficiaries have reduced significantly their goat ownership (each of them possessed only a few goats) because they were no longer concerned with the breeding activities. Mr. Lano for instance said that he only had five goats as he had sold most of them to cover the living costs. The impact in terms of religious aspect has also declined – a beneficiary for instance has started to engage in pig hunting (the old habit prior to joining the program). As mentioned earlier, avoiding unwanted behaviour for a Muslim was one of the requirements to be recruited as beneficiaries of the program.

3.3 Does the program effective?

Central BAZNAS in Jakarta reported that the ZCD program undertaken in *Andaleh*, *Tanah Datar* was one of the success stories of ZCD program (BAZNAS RI, 2019b). Using 'Sustainability Livelihood Impact Assessment' (SLIA) technique, evaluative study conducted by central BAZNAS from 4-6 July of 2019 concluded that the program was successful in increasing the income of program beneficiaries. The SLIA technique measures the success of the program based on 5 aspects: human resources, financial, physical, natural and social aspects. In term of human resources, the program has been successful in resulting beneficiaries to have sufficient knowledge and skills in goat farming because of trainings and direct coaching provided in the field. From the financial aspect, the program was claimed to have been successful to increase income among the beneficiaries, as beneficiaries could sell goats in about every two months. The presence of a small *mushalla* (a small and simple building to perform *solah*) in the middle of the farm, built on the land belongs to Mr. Panduko, was program success in terms of physical. The small *mushalla* was used for routine group meeting and a place to perform *solah* among farmers working in the area. The high spirit to help each other among the group was a success in terms of social aspect. In short, the program was claimed to have encourage the beneficiaries to be independence.

Based on the logic model of the program presented in Figure 4, however, the program is categorized as ineffective. This is due to the program does not achieve its intended objectives (outputs) by the end of the program (2020). As mentioned earlier, the objective of the program is to establish *Boerka* Breeding Center. Referring to Table 3, beneficiaries of the program should meet six criteria for intensive stage in 2019 and nine criteria for the finalization stage in 2020 (see Table 4).

ZCD program implemented by BAZNAS *Tanah Datar* District and concentrated in *Andaleh* is indeed a great program. The program in fact has been highlighted as one of the successful ZCD program by BAZNAS at the national level. In relation to this, by June 2020 for instance, three beneficiaries have owned over 40 goats. A beneficiary owned 75 goats, while 2 beneficiaries owned 40 – 45 goats, and the other two beneficiaries owned 20-30 goats. This is an achievement as profession of goat breeders was unknown in *Andaleh* prior to BAZNAS intervention in the sub-district. Presently *Andaleh* has started to be known as a center of goat breeding program for BAZNAS. Based on the logic model approach to measure performance adopted in this study however, the program has failed to achieve its outputs (intermediate objectives), not to mention its outcomes (ultimate objectives). None of the intermediate objectives set as shown in Figure 4 has been achieved.

The first objective (i.e., establishment of *Boerka* Breeding Center) has not been materialized yet. As mentioned earlier, the agreement between BAZNAS *Tanah Datar* and *Sei Putih* Research Center was that the research center is responsible to provide male goat (*Boerka*), whereas BAZNAS *Tanah Datar* to procure female local goat (*Kacang*); and therefore, the cross-breeding between the two different strains of goat could take place. Interviews with beneficiaries of the program and observations to the field however revealed that none of the beneficiaries had been given the *Boerka*. Key Informant (No.1) reported that he had received both local goats when he was given the goat breeds (i.e., Java male goat called *Randu* and female local goat *Kacang*). Thus, the cross-breeding was not between *Boerka* (male) and *Kacang* (female) as planned instead between *Kacang* and *Randu*. Table 5 summarizes the comparison between plan and implementation of the program.

Table 5: Comparison between Plan and Implementation

Plan	Implementation
Boerka + Kacang	Java *Randu+ Kacang*

Source: Researcher's interviews with the key informants

Table 5 clearly shows the reason for the first intermediate objective failed to be materialized. The program intent was to develop a center for *Boerka* breeding. However, the male *Boerka* breed itself has never been given to program beneficiaries. Even if beneficiaries were successful to grow the goat breeds given to them, the title of the program is no longer has relevance with reality in the field. Instead, the title of the program should be revised to development of center for cross-breeding between Java *Randu* and *Kacang*. This is to be matched with the reality in the field and the objective should be revised from developing '*Boerka* Breeding' center to developing '*Randu*Kacang' center.

Implementation of the program has also failed to follow the set timeline. As presented in Table 3, by 2019, the program was intended to produce a minimum of 30 beneficiaries who were eligible to enter the intensive stage, and the 30 beneficiaries should meet the six set criteria. Based on observation in 2019, only one program beneficiary who had meet the six criteria (Mr. Jon), while two other beneficiaries only met the first criterion (Mr. Emi and Mr. Malin). Mr. Jon indeed had owned about 40s goats at the time of observation (23 June 2019), however he grew different strains of goats, included the *Etawa* goat (originally from Uttar Pradesh, India and breed in Indonesia).

By June 2020, it can be concluded that the program has failed to achieve the expected targets as presented in Table 4. Three program beneficiaries have owned over 40 goats but not *Boerka* goats, instead the cross-breed between Java *Randu* and local goat *Kacang*. Indeed, none of the beneficiaries own a representative goat-pen. Further, based on observations made to the four goat-pens belong to Mr. Emi, Mr. Malin, Mr. Jon and Mr. Lano, none of them owned a healthy goat-pen. Their pens were lacked natural light and not properly cleaned, except the pen belongs to Mr. Jon. The pens had been designed not according to the accepted and modern standard for good and healthy goat-pen. The urine and manure of the goats were mixed; thus, it is difficult to clean the pen.

In terms of cleanliness, the pen belongs to Mr. Emi was found to be the worse among the four pens observed. The manure was just left as it is for days. Due to this, the manure has been mounting and reaching the floor of the pen. Some parts of the manure have even been spread out on the ground. During the observation to Mr. Emi goat-pen (11 December 2018), we had to step on the goat manure to observe the goats directly inside the pen. The condition was made worst because of the rain at that time. In terms of acquiring skills needed to become a good breeder, all beneficiaries interviewed indeed had possessed some breeding skills but not for disease prevention, especially when the goat experienced diarrhea. This problem was highlighted by all key informants in this case study (beneficiaries) of the program.

As for the extra income obtained from raising goats, Mr. Lano mentioned that he was able to sell 1-2 goats in 2-3 months with the price between 1.0 -1.5 million rupiah. The extra income received however is far from target (4 million rupiah) per month. Three beneficiaries indeed had transformed themselves from *mustahik* to become *muzakki* since 2019 as the *nisab* of *zakat* for goat is 40 (i.e., the owner shall pay a goat as *zakat* in every 40 goats owned). A beneficiary (Mr. Lano) however, never allowed his goats to reach beyond 30s. The reason was, he had no intention to become a professional breeder, instead he prefers to be a farmer as his main profession. Thus, the intention to participate in the program from the beginning was limited to obtain organic fertilizer for his farming activities. This is the reason why he will sell between 1– 2 of his goats each time the goats reach over 30. The expected target (No. 6– 9) as in Table 4 hence has not been achieved at all.

Finally, the outcomes of the program (ultimate objectives) clearly were not achieved as of October 2021, almost a year after the program ended. Indeed, there is almost no sign of the program remained. As mentioned earlier, all program beneficiaries now only possess few goats with them. Mr. Lano even no longer has a green farm as shown in Figure 6. The *mushalla* is no longer maintained anymore as it has been rarely visited by the program beneficiaries.

3.4 Lessons learned

There are several reasons for the ineffectiveness of the program. This is due to the approach used to introduce the ZCD program, low stakeholders' involvement and lacked transparency. The following sub-section discusses each of the factor.

3.4.1 The use of top-down approach

The ZCD program introduced by BAZNAS *Tanah Datar* has used a top-down approach. This approach was inconsistent with the basic idea of community-based program initiated by the National *Zakat* Board. An ideal community-based program shall begin from the community itself. *Zakat* fund should be used to empower community to develop what they already have.

An example of ZCD program that empowering the existing communities is ZCD program undertaken in *Kelurahan Benteng Utara*, *Benteng* Sub-District, *Selayar* District, South Sulawesi province. *Kelurahan Benteng Utara* has a potency in coconut plantation. ZCD program implemented in this area focused on developing coconut-based products such as Virgin Coconut Oil (VCO), cooking oil, canned food *nata de coco*, *arang tempurung*, cocopeat and coco fiber. The program was successful and benefited up to 50 poor families (Sasongko, 2019).

Still related coconut, ZCD program has also been implemented in *Takome* village, West *Ternate* Sub-District, *Ternate* Municipality, North Maluku province. The village has potency in coconut plantation. Almost all land is cultivated with coconuts and therefore, coconut is the main commodity of the village and the villagers have profession as coconut farmers. Farmers process the coconut to become VCO, coconut biscuit, and *arang tempurung*. Through ZCD, the coconut farmers are empowered to produce a new product i.e., *nata de coco*. Following the ZCD program, seven groups have been formed which involved 35 families (BAZNAS RI, 2020).

In contrast to the ZCD program in *Selayar* District, South Sulawesi and *Ternate* Municipality, North Maluku, the case in *Tanah Datar* District was different. The ZCD program introduced and concentrated in *Andaleh* was relatively new to the community as most of them are farmers. The other growing profession emerged in the last ten years is flowers traders. *Andaleh* itself was named as *Nagari Bungo* (flower village) since 2006. In the last ten years, the flower business has been intensified. This profession has become very attractive for many, especially the young generation. The job of selling flowers is far less demanding than other occupation such as farmers. Profession as goat breeders hence is totally unattractive for many people in *Andaleh*. Those who were recruited to participate in the ZCD program treated breeding goats as only a secondary profession beside their main profession as farmers. Thus, none of the program beneficiaries fully concentrated in raising and breeding goats.

Consequently, the lesson learnt from the case study is, it is more effective to launch a program that can support the existing profession of the targeted community, and *zakat* fund can be used to empower them. By doing so, *Zakat* Board reduces unnecessary efforts such as the building of basic skills needed for them to be successful in undertaking new profession. In the case of ZCD program implemented in *Tanah Datar* district, program beneficiaries need to be firstly trained to become a breeder and a good breeder. In addition, mentors are also needed for the program. The outcome could be different if BAZNAS *Tanah Datar* focuses on empowering the existing community of *Andaleh* in flower trades. The existing community have already acquired some basic skills to become flower traders. In other words, there was no need to start from 'zero' to empower the community. What is required is to support those who did not have capital to set up their business. In other words, less is needed to build technical skills to run their profession as the people in *Andaleh* have already acquired some skills in flower business.

The initial intention from BAZNAS *Tanah Datar* was good as it wanted to create a breeder community. Apparently, creating a new community is not an easy task. ZCD program was only designed for 4 years whereas the creation of a new community such as flower trader community in *Andaleh* took around 20 years for the community to grow well as it is today. It was clear that the ZCD program implemented by BAZNAS *Tanah Datar* was a top-down approach because the initiative to set up a center for high quality goat breeds came from BAZNAS *Tanah Datar*, motivated by the difficulties to find a good and standardized goat breed in the local market. Thus, the program was driven by BAZNAS *Tanah Datar*'s interest instead of the genuine interest of beneficiaries involved in the program. The program also served the interest of *Sei Putih* Research Center which was to experiment cross-breeding between *Boer* goat and local goat. The research center was in need for collaboration with other party so that their researchers had opportunity to put in practice what they have experimented in the laboratory.

Interview with a community leader in *Andaleh* who is aware of the development in the area revealed that he had never heard that BAZNAS *Tanah Datar* conducted audiences with village leaders about what is best to be done for the village. This information is confirmed by one of the key informants (Mr. Sati).

Since the program has been implemented using a top-down approach in which the implementation of the program was driven by the intention to serve the interests of BAZNAS *Tanah Datar* as the owner of the program and its partner institution, BAZNAS *Tanah Datar* has ignored the nature of the existing communities where ZCD program is to be implemented. As mentioned earlier, the major profession of people in *Andaleh* is farmer, hence there is farmer community in the village. The second major and growing community in the village is flower trader. Meanwhile, breeder community did not exist in the village prior to the introduction of the ZCD program and profession as a breeder is uncommon in the village. Despite that, there was an attempt to set up a business in goat breeding in the 1990s by a villager named Mr. Malagam (based on interview on 20 December 2018). The business started with 40 goats but miserably failed because of disease. Since then, there had been no one who try the same business again. In 2011 there was a program conducted by the local government to distribute goats to some selected residents with the objective to form a breeder community. The program nevertheless failed as the recipients of the program sold the goats granted instead of breeding them.

In 2013 - 2014, BAZNAS *Tanah Datar* granted 2-3 goats to around 6-7 people in *Andaleh* who were categorized as *mustahik* (eligible *zakat* recipients). Among those who granted goats during the period, there were only three beneficiaries who were able to maintain the quantity of goats granted to them. The rest sold all the goats given to them. The three successful recipients were then recruited to the ZCD program launched in 2016. Four years after the launch of the ZCD program, the breeder community still has not been created in the village except only a few beneficiaries of the 2016 ZCD program who were able to maintain or increase their goats in their individual capacity. Once the supervision and coaching from BAZNAS *Tanah Datar* ceases, each beneficiary conducts the goat breeding individually.

3.4.2 Stakeholders' involvement

A program shall get a full support from all stakeholders for it to be successful. In the case of ZCD program implemented in *Tanah Datar* District, the collaboration with *Sei Putih* Research Center has ceased by early 2019 although the program is scheduled to end in 2020. Based on our observations during early 2019 to June 2020, the ZCD program has ceased its routine activities. There were no more visits by the experts from the *Sei Putih* Research Center as well as visits by mentors of the program.

3.4.3 Transparency

As mentioned in the previous discussion, there has been no *Boerka* Breeding center established in *Andaleh* because program beneficiaries had been given a different strain of goat – Java *Randu*. There was no transparency regarding the reason for why the beneficiaries were given a different strain of goat, which is a local strain. A key informant (Mr. Emi) mentioned about the high price of the male *Boerka* that could reach 20 million rupiah each and 40 million rupiah for a high-quality male *Boer* goat. The Java *Randu* goat itself was not given to the program beneficiaries but was only lent to them for a certain period. This was inconsistent with the concept and objective of the program. *Sei Putih* Research Center was supposed to provide male *Boerka* goat while BAZNAS *Tanah Datar* would use *zakat* fund to procure 100 females of *Kacang* goat. There was not clear what happened to the *Boerka* male goat granted by *Sei Putih* Research Center. We argued that why none of the program beneficiary has been granted the specified goat or at least being lent the specified strain to allow the cross-breeding to take place. The report of the ZCD program made by the *Zakat* Board of *Tanah Datar* itself mentioned that the partner institution indeed has granted 17 *Boerka* male goats in 2016 (unpublished report of ZCD program, 2018, p. 12). This raised doubt on transparency of the program.

3.4.4 Economies of scale

None of the program beneficiaries solely focused on the goat breeding activity. As discussed earlier, all of them treated goat breeding as a side profession. A reason mentioned by all informants was the economies of scale. On average, each beneficiary was only able to sell 1-2 goats in 2 - 3 months. The price was between 1 – 1.5 million for each goat. Relying on the sales, according to them, it was not enough to cover the needs of the beneficiaries' family. Due to this, Mr. Panduko for instance, had to work as a farmer on his own land or go for work in someone else's field or go to the forest to search for forest products to be sold in the market. This has implication as by doing other jobs, there was not enough time for the beneficiary to get fresh grass for his goats. For this reason, he always keeps the quantity of his goats to not more than 15.

The problem about economies of scale was also highlighted by Mr. Jon who by 2019 owned around 40s goats and remained with the same number by early June 2020. Based on an interview conducted on 7 December 2019, according to Mr. Jon, he would spend the whole day just to find fresh grass if he allows the goats to grow beyond 40s. If he did that, he would not be able to fulfil the needs of the family. Thus, he maintained the quantity around 40s so that he would spend a couple of hours to get fresh grass in the morning and a couple of hours in the afternoon. In between, he could use his time to help his wife developing flower nursery business that seems growing well. This means, when a breeder owns goat beyond 40s, he should be equipped with a machine that can process the fermented feed so that the breeder should not use all his time just to find fresh grass every day. The procurement of mini feed factory is part of the program (see Figure 4). Despite that, there has been no indication for the mini factory to be set up by June 2020. Again, this raises a question regarding the commitment of the related parties in implementing the program.

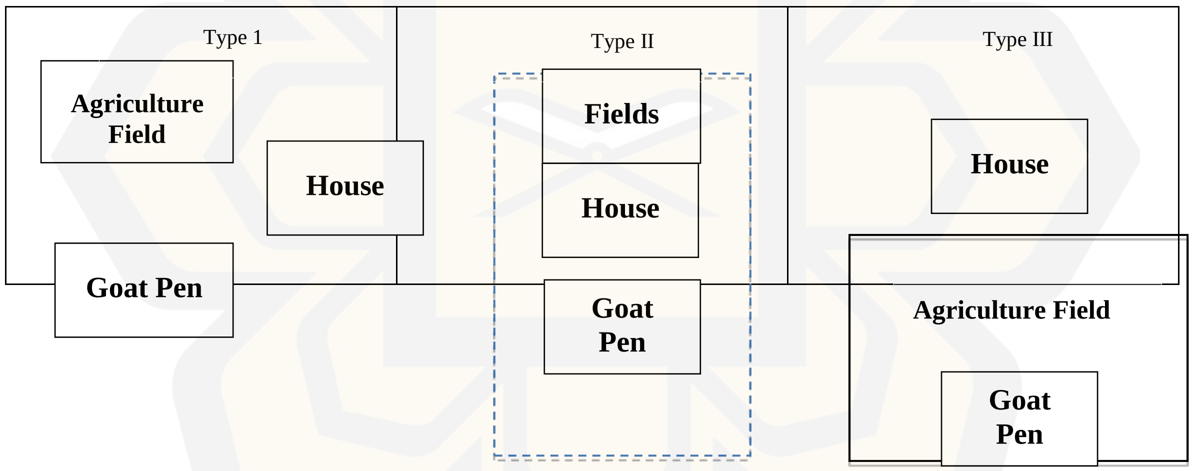
3.4.5 Market uncertainty

When the beneficiaries wish to sell their goats, they will wait for a broker to come over. According to Mr. Panduko, "*If the goat is brought and sold in the market, the price can be very cheap*" (Interview with Mr. Panduko in September 2019). As Mr. Panduko continued "*only when a broker or direct buyer come over, we can hope for the good price*". This practice however diverted from the blueprint of the program (Unpublished Report on ZCD, 2018, p. 4).Based on the blueprint of the program, *Zakat* Board of *Tanah Datar* intended to provide market certainty to attract interest of beneficiaries by buying back the goat breeds produced by the beneficiaries. However, the plan seemed to be not materialized. Beneficiaries have been allowed to sell their goats to other parties.

3.4.6 Typology of breeders

Based on the frequent visits made by the researcher during one and half years to the case site (2019-2020), ZCD beneficiaries can be classified into three typologies: Type I, Type II and Type III beneficiaries.

Figure 5: Typology of Breeders Participating in the ZCD Program of Tanah Datar District



Source: Researcher's observations at site (2019-2020)

Type I refers to a beneficiary (a breeder) who stays, works and raises goat in separate locations such as Mr. Malin. Type II is a beneficiary (a breeder) who stays, works and raises goats in the same location such as Mr. Jon. Finally Type III refers to the place of living is in one place and the place of raising goats is located in the same place where he should do agricultural works such as Mr. Lano.

Type II beneficiary (Mr. Jon) is the most successful one. Mr. Jon has built his goat-pen at his backyard whereas in his front yard, he set up flower nursery. This is a good businesses combination. Mr. Jon has utilized goat manure as fertilizer to his flowers. He also packed the fertilizer and sells it.

Mr. Lano and Mr. Panduko who are classified as Type III breeders, are benefited from the raising goat activity. The first and most obvious benefit was the opportunity to get free organic fertilizer which is quite difficult to get in *Andaleh* (if we do not own goats/cows). Mr. Lano has received a great advantage on his farming from using the organic fertilizer. First, the produce increased significantly, and at a much better quality compared to those who do not use organic fertilizer. The green bean belongs to Mr. Lano had a very wide leaves and very long fruit. Second, the use of organic fertilizer has reduced up to 50% the production costs of his farming. Second advantage, he received extra incomeof 1.0 -1.5 million rupiah in 2 -3 months.

Type I beneficiary is the most disadvantaged. There were much times wasted on the way to the location of agriculture field and then to the location of goat-pen. Mrs Malin for instance mentioned that she and her husband had to divide jobs: when she feed the goats, the husband would go to work in the agriculture fields or vice versa. The distance between location of agriculture field and goat-pen location is quite far, one-hour walk. As a result, the goat-pen is not well maintained. She and her husband did not have enough time to properly clean the pen, especially she now had quite many goats (75). She sometimes arrived late to the goat-pen, as a result she was not able to save one of her goats that got diarrhea or a newborn that died because of his mother stepped in on him. Mr. Emi lives about 2 km away from his goat-pen. Accordingly, he could not know immediately if there is any problem with the goats (diarrhea or delivered a newborn). If the pregnant goat had two babies, in many cases, only one of them survived because no one helps in the process of delivery. Based on our observations, Mr. Emi also often arrived around 9 am at the goat pen. The goats may have been very hungry since they were being feed late.

Thus, the program has not been able to create a breeder community as intended, let alone an independent community. By October 2021, it has been very clear that the program has completely failed. The program is therefore not effective. The finding of this study therefore adds to the list of ineffective ZCD programs. A recent study has highlighted the ineffectiveness of ZCD program undertaken by BAZNAS in East Java Province (Ryandono and Wijayanti, 2019).

The next issue is the lack of skills in disease prevention. This issue was highlighted by all informants. Informant No. 4 shared something interesting on this issue based on interview on 7 December 2019.

> "*Actually there has been no real training on how to prevent the goat diseases, the trainers mentioned about the indications of a disease and we were advised what to do to avoid it. We then followed the advice. But, still the problem emerged. I had a suspicious that the disease was actually brought in by goats granted in the second round in 2014. The reason why I said so was because we did not have any problem in 2013 when we first granted a couple of goats".*

Based on the statement, it is important for the *Zakat* Board to ensure the health status of the goats before granting the goats to the recipients. Any animals to be given to *zakat* recipients need to be isolated first to ensure that the livestock do not have any infected disease with them, as it will risk other animals once mixed. Here the role of the livestock expert is very important and as mentioned earlier, *Zakat* Board cannot perform the job alone. Synergy with other stakeholders therefore is critical.

4. Conclusions

Zakat Board of *Tanah Datar* District has designed a very good ZCD program with a very clear timeline. In this regard, the inputs, outputs and outcomes of the program have been clearly defined. The case study showed that the ZCD program undertaken by the *Zakat* Board of *Tanah Datar* District did not achieve its intermediary objectives or outputs as targeted. Achievement of the ultimate objectives or outcomes therefore is far from feasible. The program therefore can be concluded to be ineffective. Some factors have been identified to contribute to the ineffectiveness of the program; the top-down approach adopted to introduce the program, the lack of institutional capacity of the local *Zakat* Board to carry out the program, the low involvement of stakeholders and the lack of transparency and accountability of the program.

This explains why programs funded by *zakat* in the past tended to use the rudimentary measures such as number of *mustahik* participated in a program, amount of *zakat* distributed and other factors which are easy to quantify. When a program is measured through higher level indicator (outputs/outcomes measures), that program can be judged as a failed one (ineffective). Moreover, during the program, unforeseen events may occur which are beyond the control of the program implementer, which could impact the success of the program.

It is without doubt that the program did have some positive impacts on beneficiaries. The positive impact, however, depend very much on the personal quality of the beneficiaries; creative and innovative beneficiaries are likely to achieve more from the program. Therefore, recruitment process is critical to ensure the productive utilization of *zakat* funds. Sustainable coaching is also important to keep the beneficiaries are motivated. Without careful recruitment process and sustainable coaching, once the program ends, the situation (of program beneficiaries) can just go back to the same quadrant as where they were prior to joining the program, as experienced in the case of the ZCD program undertaken in *Tanah Datar* District.

Some lessons to be learnt from the ZCD program undertaken in *Tanah Datar* District include involvement of universities in the form of providing experts in the related field will help *Zakat* Board to effectively implement a ZCD program. Next, involvement of local government is also important for funding support, thus, the programs do not solely rely on *zakat* funding. This is a very rational as poverty alleviation is the responsibility of government and coordination between the two (government and *zakat* institution) is likely to bring a greater impacts on society at large (Halimatusa'diyah, 2015). This is consistent with the principle of integrated program as defined by the national *Zakat* Board, i.e., ZCD program should bring together all related stakeholders (Indonesia National *Zakat* Board, 2019). Higher level of transparency and accountability is needed in implementing ZCD programs in the future. The finding of this case study research supports the previous study which argued that empowering *zakat* to be productive involves a complex management as more stages needed in its preparation and implementation (Furqoni et al., 2018).

Finally, this study suggests that it is better to improve the existing condition of the community rather than creating a totally new community. Thus, a ZCD program to be introduced in the fishermen community for instance should be the one that has a connection to the fish and fish related products. When ZCD is introduced to flower traders' community, it is better to teach them how to improve their skills in creating new variant of flowers and effectively operate professional nurseries, rather than teaching them a new skill to becoming a livestock breeder. The two activities do have a connection. Flower business will need fertilizer that can be obtained from farms. However, the former option will show faster results than the latter option.

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A Deep Learning Robo-Advisor Framework for *Shariah*-Compliant Investment into Chinese A-Shares

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Abstract

The economic growth of China has led to a growth of investment opportunities in China that has strengthened its collaboration with many Muslim countries. The One-Belt-One-Road initiative has led to growth in bilateral investment with many Muslim countries, requiring the investing Chinese companies to adopt more and more Islamic finance principles. Until recently, Muslim investors had relatively little information and options to invest into the Chinese markets, making the investment potentially impermissible according to *Shariah* Law. With the growing access provided by Islamic banks to Muslim investors, exchange traded funds incorporating *Shariah* compliant Chinese A-Share stocks have been set up. For individual investors, determining efficiently which stocks are *Shariah* compliant remains a considerable challenge and requires extensive manual analysis. Overcoming this challenge, the paper represents a deep learning Robo-advisor prescriptive framework for *Shariah* compliant investment advice in the Chinese stock market. The performance of the framework was evaluated on recent stock and company financial information, outlining the strong estimation and advisory functionality of the framework. The framework represents an important step towards making high quality *Shariah*-compliant investment advisory available to a wider audience.

Keywords: *Islamic finance, Robo-Advisory, Artificial Intelligence, China, Shariah-compliance*

1. Introduction

Islamic finance has in the last several decades gained significant prominence in both China and beyond. While Muslims represent only a minority in China, there are several companies that provide Islamic financial products as well as ensure that their business meets the standards of Islamic finance (Irshad, 2015). With the strengthening of the Belt and Road initiative that crosses mostly Muslim countries along the former Silk Road, many Chinese companies expand in these countries, which necessarily requires them to adhere to the local regulations, which are mostly based on *Shariah* law. Financial regulations play a key role for these Chinese companies, which considerably affects the business model they use in these countries (Selmier, 2018).

Islamic finance is based on three major principles, which include *riba* (the prohibition of interest), sharing of profit between creditor and debtor, and the obligation that any financial transaction is supported by real assets (Oseni and Ali, 2019). The prohibition of charging of interest, or usury, represents a major difference compared to conventional banking and financing and requires Chinese banks and lenders as well as companies to adapt their business models to ensure that their investments are profitable. Specifically, the Belt and Road initiative has more than 65 countries that signed up for the initiative, and 27 alone are Muslim majority countries (Devonshire-Ellis, 2021). This implies that to expand into these markets, Chinese companies have to adhere to the Islamic regulations when conducting business, and with the rise of e-money services, and online payments, these companies are required to provide greater risk-sharing to their clients (Li, 2018). Lending has boomed in most of these Islamic economies, where both financial service providers and conventional banks have gained a foothold. While in the domestic market, they may charge interest, it requires them in Islamic countries to

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adapt their model and engage in greater risk-sharing. For example, buy now-pay later services must adapt in terms of that the lender purchases the item for the buyer and then sells it to the customer at a later time with a markup.

In this regard, Southwest Security established a cooperation deal with the Qatar National Bank (QNB) and the Qatar International Islamic Bank (QIIB) to develop Islamic finance compliant products in the state of Qatar (Rakhmat, 2019). This move should enable Chinese investors to invest in the Gulf markets as well as open the Chinese market up to Gulf investors. The Industrial and Commercial Bank of China (ICBC) provides *Shariah*-compliant banking products in the Gulf and China, as well as asset management in Hong Kong partnered with a UAE-based financial service provider to issue Islamic finance products in both jurisdictions. The Asian Infrastructure Investment Bank (AIIB) has become a major player in the *Sukuk* bond market, with Hong Kong taking on a crucial role. Hong Kong passed 2014 a law to enable the issuance of *Sukuk* by the Hong Kong Monetary Authority. In addition to a new taxation framework, this enabled the Hong Kong government to issue dollar-denominated *Sukuk*, which was listed both in Hong Kong, Malaysia, and Dubai (Rakhmat, 2019).

The growing importance of these foreign markets for these companies has also become a critical business model change driver for several Chinese companies. Specifically, the growing interest of Islamic countries to invest in the Chinese market and the demand of investors to ensure that these companies are compliant have led to a greater focus of these companies to have an Islamic finance compliant business model.

While businesses that invest in Casinos, military industry, and other sectors forbidden by *Shariah* law are excluded from obtaining investment based on *Shariah* principles, several other businesses have benefited from this new investor class (Saad et al., 2020). This necessarily poses the question to what extent the adherence of these companies to Islamic finance principles has on their stock price and performance, and to what extent the correlation between investments into Islamic funds and the stocks arises.

This article presents a prescriptive innovative artificial intelligence Robo-adviser framework for investment recommendation in *Shariah*-compliant stocks in the Chinese stock market, as well as classify the impact of Islamic finance investment products on the performance. The latter classification enables investors to determine the degree of importance of investments according to Islamic principles on the performance of the company, potentially affecting the business model strategy as well as financing of the company to align stronger with *Shariah* principles.

2. Literature Review

Artificial intelligence has gained prominence in a variety of different sectors to enable data-driven decision making, obtain a more profound overview of the processes and dynamics in societies, organizations and automatize processes. Artificial intelligence has also penetrated the field of finance and is utilized in a variety of different use cases, from investment advice to automatic trading.

Gazali et al. (2020) provided an overview of how artificial intelligence can be applied in Islamic investments. The authors outlined the evolution of digital banking, starting from the introduction of emails and internet banking in the 1990s over to the introduction of digital banking 4.0 starting from the late 2010s (Gazali et al., 2020). While the authors provided an overview of the applications of artificial intelligence being primarily in detecting and deterring security intrusions and gauging internal compliance, there have been growing applications in the field of finance.

When it comes to applications in the Islamic financial system, then Robo-advisors have become of crucial interest. The Robo Islamic Advisor (RIA) is the first step and promises to be able to provide 2 billion Muslims with easy access to portfolio management that is based on Islamic principles. There are several other Robo advisors that build automatic portfolios based on Islamic principles. While these portfolios are of importance, the selection is primarily based on whether a particular company qualifies for the master portfolio list. Factors such as its future performance as well as whether the company's action makes it suitable for Islamic investment are only marginally considered.

Lin (2019) presented an overview of artificial intelligence in law and finance and outlined the potential challenges blind trust and belief in the system may affect both financial decisions and challenges law enforcement (Lin, 2019). A crucial component is that data bias, virtual threats, and systemic risks may pose a challenge to these algorithms if they are not properly able to adapt to the environments in which they operate. This relates especially to financial decision-making that may provide inadequate recommendations and may lead to shortfalls when related to Islamic finance.

Khan et al. (2020) demonstrated a new chatbot system related to Islamic finance investment decisions for individuals. The chatbot provides general information about Islamic finance terms and allows the users to interact with it. However, it does not provide any investment advice or is able to provide portfolio recommendations (Khan and Rabbani, 2020). Therefore, the chatbot system is solely a knowledge system that provides terminology information and allows the users to interact with it.

Dahlan (2018) provided an overview of whether robots that can perform tasks of humans shall be considered as human and whether the matter of *fiqh* (Islamic jurisprudence) is relevant to these robots (Dahlan, 2018). Given that more and more artificial intelligence solutions are also employed in the Islamic finance space, this may pose the question of whether the recommendations or advice provided by these AI robots has to adhere to *Shariah* principles and to what extent it affects the decision making and recommendation process.

When it comes to artificial intelligence and the acquisition of funds based on Islamic principles, crowdfunding has become a key component to attract investment (Hassan, 2017). Specifically, investment funding and crowdfunding of new companies have become a crucial interest in the Islamic finance community. Challenges arise in this context, specifically when applying artificial intelligence to provide *Shariah*-compliant investment decisions.

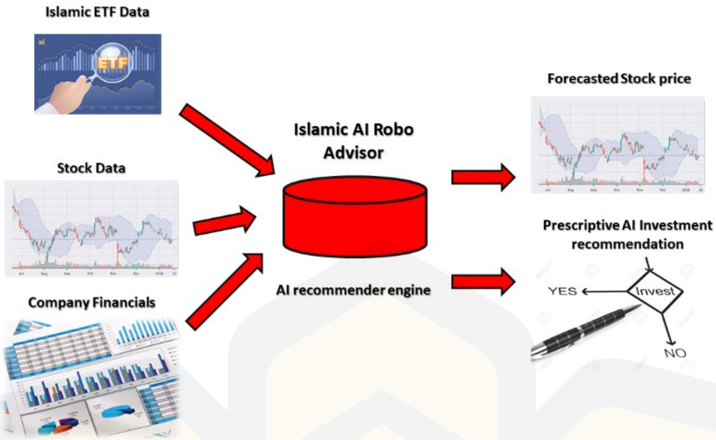
While there have been review articles and research on the application of artificial intelligence in Islamic finance, relatively little research has been conducted on providing specific solutions to optimize the performance of artificial intelligence frameworks in an Islamic finance setting. This research article aims to provide an important contribution to the field of Islamic finance via providing an artificial intelligence Robo-adviser framework for investment recommendation in *Shariah*-compliant stocks in the Chinese stock market, building upon prior research.

3. Conceptual Framework

We have developed a new prescriptive Robo-advisor framework for forecasting of stock prices of Chinese stocks qualifying under *Shariah* law. The framework integrates both the stock data, such as closing, opening, and volume data of the stocks, in addition to critical data regarding the Islamic exchange-traded fund (ETF) performance that invests into these Chinese stocks. The data consist both of time series and general volume and size of the exchange-traded fund. Additionally, the sector classification is utilized as a distinguishing factor for enhancing stock price forecasting and provide better recommendations towards *Shariah* compliance of investments.

Specifically, the incorporation of financial statements and information in connection with the investment sector allows improving forecasting and recommendations given that company valuations are considerably for various sectors. While new technology companies, such as Tencent or BYD, are primarily valued based on their future market potential and growth, more mature companies such as banks are primarily valued at their current market potential (Mohammed and Ali, 2018). Furthermore, price-to-earnings ratios for technology companies are considerably higher as compared to more mature companies (Tahat et al., 2018). WeWork was a prime example of inflation in valuation, which was primarily driven by a false narrative that it was a tech company instead of a real-estate firm (Meredith, 2019). Given the fictitious valuations, this may render some of these companies not permissible for Muslim investors as there are not any real assets that are backing the stock valuations (Ramazan et al., 2018). *Shariah* explicitly forbids *maysir* or gambling (*Qur'an* 5:90), and such investments into companies whose value is not backed by real assets or reasonable valuation, is considered forbidden in *Shariah* Law (Ramazan et al., 2018). The framework considers the financials of the companies for the valuation of the framework and outlines whether the investments adhere to Islamic principles and whether an investment is advisable. A graphical illustration of the framework is provided in Figure 1.

Figure 1: AI Robo-Advisor Framework



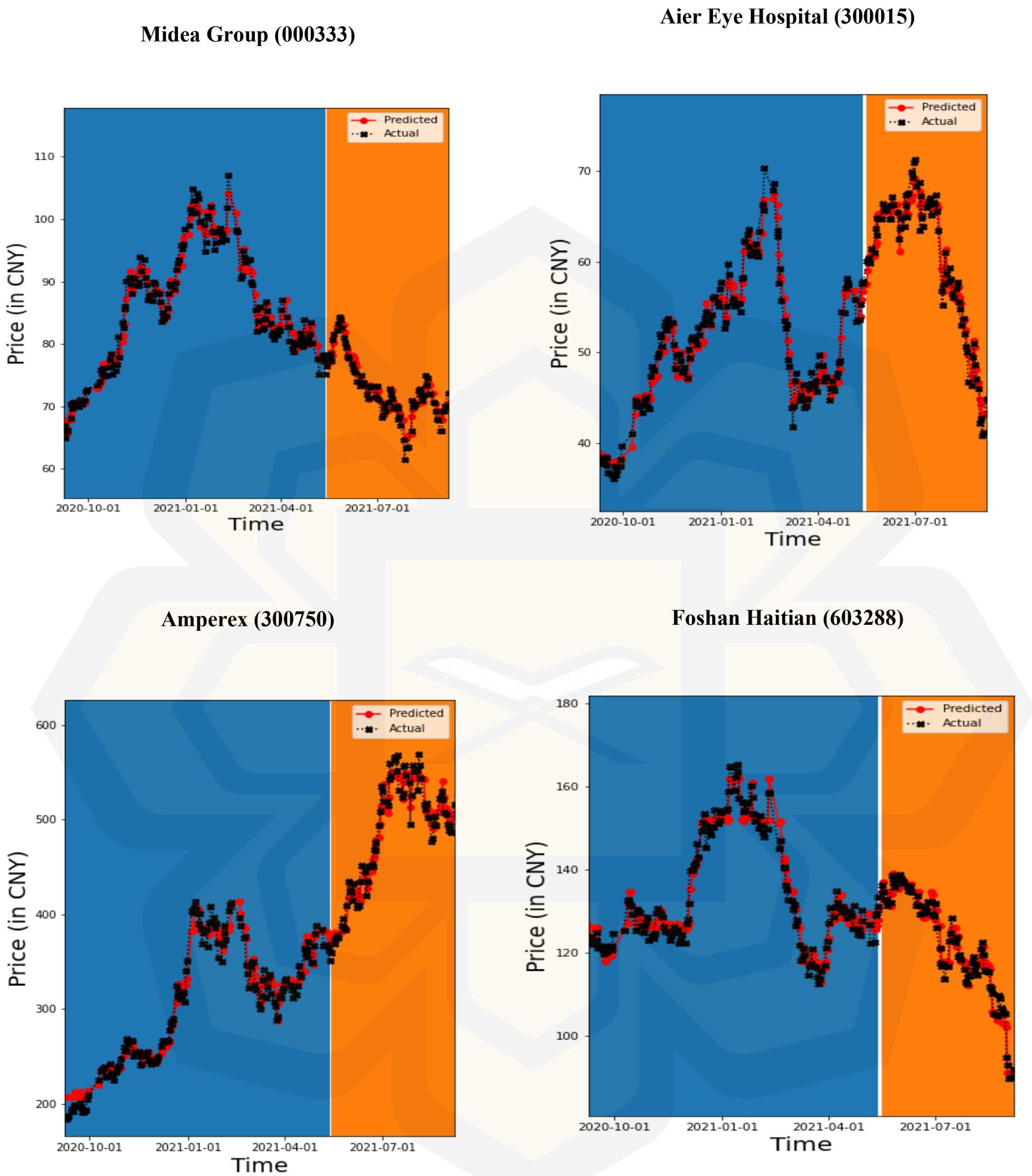
4. Results and Discussion

We evaluated the framework on the stocks in the VP-DJ *Shariah* China A-Shares 100 ETF (exchange-traded fund), which is a major Islamic ETF focusing on the investment into Chinese A-shares that adhere to Islamic principles. The ETF enables easy access to A-Shares for foreigners willing to invest in *Shariah*-compliant A-Shares. A core component of the ETF is that the ETF performs a quarterly readjustment of its composition, which may lead to some A-shares being dropped. The dropping may be either due to a change in market value or the companies not being *Shariah* compliant. Furthermore, stock data from the *Shariah*-compliant stocks are utilized for the Robo advisor estimation and the prescriptive investment recommendation. *Shariah* compliance of a stock requires that the stock fulfills six key criteria as required by the *Shariah* advisor Amanie Advisors Sdn Bhd for the issuer of the ETF Value Partners Asset Management Malaysia (Value Partners Asset Management Malaysia Sdn. Bhd., 2021).

First, the business of the company must be halal and must be in line with *Shariah* requirements. This implies that an investment in conventional banking, conventional insurance, alcoholic drinks, tobacco, pork production, arms manufacturing, pornography, or related activities are not permissible. The second test is whether the debt to total assets is less than 37 %. While this threshold is negotiable, it is an adequate measure. Debt is classified as any interest-bearing debts, which also involve zero-coupon bonds and preference shares. Another test the investment has to fulfill is that non-compliant investments shall make up at most 33 % of the total assets based on the accounted book value. This shall incorporate the non-compliant security investments. A fourth test is that the non-compliant income as a percentage of the total revenue must be less than 5 %. Specifically, the income should be provided to charity as a pro-rate ratio of the issued dividends. The fifth test is whether the ratio of assets that are illiquid to total assets is 25 % at least. An illiquid asset is defined as an asset that is permitted to be traded at a value other than par, according to *Shariah* Law. Finally, the net liquid assets per share to share price shall be less than one. The net liquid asset is calculated as the difference between total assets, illiquid assets, and total liabilities.

These constraints represent an important part of determining whether an investment into a company is permitted or not. While these ratios may be adapted depending on the sector the company operates in, excessive valuations may represent a situation where the value of the company is disconnected from the real assets and performance of the company. Excessive valuations are currently not taken into consideration when classifying stocks in terms of their *Shariah* compliance. Hence, more extensive research is needed in this regard. As outlined previously, we evaluated the forecasting performance on the constituents of the *Shariah* China A-Shares 100 ETF. An AI based system requires a training and testing period to train the AI routines and evaluate its performance on a separate dataset. The results for selected stocks for both the training and testing period are outlined in Figure 2 and Figure 3. The performance of the framework was observed over a total time horizon of one year, with the eight months being utilized for the training period and the remaining four for the testing period. The time period ranges from September 8th, 2020 until September 8th, 2021, and stock prices were recorded daily. The framework utilized an adaptive boosting ensemble learning approach implemented in python in order predict the stock prices. Comparing predicted versus to actual stock prices for some *Shariah*-compliant stocks demonstrates the high accuracy of the framework for the forecasting of the stock prices and subsequent performance determination. The stocks were randomly selected ensuring that they represent different market capitalizations.

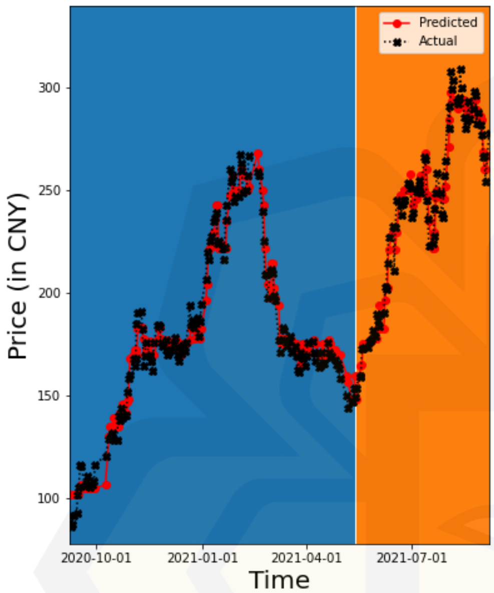
Figure 2: Comparison of Stock Price Forecasts for Four Different Stocks



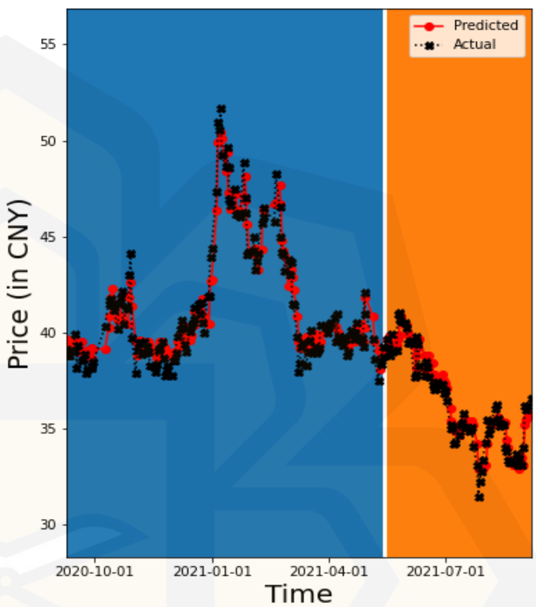
Analyzing the various stocks in greater detail, one observes potential challenges that some of these stocks may not fulfill the requirements for being *Shariah*-compliant anymore. For example, Amperex almost tripled its stock price within less than a year while revenue and income increased considerably less than 300 %. Specifically, BYD experienced a considerable increase in its stock price that has not been matched a similar increase in its revenues and income. Specifically, electric car makers have been heavily affected by the global chip shortage, leading them to reduce their overall car production. A similar situation is experienced by Tesla, which is in terms of market capitalization, the largest car manufacturer in the world, but in terms of actual units delivered and sold far behind other companies. This lack of a real asset-supported business environment necessarily leads Tesla not to be *Shariah*-compliant and be considered rather speculative. This stands in contrast to Yunnan Energy that has observed an increase in its revenue and overall assets due to strong demand for packaging and e-commerce. While the stock price increased considerably, the percentage increase is similar to the overall increase of the assets of the company and revenue. Sales revenue growth was 119% alone in 2021, which supports the increase in the stock price (The Wall Street Journal, 2021). This leads to the stock remaining *Shariah*-compliant.

Figure 3: Stock Price Comparison for Four Different China A-Shares Listed Satisfying the *Shariah* Requirements

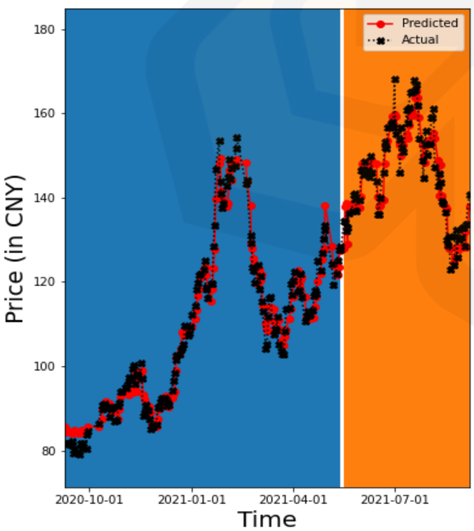
BYD (002594)



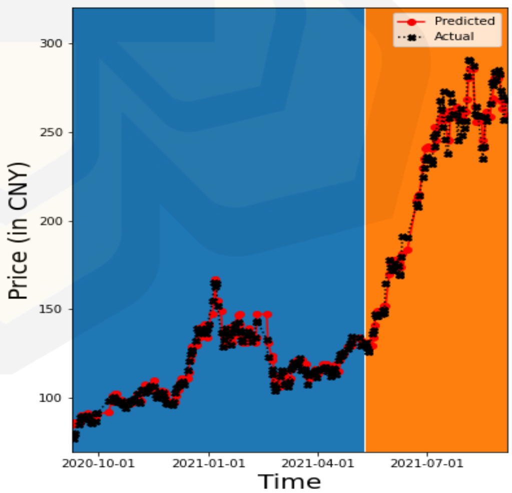
China Tourism (601888)



Wuxi AppTec (603259)



Yunnan Energy (002812)



A general comparison of the framework is outlined by the root-mean-squared error (RMSE). The RMSE represents an important measurement criterion for the accuracy of the estimates and has to be considered relative to the stock price. The overall one-year observation period was divided into the first 2/3 period as the training timeframe and the remaining period to be for testing. With an average stock price of around 250 CNY, the average error rate is less than 3 % for the stock BYD. Furthermore, the framework does not seem to be overfit, given that the RMSE for both the testing and training dataset is rather similar. Overfitting would typically imply that the testing dataset has a considerably higher RMSE as compared to the training dataset.

Table 1: Comparison of Root-Mean-Squared Estimation Error for Selected *Shariah*-Compliant Stocks of the *Shariah* China 100 ETF

Ticker	Company	Training RMSE	Test RMSE
002594	BYD Co Ltd	7.218871	7.928522
000333	Midea Group Co Ltd A SHARES (SZHK)	1.684763	1.44759
300750	Contemporary Amperex Technology Co Ltd A SHARES (SZHK)	12.00713	12.75635
601012	LONGi Green Energy Technology Co Ltd A SHARES (SHHK)	2.201218	2.271409
600900	China Yangtze Power Co Ltd A SHARES (SHHK)	0.225631	0.211866
601888	China Tourism Group Duty Free Corp Ltd A SHARES (SHHK)	8.311843	8.26593
603288	Foshan Haitian Flavouring & Food Co Ltd A SHARES (SHHK)	2.806185	2.708975
603259	WuXi AppTec Co Ltd	3.293607	3.97375
600276	Jiangsu Hengrui Medicine Co Ltd A SHARES (SHHK)	1.527193	1.190468
600438	Tongwei Co Ltd A SHARES (SHHK)	1.257737	1.269348
002352	SF Holding Co Ltd A SHARES (SZHK)	2.024137	1.564844
300122	Chongqing Zhifei Biological Products Co Ltd	5.796864	5.783156
002475	Luxshare Precision Industry Co Ltd A SHARES (SZHK)	1.233121	1.062239
600031	Sany Heavy Industry Co Ltd A SHARES (SHHK)	0.901653	0.849431
002812	Yunnan Energy New Material Co Ltd	4.164092	6.892617
300015	Aier Eye Hospital Group Co Ltd A SHARES (SZHK)	1.448022	1.641037
300274	Sungrow Power Supply Co Ltd	3.243822	4.888028
600887	Inner Mongolia Yili Industrial Group Co Ltd A SHARES (SHHK)	0.821711	0.685575

Finally, the framework determines whether the stock remains compliant based on financial and stock price development, via comparing the actual stock price with the valuation based on the financial statement. As outlined above, the framework accurately determines that the stock BYD is non *Shariah*-compliant anymore and has to be excluded from the ETF, while Yunnan New Energy may still be retained given its *Shariah* compliance. Nevertheless, actual fund decisions may depend on the cost of excluding a particular stock and may solely exclude the stock if the valuations are consistently not complying with *Shariah* regulations. The framework represents an important step towards data-driven forecasting and determination of *Shariah*-compliant stocks.

6. Conclusion and Recommendation

We presented a novel Robo prescriptive advisor framework for investment recommendation into *Shariah* compliant Chinese stocks. With the growth of Islamic finance and the One-Belt One Road initiative, the collaboration between China and most Muslims countries has considerably increased. While the initiative focuses primarily on strengthening infrastructure investments in the countries along the road, bilateral investment has been a cornerstone. Specifically, foreign investment into Chinese corporations has multiplied considerably, and this has been accompanied by a growing interest of Muslim investors to invest in these corporations based on *Shariah* compliance.

The framework enables to forecast stock price development, as well as provide recommendations on the *Shariah* compliance of these stocks based on market backed valuations. Evaluation of the framework on Shariah-compliant Chinese A-shares outlined the strong performance and quality of the Robo advisor framework to recommend *Shariah*-compliant shares and determine their expected performance. This framework represents an important part of utilizing artificial intelligence within Islamic finance to provide advisory services for Muslim investors in China.

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Potential Solutions to Financing Problems among the Poor: A Case of *Baitul Maal Wa Tamwil* (BMT) in Indonesia

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Abstract

Many people in the poor category do not have access to most financial services, especially from formal banking institutions. For example, in Indonesia, as of 2020, there are approximately 91.3 million Indonesians who still do not have access to financial or banking services in the country. Given the difficulties to access financing to undertake their economic activities, the poor have been economically unproductive and remains in poverty. There is a need for non-banking financial institutions (NBFIs) to play a role in reaching people who are still disconnected with the banking system. Several models of NBFIs can be engaged to solve the problem. Indonesia, as a country with the largest Muslim population in the world, has a very well-known NBIFI, namely *Baitul Maal wa Tamwil* (BMT). With a business model that focuses on the lower-middle-class economy and the MSME sector, it is hoped that BMT is able to provide a solution to the problem of access to financial services for the poor. This study aims to determine the issues and challenges of BMT in providing financial service solutions to the poor in Indonesia. In addition, this study provides alternative solutions to the problems faced by BMT in their efforts to improve financial inclusion in Indonesia. The study adopted a qualitative method based on a review of literature from research journals and other types of publications. The study hopes to provide enriching inputs in the development of the Islamic microfinance industry in Indonesia and other countries.

Keywords: *access to finance, financing, poor, Baitulmal wa Tamwil, Indonesia*

1. Introduction

1.1 Background of the study

With the founding of the People's Credit Bank and *Lumbung Desa* by the government in the late nineteenth century, Indonesia's first formal microfinance began. These two organizations were created to help farmers and laborers to free themselves from loan sharks. The People's Credit Bank was upgraded to the Village Bank in 1905, and its services were broadened to include all small business activities (Rokhman, 2013). Microfinance, together with social protection and community empowerment program, is one of the most important tools for reducing poverty in Indonesia. It is given through bank microloans and the formation of savings and lending groups (The Asia Foundation, 2014). Furthermore, this industry creates opportunities for poor and microenterprises (Tamanni, 2019). The poor, who accounted for 80 million individuals in the country, or around 10% of the population, are the focus of this essential instrument (BPS, 2016). Microfinance clientele has recently been estimated to number around 50 million people, with 80% of them receiving loans from non-bank institutions (Sutiyo et al., 2020). Living in poverty entails more than just a lack of clothing, food, and shelter. Poverty, on the other hand, requires having limited access to resources and productive assets, such as research, knowledge, technology, and capital, to attain necessities (Jayengsari and Husaeni, 2021). According to Ayu et al. (2019), poverty refers to low-income citizen that cannot fulfil their basic need. In addition, these people have lack of productivity due to capital problems such as financial or skill problem. The purpose of

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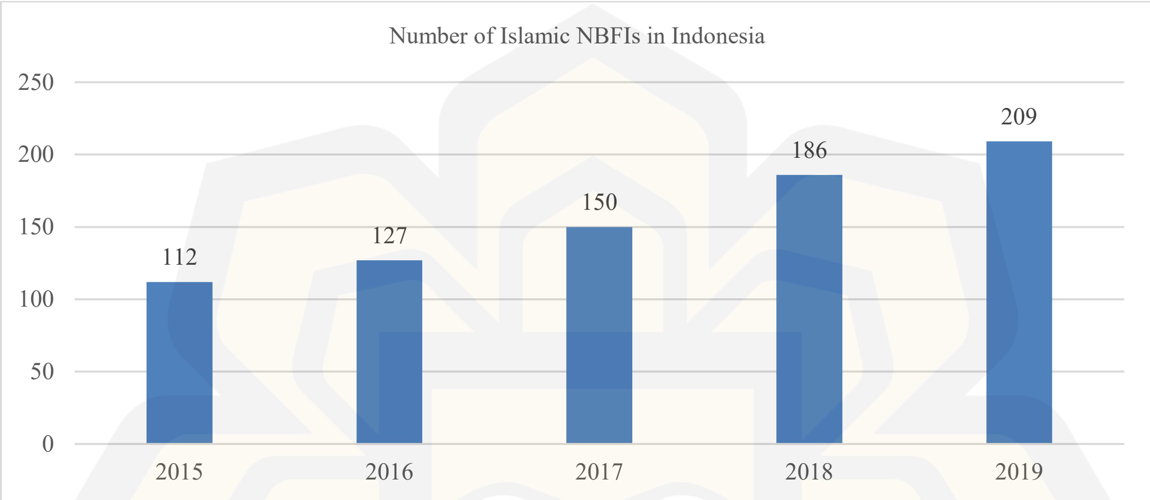
Islamic microfinance is to provide financial services to the poor and the poorest people in the informal economy, which is usually funded through third-party sources such as charity (*infaq* and *sadaqah*[1]) and compulsory Islamic taxation (*zakat*). Islamic microfinance is essentially interest-free microfinance because it offers funds without charging interest to adhere to *Shariah* requirements. In addition, Islamic microfinance maximizes social services by utilizing *zakat*, *infaq*, and *sadaqah* to meet financial requirements (Wulandari and Kassim, 2016). Here are the number of Islamic non-bank institutions based on OJK (2019).

Figure 1: The number of Islamic non-bank institution (NBFIs) in Indonesia



Source: OJK (2019). The data is processed by the researchers

Baitul Maal wa Tamwil (BMT) is one of Indonesia's non-bank Islamic financial institutions (NBIFIs). As an Islamic microfinance institution, BMT is an intermediary financial institution that operates in the microfinance sector. Based on KNKS (2018), approximately 4500 BMT institutions have been established and scattered throughout Indonesia. However, not all BMT are under OJK as some Islamic microfinance institutions are under the Ministry of Cooperative, Indonesia. Some BMT institutions do not apply the license from the OJK; thus, they are under the jurisdiction of the Ministry of Cooperative, Indonesia.

BMT takes deposits from excess units and disburses them to customers in need of credit (deficit units). As a *Shariah* intermediary financial institution, the BMT follows *Shariah* in its operations. The revenue generated by BMT will be partly distributed to the depositors (*shahibul mal*), while the remaining part will be BMT's income (Mawardi and Widiastuti, 2018).

BMT plays a unique role as *Baitul Maal,* which functions as an *amil* that manages, collects, and distributes *zakat* and acts as a financial intermediary by managing funds, savings and providing financing (*Tamwil*). It serves a dual purpose as a business and social entity (Hadisumarto and Ismail, 2010). BMT's social function is carried out through the provision of *qardhul hasan* (an interest free loan) financing. Besides that, BMT also offers other contracts based on profit-loss sharing principles contract under Islamic values. BMT performs vital tasks as cooperatives based collective operations to decrease risk aspects under Islamic norms. In mitigating the credit risk, BMT promotes spiritual and moral support with collective activities among members, which are

[1] *Infaq* is derived from the Arabic word *anfaqa*, which means to spend (possession) for particular importance. *Infaq* is voluntary spending done by a Muslim regardless of the threshold and the person who gives the *infaq*. *Sadaqah* is derived from the Arabic word *ash-sadaqa*h. It means to spend (possession) to those in need, such as the poor. Both *infaq* and *sadaqah* do not require a specific amount and type of gift. The purpose of *sadaqah* is to help those in need, and it is broad. While *infaq* is a gift given when someone receives the sustenance and blessing of Allah.

different risk mitigation mechanisms from banking institutions. Islamic counselling and regular meetings are two activities that encompass Islamic spirituality and practice as part of credit risk mitigation (Wulandari and Pramesti, 2021).

Figure 2: Distribution of BMT based on provinces in Indonesia

Aceh	**2**	**DKI Jakarta**	**1**	**Jawa Timur**	**18**	**Maluku**	**1**	**Sulawesi Selatan**	**1**
Banten	**3**	**Jambi**	**1**	**Kalimantan Selatan**	**1**	**Nusa Tenggara Barat**	**1**	**Sumatra Barat**	**2**
Bengkulu	**2**	**Jawa Barat**	**14**	**Kalimantan Timur**	**1**	**Papua**	**1**	**Sumatra Selatan**	**2**
DIY	**3**	**Jawa Tengah**	**21**	**Lampung**	**4**	**Riau**	**2**	**Sumatra Utara**	**1**

Source: OJK (2021). The data does not cover the exact number of BMT in Indonesia because not all BMT is under OJK.

1.2 Problem statement

Indonesia has the largest Muslim population in the world, poverty issue continues to rise as the number of the poor does not decrease significantly, and people still experience a lack of access to finance. According to the Central Statistics Agency (BPS, 2020), the percentage of Indonesia's poor population grew by 0.97 percent because of the COVID-19 pandemic, or 2.76 million people, from 24.79 million in September 2019 to 27.55 million in September 2020. Poor people are not just poor in terms of cash but also in terms of access to fundamental requirements such as education, health care, safe drinking water, and decent sanitation. The most significant barrier to impoverished individuals rising out of poverty is a lack of credit to run their businesses for various reasons. There are many challenges in getting credit from a formal banking institution. First, banks require collateral. Second, they favor consumers with high incomes. Third, the bureaucratic policies and procedures involved in obtaining loans which sometimes lead to complicated policies. In their effort to alleviate the poverty, microfinance institutions (MFIs) face a set of challenges (Kassim et al., 2018). Like one of the Islamic microfinance institutions, BMT has some problems to provide financing to the customers, which are: funding problems, infrastructure problems, people's awareness, market problems (Wulandari and Kassim, 2015; Mu'tadi, 2019; Kurnia, 2017; Rusydiana and Devi, 2013). Hence, this study aims to explore the potential solutions to finance the poor by BMT in Indonesia.

1.3 Research objectives and questions

Based on the problem statement above, this study has two research objectives: First, to analyze the problems of poor financing faced by BMT in Indonesia, and second, to propose possible solutions to tackle the problems. Based on the stated research objectives, the study poses the following research questions: What are the financing problems among the poor faced by BMT in Indonesia? Furthermore, what are the possible solutions to these problems?

2. Literature Review

2.1 Islamic financial inclusion in Indonesia

World Bank (2014) defines financial inclusion as providing financial access at an affordable cost to low-income segments of society. Hannig and Jansen (2010) stated that financial inclusion strives to help unbankable people access the formal financial system, allowing them to access financial services such as savings, insurance, financing, payments, and other financial services. Another purpose of financial inclusion is to provide simple access to financial services to everyone, especially the middle- and lower-income people. The ease with which the public can gain access to the banking system will enhance the country's economic growth.

Indonesia's financial inclusion programme began in 2010 (Jayengsari and Husnaeni, 2020). The National Strategy for Financial Inclusion (NSFI) programme was launched by Bank Indonesia (the Central Bank) to increase public access to financial services (Jayengsari and Husnaeni, 2020). Currently, financial services have not reached 32% of the population or 76 million people. In addition, 60-70% of Micro, Small, and Medium Enterprises (MSMEs) lack access to banks' services (Jayengsari and Husnaeni, 2020). In contrast, almost 53 million poor people employed in the MSME sector have enormous potential to eliminate unemployment and poverty as well (Husnaeni, 2017).

Financial inclusion has been implemented in Indonesia in various ways, including the development of *Baitul Maal wa Tamwil* (BMT) and the provision of People's Business Credit (KUR). KUR is a specific business credit scheme for MSMEs and cooperatives that have met the business feasibility criteria but lack collateral in accordance with strict bank requirements (Jayengsari and Husnaeni, 2020). Aditya and Cut (2014) stated that the government seeks through the KUR program to enhance the access of banks to MSME business credit by increasing the guaranteed companies' capacity. On November 5, 2007, the KUR program was officially launched.

The launch followed the signing of a Memorandum of Understanding (MOU) between the government and the banks on credit guarantee or financing to MSMEs and cooperatives on October 9, 2007 (Jayengsari and Husnaeni, 2020). According to Aditya and Cut (2014), the implementation of the KUR program is based on three main pillars, which are as follows:

1. The Government is to assist, encourage, support the distribution of credit, credit guarantees, as well as the preparation of the prospective debtors.
2. For example, the credit guarantee institutions, PT Jamkrindo dan PT Askrindo, serve as a representation of the government and act as a guarantor for bank loans.
3. The banking institution acts as the recipient agency of guarantee, distributing credit using internal funds credit to MSMEs and cooperatives.

According to the World Bank survey in 2014, 60% of Indonesians borrow money, but only 26% borrow from microfinance institutions (MFIs) or banks. Particularly, banks serve only 17%, and semi-formal financial institutions serve the remainder (9%). The remainder of the loans received by the Indonesian population comes from the informal sector (34%), which includes loans from family, friends, and neighbors. While the unserved population remains relatively large at 40%, of which 60% are deemed ineligible for loans due to their mild poverty or extreme poverty.

2.2 Baitul Maal wa Tamwil (BMT)

Soemitra (2009) mentioned that BMT refers to an Islamic financial institution (IFI) that was established to fulfil Islamic social obligations while also seeking profit following *Shariah*. BMT represents *baitul maal* (the house of wealth) and *baitul tamwil* (the house of wealth development). BMT was founded as an Islamic financial intermediary focusing on micro and small enterprises (MSMEs). Thus, BMT is also known as Indonesia Islamic micro-finance institution; hence, BMT has become an alternative financial services provider in Indonesia.

BMT is an IFI modification of *baitul maal* during prophet Muhammad (ﷺ) period. In addition to collecting and distributing *zakat*, *sadaqah*, *infaq*, and *waqf* for social welfare, BMT can also act as a financial intermediary, similar to Islamic bank, to seek profit in a variety of ways that are in accordance with *Shariah* (Soemitra, 2009).

There are four activities that can be conducted by BMT (Utami and Setiawan, 2006; Soemitra, 2009; Widiyanto and Ismail, 2010). Those activities are collecting and distributing of *zakat, infaq, sadaqah and waqf* (Soemitra, 2009), and financing activities and service activities (Widiyanto and Ismail, 2010). For funding activities, BMT applies *wadiah* (depository principle) and profit-sharing principle, especially *mudharabah* (Utami and Setiawan, 2006); while for the service activities, BMT provides services like *kafalah* (guarantee), *hiwalah* (transfer of debt)*, wakalah* (delegation) *and rahn* (pawn) (Karim, 2004).

Figure 3: The Conceptual Framework of the Study

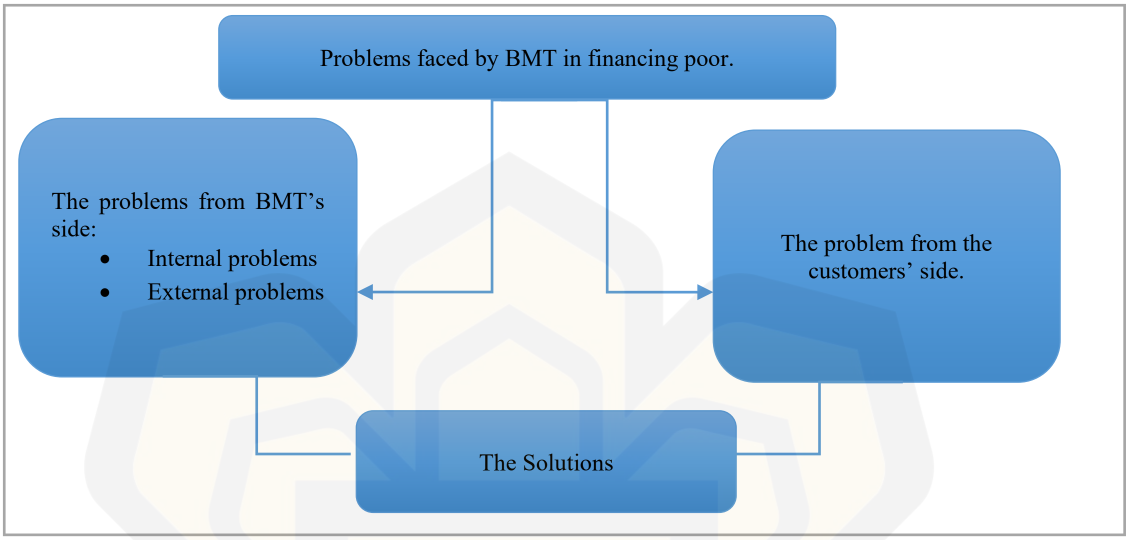


Figure 3 above illustrates the conceptual framework of the study. The study explores the problems faced by BMT in financing the poor in Indonesia. From the analysis, it is divided into two divisions. The first is the problems coming from the issuer; in this case, the BMT. The problem consists of internal and external problems of the institution. Another part is the problem raised from demand, which is from the customers' side. With the problem identified, the study proposes some solutions to the problems faced by BMT in providing financing, especially to the poor people.

3. Research Methodology

This study is a qualitative study with a secondary research approach where the data and information have been gathered by reviewing literature from research journals and the various types of publications (Martins et al., 2015; Nomran and Haron, 2020). The literature source is ranged from 2009 up to 2021. From the collection of the theme of the study, there are 30 papers from various journals, 4 books and 3 unpublished theses. This study also refers to the secondary source which the reports obtained from the documents published by the relevant authorities; *Badan Pusat Statistik (BPS), Komite Nasional Ekonomi dan Keuangan Syariah* (KNKS), and *Otoritas Jasa Keuangan* (OJK).

4. Finding and Discussion

4.1 The problems of financing the poor (BMT)

In the agenda to assist poor society to obtain financial services, BMT emerged as a solution for the problem faced lower-income people. However, in meeting its agenda, BMT faces problems whereby it can be divided into the problem coming from BMT itself (internal) and the problem from the customers (external). In this regard, fund sources and infrastructure are related to the internal problem, and people awareness and market problems are associated with external problems (Wulandari and Kassim, 2015; Mu'tadi, 2019; Kurnia, 2017; Rusydiana and Devi, 2013).

4.1.1 Funding sources problem (internal)

In principle, BMT has the same operation as Islamic banks in providing financing. Generally, BMT has sources of funds and other services in its operation. Sources of funds BMT involves the following (Buchori, 2009; Pujiyono, 2013):

- Principal asset. It is a capital between members in the form of *musharakah* contract.
- Mandatory asset. It is a cooperative capital where the amount is determined through discussion, and the amount is deposited monthly.
- Voluntary asset. It is an investment from members having more funds to be deposited in BMT, either in the form of *wadiah* or *mudharabah*.
- Investment from other parties. It is funded by other parties such as Islamic banks in order to develop BMT, either by *musharakah* or *mudharabah*

BMT, nonetheless, cannot rely solely on the internal funds because of its limited capital, subsidies in the form of cash are needed from the government. Without subsidies, BMT will not survive in the future (Wulandari and Kassim, 2015). However, not all BMT are subsidized by the government (Riwajanti et al., 2020).

All Islamic microfinance institutions (IMFIs), including BMT face funding problems as their customers are poor or near-poor. This is especially when their savings are not enough to fulfil the demand for microfinancing. Hence, BMT must rely on subsidies or other sources of funds for its survival (Ascarya, 2018). Ascarya (2017) analyzed the weakness of BMT where its funding is highly dependent on external sources because some of its members are poor and, due to this, rely on bank financing, which is costly for BMT. The high demand for financing from the lower-income people makes the problem worse. The situation is indeed recorded by Nofinawati (2016) in her interview with BMT customers (*Padangsidimpuan*). She found that many poor people applied for financing from BMT (*Padangsidimpuan*), but BMT could not meet all the requests due to limited capital owned by the institution. Hence, external funding is crucial to support the financing needed by the poor people.

Additionally, BMT is also in need of cash in terms of funding subsidies from the government. Kassim and Satar (2019) explained that the additional cash subsidy will significantly reduce the financing rate charged to the poor by BMT. They further suggested that for small-sized BMT, funding subsidy is crucial to prevent the institution from collapse.

4.1.2 Infrastructure problem (external)

In the effort to serve the poor society, the infrastructure of BMT is becoming more crucial. Pujiyono (2013) found that just a few BMT have online facilities such as e-BMT. He suggested that the existence of e-service such as e-BMT and ATM is required to boost customer mobility. In relation to the e-service, online services nowadays are a requirement. Hardi (2020) argued that BMT needs to capitalize on technology to offer efficient services to its customers. Efficiency is important for IMFI, such as BNT, to manage its business. Mu'tadi (2019) commented that despite some BMT in Indonesia having online services, the services are not sufficient and should be improved further by offering new innovations such as the display and features of the e-services. Sakti (2013) reported that in terms of infrastructure comprehensiveness, BMT's is gradually improving; nonetheless, it is not functioning optimally. This impedes the performance of BMT.

4.1.3 People awareness (external)

Financial inclusion is to provide easy access to formal financial services to the unbanked people (Joshi and Rajpurohit, 2016). However, the limited knowledge of the unbanked people among the poor impact the success of financial inclusion. The knowledge owned by someone influences his/her decision. In the context of financing, when applying for financing, a customer tends to use a product and services that he/she is familiar with and will provide utmost satisfaction, subject to the customer's risk profile (Risnaeni and Wulandari, 2020). Therefore, the awareness and the understanding of the products offered by BMT are important for their customers.

According to Kurnia (2017), some people in the society still do not know that besides having savings products, BMT also has financing products. Hamzah et al. (2013) highlighted that BMT's inability to introduce its products (services) to the society will create low awareness in its services, and this has been identified as an external obstacle or barrier of the IMFI as BMT. The understanding of products offered by BMT, therefore, is a necessity. Hasan and Ilahi (2018) conducted an interview with a manager in the BMT *Jati Baru Padang* and found that many customers are not aware of the products offered by this BMT. This is attributed to the limited number of brochures given to customers. Risnaeni and Wulandari (2020) explained that the understanding of customers significantly influences the decision for applying financing at BMT.

4.1.4 Market problem (external)

The discussion about the market problem is related to the competition among BMT itself and other microfinance institutions such as cooperative or Islamic banks that offer microfinance services. In practice, the highest competition occurs between BMT with Islamic banks offering microfinancing services (Rusydiana and Devi, 2013). Islamic financial industry is growing fast since most Indonesians are Muslims. This situation, however, creates high competition among the players (Islamic banks and IMFIs) since they are targeting the same market, i.e., Muslims in the country. This situation affects BMT externally, leading BMT to strive and survive to sustain its business (Haque et al., 2021). With the high number of conventional and Islamic FIs involved in providing credit financing to the MSMEs, this might be the challenge for BMT in improving its position in the sector. Further, with the high number of IFIs in the market, the understanding of the society towards the role and function of BMT is crucial for its survival (Ngulfa, 2018). Having said that, those are the problems arising from the BMT's perspective. Nonetheless, the problems may also be contributed by the BMT customers, which creates serious challenges for BMT. The problem is related to customer credit unworthiness.

There are certain criteria determining the feasibility of the customers (Micro Enterprises - MEs) applying for financing from BMT. The criteria involve credibility (honesty/*akhlaq*), business competence, experience in business, collateral, and business worthiness. Furthermore, a customer should have the legal capacity to enter a contract. The criteria are important to avoid customers' default (Hadisumarto and Ismail, 2010).

One important aspect of financing is the business competence of the customers, as it leads to the profitability of BMT (Wiratama, 2018). However, if this criterion is not met, the risk of default in the future cannot be avoided. Hence customers should be competent in their businesses to minimize the risk of default. Adnan and Ajija (2015), in their study on BMT (*Sidogiri*), revealed that the BMT adopted the competence aspect in their evaluation before deciding to provide financing to the MEs. In fact, the customers' capability in running their business is set as the most prioritized criteria by BMT (*Sidogiri*) in the selection process of financing.

4.2 The potential solutions to the problems

The problems explained above cause the role of BMT as an IMFI not maximized. A potential solution, therefore, is needed to overcome the problems. The following outlined the possible solutions that BMT can implement for it to have a significant impact in increasing the financial inclusion of Islamic financial products in Indonesia.

4.2.1 Synergy with zakat institutions

One of the problems of BMT is the lack of funding to be channeled to low-income communities due to a lack of support from relevant agencies in the development of the financing products. Many Muslim communities are poor and need business capital assistance (Dehotman and Yusrialis, 2016). They cannot access finance from Islamic banks because they do not meet the requirements (unbanked). So, there is a need for funding support to BMT so that it can provide financial access to a broader range of poor people. The funding support can be promoted by having synergy between BMT and *zakat* institutions in Indonesia. It is because *zakat* institutions can give financial assistance without collaterals attached (Kareem and Bankole, 2016). Apart from collecting *zakat*, *zakat* institutions in Indonesia also have a role in distributing *zakat* funds. The distribution process is divided into two categories, namely consumptive *zakat* and productive *zaka*t (productive *zakat* is a strategic mechanism to help alleviate poverty from the *zakat* given). However, unfortunately, the practice of productive *zakat* is still very rarely done in Indonesia. This is because *zakat* institutions still do not have the infrastructure and systems to mentor and monitor businesses. In fact, according to research by Ali et al. (2015), productive *zakat* can increase *mustahik's* (*zakat* recipient) income by 32.33%, while consumptive *zakat* can only increase *mustahik's* income by 13.38%.

Seeing these potentials and problems, according to Riyadi et al. (2021), the synergy between BMT and *zakat* institutions can be created and achieved through *zakat* fund distribution cooperation. *Zakat* institutions have sizable *zakat* funds for distribution, while BMT has an MSME financing and empowerment program. Combining these together will create synergy and an impactful force to assist the poor not only in business financing but mentoring as well through empowerment programs. Realizing the potentials, Riyadi et al. (2021), in their research, have proposed a synergy collaboration between BMT and *zakat* institutions. Riyadi et al. (2021) proposed the synergy collaboration of the *zakat* fund for the Islamic microfinancing program. The collaboration is explained in detail as follows:

1. Part of the *zakat* funds in *zakat* institutions is distributed to Islamic microfinance institutions/ (BMT).
2. BMT then manages and distributes it to the poor and MSME entrepreneurs in three stages. BMT can make agreements with beneficiaries to commit to improve their standard of living and make BMT a partner for their efforts. BMT can carry out the following three stages:
   a) Distribution of *zakat funds*
   The first stage is the provision of *zakat* funds aimed at beneficiaries (poor people). BMT and *zakat* institutions collaborate and provide *zakat* funds for consumptive and productive purposes. This arrangement is the first step for beneficiaries to engage in productive business with the assistance and monitoring of BMT. This form of assistance will channel the *zakat* funds for productive purposes and beyond consumption. This initiative will also empower the poor to be in businesses.
   b) *Qardhul hasan*
   The *qardul hasan* fund is the second stage to be implemented after the beneficiaries become productive, but not yet maximized. *Qardul hasan* will also be distributed to MSMEs, especially to those with limited capital. The recipients of the fund will pay back only the principal to the capital provider.
   c) Profit-loss sharing
   In the third stage, beneficiaries are expected to receive several benefits from their businesses having businesses being established. In this stage, BMT can implement a profit-loss sharing considering the efforts and success of the beneficiaries in their businesses.
3. After going through several phases, *mustahik* is expected to have sufficient income. With a better income level, their welfare is expected to improve and transform them into *muzakki* (donor). Later, they can perform savings in BMT and fulfil their religious obligations by giving *zakat* funds through *zakat* institutions.

Having explained the above stages and the expected synergy between BMT and *zakat* institutions in helping the poor, BMT can get capital assistance from *zakat* institutions. Besides that, *zakat* institutions also benefit because they have been assisted by BMT in the distribution of *zakat* funds productively. This will create a win-win solution for all parties to reduce poverty in Indonesia.

4.2.2. Developing BMT technology infrastructure

BMT, as an IMI, is unique compared to Islamic banks (Putra, 2015). BMT does not have the same technological facilities as the banks in terms of infrastructure. However, BMT has strength in terms of closeness to its members because BMTs in Indonesia are cooperative legal entities. So those people who are the customers of BMT are also registered as members of BMT. Despite that, most BMT members are village people who do not understand ATM, Internet banking, and mobile banking.

However, with the growing adoption of technology in the current time, BMT must be able to adapt to changes. Applying technology in financial activities will facilitate BMT in conducting financial transactions with their customers. BMT, therefore must be able to identify the suitable technology as their customers are not yet technology literate. To address this issue, the first step that BMT can take is to develop a simple technology that can be easily adapted by its customers. For example, BMT can develop an agent infrastructure that functions as a BMT representative to make it easier for customers to save, pay financing instalments and withdraw money. To support the development of the BMT agent model, it is necessary to develop technology for recording transactions between customers and BMT agents. This can make it easier for BMTs and customers to carry out financial transactions regularly.

4.2.3. Islamic financial literacy program

Currently, Indonesia's level of Islamic financial literacy and inclusion is still low, at around 8.9% (OJK, 2020). This means that out of 100 Indonesians, only nine people are literate about Islamic finance. The low literacy level has implications for the low level of Islamic financial inclusion in Indonesia, far behind the conventional financial inclusion of 76.10%. Considering this phenomenon, the way forward is to increase the level of inclusion in Indonesia to increase Islamic financial literacy so that public awareness of *Shariah*-compliant financial products will increase hence its demand. In this regard, BMT has excellent potential to provide literacy due to broader reach and more intensive frequency of counselling programs and meetings with the community.

In Indonesia, one of the uniqueness of the society is a large number of women's groups; almost every village has a women's group. In addition, women in Indonesia have a strategic role in determining family financial policies so that if women can be adequately educated, they will be able to provide family financial planning following *Shariah*. This, therefore, should motivate BMT to focus on providing Islamic financial literacy programs and economic empowerment to women's groups. An example of a successful women's empowerment program is the one provided by the Islamic Bank Bangladesh Limited (IBBL), an IMFI in Bangladesh. According to Islam (2021), the IBBL program has a positive and significant impact on women customers' income, savings, and expenditure. In addition, IBBL can also contribute positively to women's empowerment.

4.2.4. Market oriented

The problem with BMT is that it does not develop its products according to market needs (Mashuri, 2016). This will make BMT less attractive to the public and less competitive than other financial institutions. Furthermore, financial institutions will develop their products to improve the services (Fajri et al., 2019). The solution to making BMT more competitive is for BMT to run their business based on a market-oriented approach. In this regard, BMT may engage a model based on Amanah Ikhtiar Malaysia (AIM) in marketing their products. Kazemian et al. (2014) reported that AIM is the oldest, largest, and most recognized IMFI in Malaysia, is very effective in implementing its marketing strategies to meet its customers' needs.

The first step that BMT can take is to determine market segmentation. Following that, BMT can conduct a market survey and evaluate the effectiveness of the products that have been carried out. Finally, BMT can then set the marketing targets to be achieved. AIM has done very well in this aspect. Based on Kazemian et al. (2014), the managers of AIM are aware of the target market very well, and as a result, the payment rate at AIM is very high, at 90%. Hence, BMT may adopt the approach undertaken by AIM to be more effective and efficient in their marketing efforts.

4.2.5. Customer capability development

One of the big problems of developing MSMEs is the quality of human resources for MSMEs, which is still at a low level (Adawiyah, 2011). Furthermore, she stated that MSMEs are found to have difficulties adapting to technology. Due to this, MSMEs are unable to compete with large businesses. To address this concern, BMT has a potential role in increasing the skills of MSMEs' entrepreneurs by providing continuous training and mentoring programs. BMT (*Muamalah Tulungagung*) is one of the examples of BMT that provide effective training to its customers (Prastiwi, 2015). The entrepreneurship training program conducted by the BMT has a significant effect in increasing the income level of MSMEs in the area. Prastiwi reported that the more frequent the entrepreneurship training is held, the higher the income level of the MSMEs. Therefore, the achievement of BMT (*Muamalah Tulungagung*) can be used as a reference for other IMFIs in Indonesia in providing training programs to MSMEs. The increasing skills and income of MSMEs will minimize their risk of defaulting.

5. Conclusion and Recommendation

From the review of literature conducted, it is proven that the emergence of IMFIs, especially BMT, is a solution for financing the poor as well as supporting the development of financial inclusion in Indonesia. Nonetheless, it is not an easy task for BMT considering the internal and external challenges they face, as explained in this study. The problems coming from BMT are divided into internal and external problems. The internal problems are fund sources problem and infrastructure problem. The external problems are people's awareness and market problems. The problem that comes from the customer's side is their unworthiness.

To address the problems, the study proposes some possible solutions that can be beneficial for the development of BMT. These include the synergy with *zakat* institutions, developing BMT technology infrastructure, Islamic financial literacy program, market-oriented products, and customer capability development.

This study, however, has its limitation as this study only provides the overall view of BMT without specifying BMT in certain areas in Indonesia as different areas have their specific problems and constraints. The huge number of BMTs in Indonesia, approximately 4500 scattered throughout the country, makes possible solutions more complex, and hence the solutions proposed in this study is general in nature. Due to this limitation, it is hoped that future research can focus on a particular BMT; hence the case, challenges, and possible solutions can be specified.

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Determinants of Islamic Financial Inclusion in Indonesia: A Demand-Side Analysis

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Abstract

The low number of Islamic financial inclusion has been a major problem to the Indonesian government because of the country has the largest Muslim population globally. This study aims to examine the Islamic financial inclusion determinants by collecting information from Muslim respondents. The determinants used include Islamic financial literacy, trust, financial self-efficacy, and social influence. The survey involved 215 respondents from West Java, Lampung, South Kalimantan, Gorontalo, and West Nusa Tenggara. All the participants involved in the study were included in Islamic financial institutions. Furthermore, the Exploratory Factor Analysis (EFA) and the Confirmatory Factor Analysis (CFA) methods were applied to classify Islamic financial inclusion determinants, while the Structural Equation Modelling was used to test the hypothetical relationships. The results showed that social influence is a significant determinant of Islamic financial inclusion in Indonesia. Therefore, policymakers and the Islamic financial industry need to improve social influence through campaigns that involve local culture and public or religious figures to enhance inclusion. Future studies need to provide other validated constructs to assess Islamic financial inclusion from the demand and supply aspects.

Keywords: *Islamic financial inclusion, Islamic financial literacy, trust, financial self-efficacy, social influence, exploratory factor analysis*

1. Introduction

Islamic finance has developed for the last 50 years and could devote itself to shared prosperity and enhance more inclusive economic growth (S&P Global Ratings, 2020). The contribution of Islamic finance has been extensively discussed in many works of literature. For instance, Ahmed (2017) stated that Islamic finance is essential in achieving the Sustainable Development Goals (SDGs) of the United Nations Development Program (UNDP). Furthermore, it could bridge religion-related problems in financial services (Karlan et al., 2021). However, it is necessary to discuss the contribution of Islamic finance in improving the economy of many Islamic countries. According to Kim (2018), OIC (Organization of Islamic Cooperation) member countries have few financial inclusion problems. This highlights the issue of financial services and inclusion in Islamic countries.

Most studies focus on the determinants of financial inclusion, which are the demand- and supply-side factors. The demand-side factor is related to the financial service customers excluded from financial services. Several studies have shown that socio-economic (Yangdol and Sarma, 2019; Zins and Weill, 2016), physical proximity, availability, and usage (Nandru and Rentala, 2019; Ramakrishna and Trivedi, 2018; Sotomayor et al., 2019), financial literacy (Er and Mutlu, 2017), social influence and culture (Ali et al., 2020) are the determinants of financial inclusion. On the other hand, the supply-side focus on financial service institutions, including the product and service (Terzi, 2015), infrastructure (Fungáčová, 2015), government intervention (Datta and Singh, 2019), and human capital (Mohammad Mahbubi Ali et al., 2020). This paper uses the term "Islamic financial inclusion" to describe the access, usage, and availability of Islamic financial services. Similarly, several studies

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have used this term to describe financial inclusion from the Islamic finance perspective, such as Ali et al. (2020) and *Otoritas Jasa Keuangan* (Indonesian Financial Service Authority, 2019).

The Global Findex Report (Demirguc-Kunt et al., 2018b) could be a reference for Muslim countries to prioritize financial inclusion. Kim (2018) stated that there is a close positive relationship between financial inclusion and economic growth. Therefore, the number of financial inclusions must be increased to achieve high economic growth. Indonesia has various Islamic financial services as a country with the largest Muslim population globally. Moreover, based on the Global Islamic Finance Report (2020), the country has the highest growth rate in Islamic finance development. On the contrary, the *Otoritas Jasa Keuangan* (OJK) Report 2019 stated that the percentage of Islamic financial inclusions in Indonesia is only around 0.89%. This evidence shows a sharp imbalance between Islamic financial services and inclusion.

Few studies deal with Islamic financial services as a provider of inclusion. While the existence of Islamic financial services is closely related to religious reasons, previous studies on financial inclusion have not dealt with religiosity in the Islamic view. In line with this, Demirguc-Kunt (2012) found that people choose to be financially excluded because of religious reasons. Similarly, Shihadeh (2018) showed that individuals' characteristics influence financial inclusion, including religious reasons. According to Mohammad Mahbubi Ali et al. (2020), religious commitment significantly influenced Islamic financial inclusion. Also, the Analytic Network Process (ANP) approach of financial inclusion shows that religiosity affects the choice for Islamic financial services. Therefore, to fill this gap, several attributes are considered besides religiosity attributes. These attributes include Islamic financial literacy, social influence from religious figures, trust in financial institutions, and self-efficacy view of Islamic finance that has never been explored. Different methods have been proposed to classify determinants, such as exploratory and confirmatory factor analyses, to enrich the research in Islamic financial inclusion.

This study empirically investigated several hypothetical factors linked to Islamic financial inclusion as determinants involving the chosen dimensions of social influence, finance knowledge, trust, and financial self-efficacy. Data were collected from West Java Province (representing Java Island), Lampung Province (Sumatera Island), South Kalimantan Province (Borneo Island), Gorontalo Province (Sulawesi Island) and West Nusa Tenggara Province (The Sunda Kecil Island). This paper is divided into five sections, including the introduction. Section two presents empirical literature on Islamic financial inclusion and its determinants in Indonesia, while the third section discusses the methodology and data. Sections four and five discuss the results and discussion and present the study findings, while the last section outlines the conclusion and recommendations.

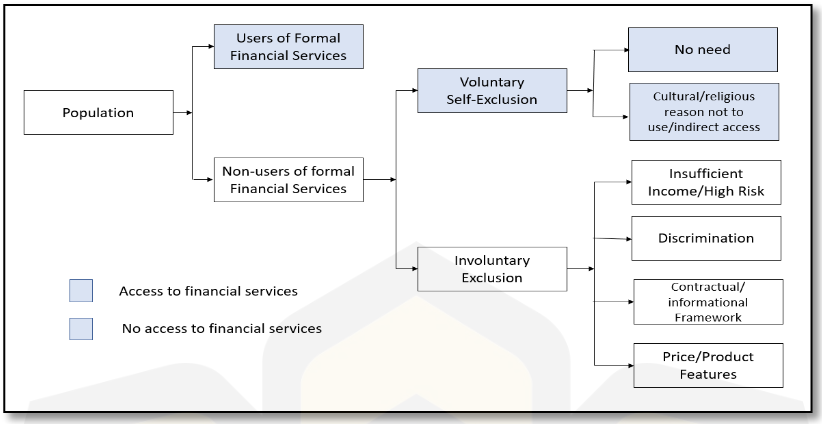
2. Literature Review

Financial inclusion is crucial in economic development and poverty alleviation programs (Sarma et al., 2011; Zulkhibri, 2016). Previous studies in Asia (Fungáčová, 2015) and Africa (Zins and Weill, 2016) have recorded low financial inclusion on these two continents. Furthermore, Muslims dominate these two continents, and most of them are OIC members. Kim (2018) and Moehildin (2011) showed that Islamic finance boosts the number of financial inclusions in Muslim countries. Also, scholars have debated whether to expect financial inclusion or migration from conventional to Islamic financial services (Tahiri Jouti, 2018).

Previous research shows that people have many reasons for preferring exclusion from financial services. For instance, Mohieldin et al. (2012), referring to The World Bank (2008), provided the earliest description of financial user characteristics (see Figure 1).

Financial users may be differentiated from the non-users that cannot access or refuse the financial system for various reasons. First, households and companies are deemed unbankable by commercial, financial institutions, and markets because they lack sufficient income, which is an unreasonable lending risk. Second, prejudice against such demographic groups may be based on socio-economic, religious, or ethnic grounds. Third, the contractual and knowledge system may prohibit financial institutions from accessing certain population groups because it is too expensive for commercial viability. Therefore, researchers explore financial inclusion problems from the demand side (Nandru and Rentala, 2019; Ramakrishna and Trivedi, 2018; Sotomayor et al., 2019). The characteristics of users are not only the accessibility problem but many other attributes that affect financial inclusion. The following subsection discusses the literature relevant to the relationship between financial inclusion and different factors.

Figure 1: The Financial Exclusion Factor



Source: The World Bank (2008)

2.1 Socio-demographic characteristics

Socio-demographic characteristics drive financial inclusion (Demirguc-Kunt et al., 2018a; Shihadeh, 2018; Zins and Weill, 2016). Therefore, most demand-side studies apply socio-demographic attributes, including gender, age, marital status, education, occupation, and monthly income. In line with this, Ng'weno (2018) and Soumaré et al. (2016) found that gender and marital status are the most significant attributes of financial inclusion in Central Africa. Moreover, Shihadeh (2018) found similar results in the Middle East, North Africa, Afghanistan, and Pakistan (MENAP). In contrast to Shihadeh (2018), Oyelami (2019) stated that income and literacy are significant factors from Sub-Saharan African countries' demand-side. Studies conducted in Asian countries, such as the Philippines, Cambodia, and Indonesia, show that age, sex, civil status, education, employment, and income significantly affect access to financial products and services. Additionally, access to media, information, the internet, and household size are significant determinants (Sam, 2019). A positive correlation exists between access to Islamic financial products and higher family income. Therefore, these observations show that socio-demographic characteristics are part of Islamic financial inclusion.

2.2 Islamic financial literacy

Many studies showed that literacy on finance inhibits financial inclusion in developing countries (Sayed and Shusha, 2019). This is due to the low education level of people in these countries. OJK Report 2019 showed that Islamic financial literacy in Indonesia was at 8.92%. However, financial inclusion comprises the general literacy to be achieved and knowledge concerning Islamic finance (Iqbal and Mirakhor, 2012). In this case, knowledge requires a deeper understanding than literacy (Sayed and Shusha, 2019). Islamic financial literacy is developed to study finance products, such as savings, *takaful*, *sukuk*, credit cards, and individual retirement funds (Er and Mutlu, 2017). The participants' Islamic financial knowledge, attitudes, and behaviour were assessed cumulatively for financial literacy after analyzing their demographic characteristics.

A Muslim must understand many basic Islamic finance factors before carrying out financial transactions, such as usury prohibition (*riba*) and *gharar* and *maysir*. Ahmad (2020) divided Islamic finance literacy into subjective *Shariah* compliance knowledge and subjective usury and profit-sharing knowledge. According to Antara et al. (2016) and Setiawati et al. (2018), Islamic social finance awareness includes the practice of *zakat*, *infaq,* and *waqf*. Furthermore, understanding Islamic financial knowledge enhances access and involves the community to increase financial inclusion.

2.3 Trust

The Global Findex Report 2017 showed that trust influences people to choose financial services. In line with this, Camara (2015) stated that lack of trust is a barrier that represents involuntary exclusion. Several trust-based market failures exist, preventing consumers and firms from cooperating to complete a useful transaction. Trust is essential for a social system to promote cooperation among people to achieve efficient outcomes. Although the two parties may have a good exchange to make, they might not trust each other.

Xu (2020) stated that social trust is a significant determinant of access and intensity to various basic financial services and digital technology. Digital financial inclusion is of particular interest in alleviating poverty and fostering economic growth. It provides a low-cost way of promoting financial inclusion, particularly for people living in areas underserved by mainstream banking. In Indonesia, problematic microfinance institutions are often closed due to bad credit or unsuitable investments. This has resulted in a continued decline in trust, despite being labelled as Islamic financial institutions. However, this trust is to increase, along with Islamic financial institutions that are strong and trustworthy in managing their products and services.

2.4 Social influence

The theory of social learning underpinning financial inclusion postulates that others' actions may influence human behavioural habits through differential support mechanisms (Bandura, 1969). In this regard, a person may accept or reject such decisions because of society's demand or influence. Furthermore, this theory explains that highly experienced individuals significantly influence the general population. Many studies show that people's acceptance and involvement in Islamic banking activity are affected by their surrounding sources, parents, family, friends, and culture (Mohammad Mahbubi Ali et al., 2020; Maryam, Mehmood and Khaliq, 2019). However, Senyo and Osabutey (2020) stated that social influence does not affect the intention and use of mobile money services as part of financial inclusion, contrary to well-established positions. Together, these studies provide important insights into Islamic financial inclusion determinants from the demand side.

2.5 Financial self-efficacy

Financial self-efficacy is an individual's ability to access, use financial products or services, undertake a financial decision, and deal with the complex financial situation (Amatucci and Crawley, 2011; Noor et al., 2020). Also, self-efficacy characterizes a person's capability to execute an action to accomplish an expected performance (Bandura, 1969). Financial self-efficacy is related to the social cognitive theory, stating that self-efficacy perceptions influence individuals' lives concerning their financial objectives. Therefore, an individual's choices and determination in achieving tasks shape their thoughts and persistence in facing problems. Also, individuals' recognition of self-efficacy influences their performance, thinking, feelings, and self-motivation. Over the years, self-efficacy mediates the relationship between several variables and the desired financial action executions. Moreover, the predictive power of domain-specific self-efficacy directly influences individual tasks or choices. The same domain-specific self-efficacy indirectly affects the perceived positive outcomes frequently expected by individuals. Therefore, an individual's desired behaviour could be acquired and regulated based on their self-efficacy to obtain an inevitable outcome.

Individuals with sufficient financial knowledge and information are self-confident in their capabilities in making successful transactions (Noor et al., 2020). Mindra (2017) stated that self-efficacy and its relation to financial inclusion are particularly relevant. It fills the gap in the financial inclusion literature and theory. This is because a financial consumer's cognition and behaviour might be influenced by a belief in their abilities to engage in a specific task or activity (Rachel Mindra et al., 2017).

2.6 Islamic financial inclusion

Financial inclusion is the delivery of financial services to the bottom of the pyramid segment of society at an affordable cost (Iqbal and Mirakhor, 2012). This concept includes easy access to financial services for all households and enterprises, prudential regulatory and supervisory institutions, financial institution sustainability, and competition among service providers to bring alternatives to customers (Demirguc-Kunt et al., 2008). According to Sarma (2008), financial inclusion ensures the availability of the formal financial system for the society with easy access and friendly usage. These definitions show that key financial inclusion dimensions are accessibility and formal financial and bank services, and other services that improve the society's economic well-being.

Previous studies showed that the measurement of the financial inclusion index covered certain dimensions. However, Sarma (2008) constructed a multidimensional index for measuring financial inclusion, including accessibility, availability, and usage of the banking system. In line with this, Ali (2020) described Islamic financial inclusion as access, availability, and usage of financial products and services. Islamic financial product-and service-based profit sharing, such as banking, *takaful*, investment, *Baitul Mal wa Tamwil* (BMT), and wealth redistribution consist of *Amil Zakat* and *Waqf* Institution.

The literature discussed shows that most studies on financial inclusion determinants in both demand and supply sides analysis are conventional. Therefore, this study fills the gap in literature by examining the determinants of Islamic financial inclusion in Indonesia using the demand-side analysis.

Table 1: Definition of Terms

Dimension	Item Measurement	Attribute	Literature Source
Islamic Financial Inclusion	Accessibility measures Islamic banking penetration to low-income people.	Access	(Sarma, 2008) (Iqbal & Mirakhor, 2012) (Abdulmumin, Etudaiye-Muhtar, Jimoh, & Sakariyahu, 2019)
	This dimension measures the availability of Islamic banking services to low-income people.	Availability	(Camara & Tuesta, 2014) (Yorulmaz, 2018) (Franklin en Leora Klapper and Maria Soledad Martinez Peria & Franklin en, Asli Demirguc-Kunt, n.d.)
	This dimension measures the usage of Islamic finance products and services by customers,	Usage	(Asli Demirguc-Kunt et al., 2008) (Camara & Tuesta, 2014)
Islamic Financial Literacy	Financial awareness and understanding of the financial concepts, procedures, and the use of this understanding to solve financial problems	Financial Knowledge Sharia Compliant Financial Knowledge Usury and profit-sharing Halal literacy Islamic Social Finance	(Sayed & Shusha, 2019) (Er & Mutlu, 2017) (Ahmad et al., 2020) (Mohammad Mahbubi Ali et al., 2020) (Albaity & Rahman, 2019)
Social Influence	The perceived social pressure to use or not to use an interest-free transaction from any Islamic financial institutions	Influence from Family, Friend, Society, public figure and Informal religious leader to choose Islamic Financial Institution	(Camara & Tuesta, 2014) (Senyo & Osabutey, 2020) (Maryam et al., 2019)
Trust	Trusting Islamic financial institutions regarding their saving and credit, as well as people and management	Trust to Islamic finance Institution Trust to people managing their money Trust *Shariah*-compliant practice	(Xu, 2020) (Filipiak, 2016) (Mohammad Mahbubi Ali et al., 2020)
Financial Self-Efficacy	Individuals' perceived ability to manage their finance	Confidence to manage own financial planning, borrow money from the bank, spending less for consumption.	(Mindra et al., 2017) (Noor et al., 2020)

3. Methodology

This study explores respondents' perceptions from five provinces in Indonesia towards the factors of Islamic financial inclusion (see Table 2). Previous studies measured financial inclusion in many ways, though the dimensions are effectively-identified quantitatively. It was agreed to individuals with Islamic or conventional bank accounts since the study considered different criteria of access to financial services, such as banking, rural banks, or cooperation/ *Baitul Maal wa Tamwil* (BMT). Therefore, individuals above 17 years were considered because it is the average age requirement for opening a Bank Account. Age groups were identified in the questionnaire as 17-30 years, 30-45 years, 46-55 years, and above 55. Furthermore, the research focused on both males and females. A structured questionnaire with closed-ended questions was used in data collection.

Table 2: Islamic Financial Inclusion Index in Five Provinces

No	Province	Islamic Inclusion Index
1	Gorontalo	0.022
2	Lampung	0.058
3	South Kalimantan	0.170
4	West Java	0.113
5	West Nusa Tenggara	0.173

Source: OJK 2019

Purposive sampling was employed in selecting 215 respondents. Usually, 100–150 individuals are considered the minimum sample size for conducting SEM (Tabachnick and Fidell, 2007). The items were measured using a structured questionnaire with a six-point Likert scale (1= strongly disagree; 2= disagree, 3=slightly disagree, 4= slightly agree, 5 = agree, 6= strongly agree). Most Likert scales have two positives, two negatives, and one neutral option, though this poses some issues. For instance, it offers respondents an easy-out, and they always choose the neutral option when they do not want to think. On the other hand, the six-point scale forces preference, providing better data (Taherdoost, 2019). In this case, the "slightly agree" and "slightly disagree" are averaged together when neutrality is needed. The demographic profile of the sample households in this research is presented in Table 3.

Table 3: Demographic Profile of respondents

No	Demographic Variable	Classification	Frequency	%
1	Gender	Male	141	65.58%
		Female	74	34.42%
		Total	215	100.00%
2	Marital Status	Married	141	65.58%
		Single	56	26.05%
		Divorce/Separated	7	3.26%
		Widowed	11	5.12%
		Total	215	100.00%
3	Age in years	17-30 years old	85	39.53%
		30-45 years old	80	37.21%
		45-55 years old	36	16.74%
		Upper 55 years old	14	6.51%
		Total	215	100.00%
4	Education Level	Illiterate	8	3.72%
		Primary School	31	14.42%
		Secondary School	74	34.42%
		Undergraduate	101	46.98%
		Total	215	100.00%
5	Occupation	Unemployment	20	9.30%
		Farmer or Fisher	14	6.51%
		Entrepreneur	40	18.60%
		Teacher	26	12.09%
		Housewife	32	14.88%
		General Employee	47	21.86%
		Government Employee	36	16.74%
		Total	215	100.00%
6	Income (monthly in Rupiahs)	Less than Rp 2.000.000	70	32.56%
		Between Rp 2.000.000 and Rp 4.000.000	72	33.49%
		Between Rp.4.000.000 and Rp 7.000.000	38	17.67%
		Rp 7.000.000 and above	35	16.28%
		Total	215	100%

Using Structural Equation Model (SEM) for testing, the hypothetical relationships were considered adequate. The proposed research model was developed based on the literature review and various empirical studies. The model considers four components in finding the relationship between Islamic financial inclusion and the research hypotheses. The four components include Trust (TR), Social Influence (SOI), Islamic Financial Literacy (IFL), and Financial Self-Efficacy (FSE). Data management and analysis were performed using SPSS 26. The proposed research assesses the relationships between the different constructs, including Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The following hypotheses were developed:

H1. Trust is a significant determinant of Islamic financial inclusion.
H2. Social influence is a significant determinant of Islamic financial inclusion.
H3. Islamic financial literacy is a significant determinant of Islamic financial inclusion.
H4. Financial self-efficacy is a significant determinant of Islamic financial inclusion.

4. Analysis and Discussion

4.1 Exploratory Factor Analysis (EFA)

The EFA method simplifies many inter-correlated measures to a few representative constructs or factors (Fabrigar and Wegener, 2011). This is essential in condensing variables with numerous questions simplifying them into better, insightful, and analyzable factors. The factor analysis method was used because the research considered several questions from various previous studies. In this study, factor analysis represents a set of 25 items unique to each variable. These underlying dimensions are factors by reducing the data set from interrelated variables to the smallest set of factors. Factor loading is significant when there are items loaded with more than a value of 0.50 (Hair et al., 2014).

Some items were removed from the list based on the rotated factor matrix due to their lower factor loading. The items found include FI_2 (Financial Inclusion), SOI_1 (Social Influence), TR_3 (Trust), IFL_3, IFL_4 (Islamic Financial Literacy), FSE_1 FSE_2 (Financial Self-Efficacy). Therefore, the original set of 25 items was reduced to 16 items, loaded under each factor (> 0.50). Moreover, the items were accepted for further analysis. The factor analysis appropriateness was tested using two important measures. The first measure is the Kaiser–Meyer–Olkin (KMO), which gives the overall sampling adequacy (Kaiser, 1974). The KMO is calculated for individual and multiple variables and represents the squared correlation to the squared partial correlation between variables.

The KMO statistic varies between 0 and 1. The sample adequacy value in this study is above the acceptable range of 0.92, which falls within the acceptable limit. On the other hand, the composite reliability (CR) of all latent constructs exceeds the proposed value of 0.5, implying that the measurement is good. The second measurement is Bartlett's test of sphericity, whose value was 4683.033, with a p-value significant at a 1% level. This measure indicates a highly significant correlation among the construct items in the survey. Table IV shows the KMO-Bartlett's test results. The KMO measure indicates that the sample size is adequate.

Table 4: Results of KMO and Bartlett's Test for Overall Sampling Adequacy

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.920
Bartlett's Test of Sphericity	Approx. Chi-Square	4683.033
	Df	300
	Sig.	.000

4.2 Reliability of the measurement items

The reliability of measurement items was evaluated by Cronbach's alpha value, which establishes internal consistency and reliability. Kline (2011) stated that the generally accepted value of 0.80 is appropriate for cognitive tests, such as intelligence, while a cut-off point of 0.70 is more sustainable for ability tests. All Cronbach's alpha in this study is greater than 0.80, which is reliable. The values of Cronbach's alpha are shown in Table 5.

Table 5: Factor Analysis and Reliability Test

No	Factor extracted	Item label	Item loading	% of variance	Cumulative variance	Cronbach Alpha
1	Islamic Financial Inclusion			74.889	74.889	0.930
		FI_6	.949			
		FI_5	.930			
		FI_4	.918			
		FI_3	.896			
		FI_2	.762			
		FI_1	.710			
2	Social Influence			66.252	66.252	0.864
		SOI_3	.912			
		SOI_5	.909			
		SOI_4	.863			
		SOI_1	.696			
		SOI_2	.652			
3	Trust			58.087	58.087	0.754
		TR_1	.836			
		TR_4	.830			
		TR_2	.685			
		TR_3	.684			
4	Islamic Financial Literacy			60.539	60.539	0.834
		IFL_1	.875			
		IFL_2	.817			
		IFL_3	.808			
		IFL_4	.735			
5	Financial Self Efficacy			69.431	69.431	0.870
		FSE_2	.949			
		FSE_1	.922			
		FSE_3	.904			
		FSE_5	.706			
		FSE_4	.638			

Source: Results of factor loading and Cronbach's Alpha

4.3 Confirmatory Factor Analysis (CFA)

CFA was conducted after identifying five factors through Exploratory Factor Analysis (EFA). The measurement model for all constructs were estimated based on factor loadings and variances, the covariance between the two factors, and measurement error variance. The CFA model analyses how the latent constructs generate the observed variables (factor loading) within the SEM framework considered the measurement model. Two specifications were used to assess the CFA model. First, model fit was measured by assessing the goodness-of-fit indices, while the second was observed by the model's validity and reliability.

4.4 The assessment of model fit indices for the measurement model

The goodness-of-fit indices for the measurement model are presented in Table 6. Moreover, various CFA statistical measures are used to determine how the model fits the present data using AMOS (version 26). Moreover, the initial CFA outputs in the item loading are interrelated to their latent constructs. According to Hair et al. (2014), factor loading should be above the common threshold value of 0.70, while the item loading between 0.40 and 0.70 should be removed from the scale.

The goodness-of-fit index (GFI), average goodness of fit (AGFI), comparative fit index (CFI), normed fit index (NFI), and Root Mean Square Error of Approximation (RMSEA) were used to assess the model's specifications. The results show that the value of GFI = 0.722, CFI = 0.855, all fit statistics values are above the threshold value of 0.90 and RMSEA = 0.105, which is more than the threshold value of 0.05. Therefore, the results substantiate that the measurement model is inadequately fitted with the data.

Table 6: Results of Goodness on Fit Indices Assessment for the CFA Model

Measure	Recommended value	Study model value	Observation
CMIN/DF	<3	3.367	The required level is inadequately
GFI	>0.9	0.722	The required level is inadequately
PGFI	>5	0.589	The required level is achieved
NFI	≥0.9	0. 807	The required level is inadequately
CFI	≥0.9	0. 855	Moderately the required level is achieved
PNFI	Between 0-1	0. 731	The required level is achieved
PCFI	Between 0-1	0. 754	The required level is achieved
RMSEA	≤ 0.08	0. 105	The required level is inadequately

Generated using Amos Software 26

4.5 Assessment of reliability and validity

The accuracy of the measurement model was assessed by the statistical examination of construct reliability, convergent validity, standardized factor loadings, critical ratio (t-values), composite reliability, and average variance extracted (AVE). The reliability and convergent validity results were shown in Table VI. In this case, the standardized factor loading examined the reliability. The factor loadings should be above the threshold value of 0.7. The results indicate that eleven factors are loading under the threshold value, indicators FI_1, FI_2 (Financial Inclusion), SOI_1, SOI_2, TR_2, TR_3(Trust), FSE_4, FSE_5 (Financial Self-Efficacy), IFL_1, IFL_4, and IFL_5 (Islamic Financial Literacy). Therefore, for re-estimation, these indicators were deleted to improve all latent constructs' composite reliability.

The value obtained in this research model ranged from 0.865 to 0.732, and the critical ratios (t-values) were above the minimum cut-off value of 1.96 ($p < 0.001$) and statistically significant at $p < 0.001$ (Hair et al., 2014). Validity is the ability of items to capture the underlying latent construct. Furthermore, two statistical tests were examined to assess the validity measures. The first test examined the CR values for seven constructs and obtained a threshold value of 0.7. The CR obtained showed the highest value of 0.957 and the lowest value of 0.884. This indicates the accuracy of internal consistency presented in Table 7.

Table 7: Results of Reliability and Validity of Measurement Model for All Constructs

		Results of measurement model (confirmatory analysis)			Results of validity and reliability test value	
Name of the constructs	Item label	Standardized factor loading	critical ratio (t value)	sig	CR	AVE
FI	FI_3	0.77	9.731	***	0.91118	0.7209
	FI_4	0.818	9.490	***		
	FI_5	0.828	9.386	***		
	FI_6	0.966	3.930	***		
SOI	SOI_3	0.881	7.213	***	0.9134	0.7788
	SOI_4	0.846	8.863	***		
	SOI_5	0.919	8.794	***		
TR	TR_1	0.641	8.770	***	0.7022	0.5449
	TR_4	0.824	7.561	***		
IFL	IFL_2	0.516	4.993	***	0.6838	0.5372
	IFL_3	0.899	7.970	***		
FSE	FSE_1	0.804	5.511	***	0.8328	0.6244
	FSE_2	0.816	7.580	***		
	FSE_3	0.749	10.916	***		

4.6 Discriminant validity

Discriminant validity is examined by the square root of AVE between two or more constructs compared to the respective inter-construct factor correlation. Diagonal values relate with the square root of AVE, and off-diagonal values represent the inter-construct correlation. The variance correlation results show that all the correlations between two latent constructs are less than their corresponding square root of AVE values. Moreover, the square root of AVE values exceeded the inter-correlation constructs. Therefore, the square root of AVE confirms a high discriminant validity for all the latent constructs. The discriminant validity results are presented in Table 8.

A measure used to assess Convergent Validity is the Average Variance Extracted (AVE). This is the variance in the indicators, or observed variables explained by the latent construct and varies from 0 to 1. An AVE of 0.50 or more indicates satisfactory Convergent Validity. Table VIII shows that AVE is more than or close to 0.50. Additionally, the Construct Reliability (CR) should be 0.7 or higher. Table VIII shows that CR is more than 0.7. This provides empirical support for the Convergent Validity of the scales.

Table 8: The Discriminant Validity

	FI	SOI	TR	IFKN	FSE
FI	0.849095				
SOI	0.478	0.882504			
TR	0.309	0.32	0.732959		
IFKN	0.216	0.227	0.169	0.790205	
FSE	0.255	0.252	0.192	0.131	0.738193

Note: Diagonal values in bold perceive square root of AVE, and off-diagonal values are inter-construct correlations

4.7 Structural Equation Modelling

The SEM was analyzed after assessing the measurement model. The structural model was developed for analyzing the strength of hypothesized relationships among the multiple latent constructs in the proposed research model (Hair et al., 2014). The SEM research tool combines factor and regression analysis, and it is useful in estimating the multiple and inter-related dependence in a single analysis. Moreover, the structural model is evaluated based on fit indices examined in the SEM model assessment. The overall structural model is depicted in Figure 2, while the goodness-of-fit indices for the structural model are presented in Table 9. The structural model adequacy statistically shows that the generated good-fit statistic with a ratio of x2 /df is 7.282, which is higher than the threshold value of 3. All other fit indices of absolute fit measures (GFI= 0.766, PGFI = 0.504, RMSEA= 0.171) and the incremental fit measures include (NFI = 0.834, CFI = 0.852,). All these fit indices should have attained their minimum cut-off values recommended by the previous studies (Byrne, 2016; Hair et al., 2014). This study indicates that the model does not fully meet the goodness of fit requirements, implying that the items on this structural model should be modified.

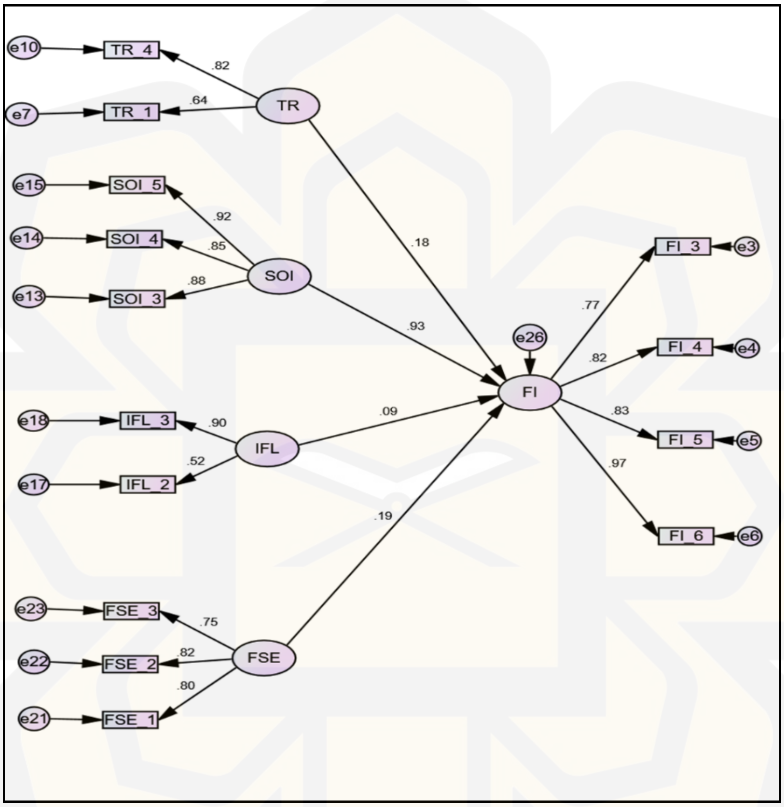
Table 9: Results of Goodness on Fit Indices Assessment for the CFA Model

Measure	Recommended value	Study model value	Observation
CMIN/DF	<3	7.282	The required level is inadequate
GFI	>0.9	.766	The required level is inadequate
PGFI	>5	.504	The required level is achieved
NFI	≥0.9	.834	The moderate required level is achieved
CFI	≥0.9	.852	The moderate required level is achieved
PNFI	Between 0-1	.632	The required level is achieved
PCFI	Between 0-1	.646	The required level is achieved
RMSEA	≤ 0.08	0.171	The required level is inadequate

4.8 The standardised regression path coefficient of the structural model

After assessing the model fit indices for the structural and measurement models, the structural model is further examined to obtain the hypothetical relationship between latent constructs. The SEM was developed based on 14 items in five latent constructs, including trust (TR), Islamic Financial Literacy (IFL), Social Influence (SOI), Financial Self Efficacy (FSE), and Financial Inclusion (FI). Figure 2 describes the significance of the regression coefficient for the latent constructs with their respective items. Also, the findings indicate that all the factor loading values were above the threshold value of 0.70, meaning that all items are able to measure the respective constructs.

Figure 2: Standardised path coefficients for the structural model



4.8 The hypothesis test results

Hypothetical relationships are examined after assessing the adequacy of CFA and structural models. The results of the regression path coefficients are depicted in Table 10. The hypothetical relationship is determined by assessing the regression weight estimates and critical ratios. Relation with four latent path coefficients was statistically significant, with critical ratios (t-values) greater than 1.96 significant at 0.001. moreover, the research results prove that hypotheses H1, H2, H3, and H4 are accepted and statistically significant because their respective p-values are significant at level 0.001.

The results show that trust, social influence, Islamic financial literacy, and financial self-efficacy were significant determinants of financial inclusion from the demand-side perspective. In the order of preference, social influence is the most significant determinant of financial inclusion.

5. Findings

The findings support the proposed research model presented in Figure 2 and the hypothetical relationships among the various dimensions. The standardized regression path coefficients and their significance levels indicate that Islamic financial literacy was a strong predictor of financial inclusion. It was followed by social influence, financial self-efficacy, and trust.

Table 10: The Standardised regression path coefficient and significance levels

Constructs	Code	Hypothesized relationship	Standardized regression weight (β)	The standard error (SE)	Critical ration (f-value)	P-value	Decision on hypothesis
Trust	TR	TR → FI	0.296	0.067	4.404	***	Accepted
Social Influence	SOI	SOI → FI	0.710	0.052	13.601	***	Accepted
Islamic Financial Literacy	IFL	IFL→ FI	0.129	0.053	2.406	.016	Accepted
Financial Self Efficacy	FSE	FSE→ FI	0.271	0.053	5.138	***	Accepted

The results show that social influence is the most important determinant of financial inclusion. Therefore, this evidence supports Maryam (2019) that social influence significantly contributed to Islamic financial inclusion than many other factors. The role of family, public figures, and informal leaders is to encourage Islamic financial institutions to support inclusion in Indonesia. Ali (2013) showed that financial self-efficacy has significantly contributed to the financial inclusion program. However, Ali (2013) placed financial self-efficacy as part of financial literacy.

This study shows that trust influences the participation of Indonesian Muslims in Islamic financial inclusion. Lack of trust reduced the performance of Islamic financial institutions in terms of institutional, professional management. These findings support Xu (2020) that trustworthy people are more likely to cooperate. Consequently, higher cooperation produces socially efficient outcomes amidst incomplete contracts and imperfect information.

These results are in line with Ali et al. (2019), which stated that financial literacy is a significant factor of Islamic financial inclusion in Indonesia. Financial literacy takes precedence over all the other factors among Indonesian Muslims. Therefore, Islamic financial inclusion could be accelerated by improving financial literacy. This study found that Islamic finance knowledge, financial institutions' products and services, and *halal* literacy are limited among Muslims in Indonesia (Albaity and Rahman, 2019; Antara et al., 2016).

6. Conclusion and Recommendation

This study provides a different perspective of Islamic financial inclusion, a demand-side approach with data from the participants. The results indicate that Islamic financial literacy, trust, financial self-efficacy, and social influence significantly affect Islamic financial inclusion in the five provinces in Indonesia. This implies that Islamic finance stakeholders in Indonesia should strengthen financial literacy, develop the financial self-efficacy of Muslim society, and build trust towards financial institutions. Therefore, this research model is useful in measuring the Islamic financial inclusion dimension in other provinces. Further research should identify other determinants of Islamic financial inclusion, such as socio-economics and financial technology literacy. Furthermore, the linkages between the determinants and economic growth or poverty alleviation could focus on research in other emerging economies.

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English Case Law on Islamic Finance: Interpretation and Application of *Shariah* Principles

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Abstract

The emergence of Islamic finance in the United Kingdom ('UK') has rendered it a remarkable alternative to conventional finance. The following paper studies how the English and Welsh courts interpret and apply *Shariah*-based Islamic finance principles under English law. The paper takes the view that Islamic finance arrangements and the *Shariah* principles that inspire them are capable of being conveyed through their conventional counterparts under English finance law, insofar as doing so does not contravene English law. The focal points enshrined under this paper are: [1] the means through which Islamic finance arrangements are interpreted and applied under English law; [2] the approaches undertaken to honour such Islamic finance principles without contravening English law; and [3] the approach taken when the courts are faced with a conflict of laws. Using legal analysis, this paper finds no one-fit-for-all method for the English and Welsh courts when dealing with Islamic finance cases. However, the unanimous principle is that Islamic finance arrangements will never be treated exceptionally to their conventional counterparts.

Keywords: *Islamic finance, English law, alternative finance arrangements, Islamic finance arrangements, ultra vires, lex mercatoria*

1. Introduction

Islamic finance has been rising as a feasible alternative form of finance to conventional finance in the UK. The Islamic Finance Services Industry currently embodies well over four hundred developed Islamic financial institutions, in addition to almost two-hundred conventional banks functioning within seventy-five countries (Zulkhibri et al., 2019). As the leading non-Muslim country for issuing *ṣukūk*, the UK was also the first to host stand-alone Islamic financial institutions in the European Union ('EU') (Abdul-Alim, 2013). Islamic finance can be described as a method to finance and commence financial activities under concepts that are grounded in and governed by *Shariah* (Alamad, 2017; 2019). The years 2003–2009 saw English finance law undergo a series of reformations to accommodate *alternative finance arrangements*—the corresponding terminology for Islamic finance arrangements under English law. Bearing that in mind, the key challenges regarding Islamic finance in the UK revolve around the extent to which *Shariah*-based principles are capable of being contractually conveyed and legally enforced without undermining well-established English law. Under English law, only can the law of a *nation* be the governing law of a contract. This poses challenges when dealing with Islamic finance arrangements because Islamic law alone—being a religious system of law—is not recognised in the UK as an applicable law of a nation.

Islamic finance arrangements are often unusual mixtures of financial devices that are tweaked and collectively activated to deliver a *Shariah*-compliant function—for example, *Islamic residential mortgage contracts* in England and Wales incorporate both a *legal charge* and *a sale and leaseback* to deliver the function of a conventional mortgage *in toto*. In an illustrious sense, Islamic finance arrangements, in their English law

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form, are akin to a *mischwesen**. This occasionally renders Islamic finance anomalous to those unaccustomed to it. Various English cases on Islamic finance have resulted in the contractual agreement prevailing as an ordinary English contract, irrespective of whether the commercial agreement's *Shariah* integrity was upheld or not. In doing so, the English and Welsh courts have separated the contractual element of the Islamic finance arrangement from its commercial one (Dewar, 2020). Parties to an Islamic finance arrangement are free to stipulate their preferred commercial elements—seldom will the courts interfere with those—however, *Shariah* principles cannot override English law.

In the eye of English law and by virtue of *retained EU law**, Islamic law (on its own) is a non-national system of law. It is deemed *incapable* of governing a contract, therefrom. Henceforward, the principal purpose of this paper is to gauge the degree to which a secular court will consider the *Shariah* principles of an Islamic finance arrangement under English law. This raises the primary research question of this paper: –

To what extent will the English and Welsh courts investigate the Islamic finance element of an alternative finance arrangement when dealing with Islamic finance cases?

To answer this question, three key research objectives must be satisfied: [1] to identify how principles of Islamic finance can be interpreted and applied under English law; [2] to identify how Islamic finance arrangements should be conveyed under an English commercial contract; and [3] to demonstrate how the English and Welsh courts resolve disputes that arise in Islamic finance cases. To achieve the first research objective, the paper must ponder the conditions that steer the English and Welsh courts to interpret and apply principles of Islamic finance. To achieve the second research objective, the paper will investigate the extent to which Islamic finance principles are capable of being upheld. To achieve the third research objective, the paper will investigate how the English and Welsh courts rule over matters requiring an interpretation and application of Islamic principles. This research is valuable for Islamic finance considering the years to come. Following Brexit, some might question whether the UK's Islamic finance sector will be affected. From a legal perspective, this paper affirms that Islamic finance will not be severely impacted due to English law's ability to adapt principles of Islamic finance within its legal framework. More importantly, this paper offers practical guidance to those who may find themselves using Islamic financial services in the UK.

2. Literature Review and Problem Statement

2.1. Islamic finance and English finance law

In England and Wales, finance law regulates and controls financial assurances, dealings, indemnities, and services (Hudson, 2013). English finance law is an area of English law subject to legal precedence and the continuous reformation of the *Finance Acts* and the UK's financial regulatory composition. The Financial Services and Markets Act 2000 and the Financial Services Act 2011 played a significant role in shaping contemporary English finance law (Tran and Roberts, 2013). More recently, the Financial Services Act 2012 defined most of the UK's current regulatory structure by amending existing legislation such as the Bank of England Act 1998. The Financial Conduct Authority ('FCA') and the Prudential Regulatory Authority ('PRA') are two prime regulatory bodies effecting the financial legal framework—both the joint-successors of the former Financial Services Authority ('FSA').* The FCA safeguards consumer protection laws by stimulating salubrious competition between different financial service providers, whilst the PRA regulates such financial institutions' conducts (Mallin, 2018). Thus, the FCA and PRA conjointly regulate Islamic financial activity and institutions. In addition to the FCA and PRA, the Financial Policy Committee ('FPC') is responsible for the macro-prudential monitoring of the UK's financial system's stability.

Islamic finance is affected by virtue of the Finance Act 2005, as modified by the Finance Act 2007—whereby Islamic finance arrangements are designated as *alternative finance arrangements*; these have been further developed under the Income Tax Act 2007, the Corporation Tax Act 2009, and the Finance Act 2009. Section

* A *mischwesen* is an unusual mixture of natural things, like the *Burāq*.

* Originally, between 1/4/1991 – 16/12/2009, the *Convention on the Law Applicable to Contractual Obligations* [1980] OJ C027/34 (the '*Rome Convention*') as enacted into English law by the *Contracts (Applicable Law) Act* 1990 applied. From 17/12/2009 – 31/12/2020, the *Regulation (EC) No 593/2008 of the European Parliament and of the Council of 17 June 2008 on the law applicable to contractual obligations (Rome I)* [2008] OJ L177/109 ('*Rome I*') applied. From 1/1/2021, the *Rome Convention* and *Rome I* were enacted into English law as retained EU law under the *Law Applicable to Contractual Obligations and Non-Contractual Obligations (Amendments etc.) (EU Exit) Regulations* 2019 ('*EU Exit Regulations* 2019').

* The Financial Services Act 2016, sections 12–15, remerged the PRA into the Bank of England.

123 of the Finance Act 2009 highlighted and extended tax neutrality to *alternative finance investment bonds*—the corresponding term for *ṣukūk*. The Financial Services and Markets Act 2000 (Regulated Activities) (Amendment) Order 2010 effected equal treatment between *ṣukūk* and conventional bonds (Hudson, 2013). This can encompass credit risk assets as well (Khan et al., 2020). In April 2021, the Financial Services Act 2021 received Royal Assent, in what is seen as the first step, post-Brexit, in managing the UK's financial services' regulatory framework to maintain the UK's status as a financial hub. With that, there is the Finance Act 2021, which focuses on clamping down on tax avoidance. Section 115 and Schedule 23 of the Finance Act 2021 amended Part 4 of the Finance Act 2003[*] concerning relief from stamp duty land tax ('SDLT') for freeport tax sites, extending tax neutrality to Islamic-financed acquisitions of property within freeport tax sites. Thus, English finance law mandates impartial treatment between Islamic and conventional financing mediums.

All the aforesaid—concerning how English law treats Islamic finance—can be summarised through the FSA's famed sentence: *no obstacles, but no special favours* (Ainley et al., 2007; FSA, 2006). The general sentiment concerning how to process Islamic finance transactions in England and Wales is hinged upon conveying Islamic finance arrangements through standardised processes and documentation. Such preference has been implied under English law and expressed by legal practitioners. An example of such standardisation of documents is the *User's Guide to Islamic Finance Documents*, which is standard guidance over drafting *Shariah*-compliant documents (Ercanbrack, 2019). Thus, Islamic finance holds no special legal status under English law—but is rather treated equally to its conventional counterpart (Dewar and Hussain, 2018). The attempts to harmonise the execution of Islamic finance arrangements under English law—in addition to the standardisation aforenoted—reflect the *UK financial system*'s positive attributes, such as its flexibility, impartiality, and inclusivity.

2.2. Comparing English law to Islamic law

English law stems from a tradition expressed in action (Slapper, 2011). This means that English law, being a common law system, finds its principal legal sources from previous case rulings (or 'legal precedence'), statutory law, and until Brexit, EU law. International treaties do not effectuate under English law until or unless they are incorporated under English statutory law (*Blackburn v Attorney-General* [1971] 2 All ER 1380 [1382]). The application of English law is carried out through procedural and substantive law. Procedural law establishes the procedure through which lawsuits will proceed, whilst substantive law draws the lines through which the law will be construed, constructed, and ruled upon. The key feature of such a dynamic is that it eases the handling of cases in the event a foreign element is brought into the English and Welsh courts. An example of this ability is reflected by the Private International Law (Miscellaneous Provisions) Act 1995, section 14(3)(b) and by *Boys v Chaplin* [1971] AC 356.

The view towards procedural and substantive law under Islamic law is different, whereby both elements bear tantamount effect. The applicability of procedural law is similar amongst the *madhāheb*[*], yet there sometimes may be variations when adopting methodologies to deduct and rule Islamic laws—these are best described as 'a diversity within unity' (Kamali, 2017, p. 54). In theory, 350 to 550 *Qur'ānic* verses are considered legally relevant for formulating rules (Lange et al., 2021). Around 80 are legal verses in a narrow sense (Lowry et al., 2007; Hallaq, 1997). Research by Lange et al. (2021) highlights 2,954 *Qur'ānic* verses from which substantive Islamic law is traceable. This is interesting because it shows how procedural and substantive Islamic laws have a common *Qur'ānic* denominator. When carrying out Islamic jurisprudence, *fiqh* (jurisprudential interpretation) can aid the procedural and substantive constructions under Islamic law. For example, *ijtihād* (independent reasoning) is an interpretive means of *fiqh*, which is relied upon in harmonising Islamic law's primary sources with contemporary society (Shabbar, 2017).

The aforesaid is not exhaustive of Islamic law, let alone Islamic jurisprudence. The prime point here is that, unlike English law, where substantive and procedural laws are divisible, Islamic procedural law and substantive law are jointly entwined with the *Qur'ān* and *Sunnah*, whence they originate. Thus, Islamic law, whilst adaptable, is grounded in many firm and non-alterable *Qur'ānic* principles, unlike English law, which reflects parliamentarian legislation, the common law, and retained law. The overarching challenge when applying

[*] The 2003 Act was the first to waver double SDLT on some Islamic products.

[*] Plural of a *madhhab* (a 'school of thought'). Throughout Islamic history, *madhāheb* emerged, discontinued, and adapted different levels of progressiveness/conservativeness—for example see *Jarīrism*.

Islamic law in an English law setting comes from the various lights Islamic laws can be construed—especially where the *Qur'ān* and *Sunnah* are silent over the question at hand.

2.3. When can a conflict of law transpire; how is this solved?

Islamic law is a religious legal system primarily shaped by the *Qur'ān* and the *Sunnah*. It forms the foundation of legal systems in countries such as Saudi Arabia and Brunei. English law, on the other end, does not recognise religious law as an applicable legal system (Reed, 2014)—this does not mean that the English and Welsh courts are incapable of interpreting and applying Islamic law; it means that Islamic law is not seen as the national law of a country—meaning that it is incapable of being the governing law of an English contract. When it comes to the national law of a country based on *Shariah,* such as Saudi Arabia, English law would regard that as Saudi-influenced *Shariah* law. This distinction can be seen in *Al Midani v Al Midani* [1999] CLC 904, even though that case dealt with Islamic inheritance and not Islamic finance. The English and Welsh courts are not bound to apply Islamic finance principles, even if the parties to a contract designate Islamic law as the governing legal system under an English contract. The only exception, in which the courts can directly apply Islamic finance principles, is when they are dealing with an arbitration agreement, in an English-seated arbitration*, insofar as the *Shariah* substance of such arbitration agreement does not contravene English law (Tucker, 2008).

Saba and Fathnezhad (2013) state that an aggravated problem that arises when interpreting and applying Islamic law in line with English law is when the *madhāheb* have diverging views over the same issue. If English law were to accommodate these *madhāheb* directly—when ruling over Islamic finance disputes—the accommodation of these schools of legal thought would distort the harmony of the courts' rulings. In theory, accounting for each *madhhab* to rule over one matter can result in multiple answers and exceptions to the original judgment. All of this means that there would be an exception at law every time English law, or a *madhhab*, is found to conflict with another *madhhab*'s perspective over an Islamic finance matter.* Therefore, there is a need to treat Islamic law in its common denominator form under English law.

Considering that, the English and Welsh courts have been apathetic about interpreting between different *madhāheb.* Instead, emphasis has been placed on the strictness with which *Shariah* principles will be interpreted and applied. Thus, their focus primarily hinges on matters that raise questions of English law not *Shariah*. Where the Islamic element is integral to the question of English law, there could be a potential consideration to both the Islamic finance arrangement's commercial and contractual agreements conjointly. However, this is yet to be expressly affirmed because it is uncertain whether the High Court intended to imply this in *The Investment Dar Company KSCC v Blom Development Bank SAL* [2009] EWHC 3545 (Ch) (Reed, 2014). Al-Ali (2019) deems this conflict as a *Shariah* integrity problem, whereby an Islamic finance arrangement must be carried out under English law even if it loses its *Shariah* integrity. There is veracity to this notion—albeit not always (as the following case law will show). This takes the paper to the next segment covering situations where parties to a contract challenge the court's justiciability to rule over matters involving Islamic finance.

2.4. Ultra vires

Ultra vires is the situation where the *question of law* is beyond the *jurisdiction* and *legal authority* of a court. Over the past twenty years, when faced with litigation, parties to Islamic finance contracts have attempted to invalidate their contractual obligations on two grounds. The first ground regards parties relieving themselves from their contractual obligations where a contract is deemed *Shariah*-non-compliant. The second ground regards Islamic law being beyond the jurisdiction of the English and Welsh courts. In legal terms, the latter is called '*ultra-vires*'—which, if accepted, would enable a party to omit from their contractual obligations in part or in whole. In practice, the *ultra vires* argument has been invalidated and disregarded by the English and Welsh courts. This comes as no surprise because doing otherwise would allow the *ultra vires* argument to be procured as a vehicle for fraud and for evading contractual liability—both of which go against English- and Islamic commercial principles.

It is somewhat logical that contracts of Islamic finance are deemed *intra vires* by the English and Welsh courts, where they will treat such agreements as ordinary English contracts. Yet, to do so, there need be a line drawn between the legal agreement and the commercial agreement of the Islamic finance arrangement.

* Wherein the *lex loci arbitri* is English law.
* There are nine primary *madhāheb* amongst *Sunni, Shia,* and *Ibādi* Muslims.

Otherwise, there would be an open door for the *ultra vires* contention. Islamic finance contracts usually contain a *Shariah*-compliancy clause, which, if breached, could render the entire agreement unenforceable. By separating the contractual- and commercial agreements, the courts can treat an Islamic finance agreement as an ordinary English contract regardless of that agreement's commercial *Shariah* integrity. Thus, the divisibility of the contractual and commercial agreements of the Islamic finance arrangement enables the English and Welsh courts to separate the contractual governing law of that agreement from its Islamic financing mechanisms. The overall effect of this is to enable the English and Welsh courts to enforce rulings on contracts that are deemed *Shariah* non-compliant, even where such judgments would not be binding upon the Islamic courts in other jurisdictions (Nethercott and Eisenberg, 2012).

3. Research Methodology

The methodology used throughout this paper is legal analysis. The method involves analysing primary English finance law—i.e., case- and statutory law—and highlighting their Islamic finance equivalents. This approach is viable because it allows the researcher to clearly draw conclusions from analysing the relevant existing documents, cases, and laws related to Islamic finance treatment by the English and Welsh courts under English law. By doing so, the author can demonstrate how the courts interpret and apply principles of Islamic finance and how such courts reach their final judgments. Moreover, the author has legally analysed each case separately to identify the problems that arise when the courts deal with Islamic finance cases. This allows demonstrating how different legal contentions are put forth before the courts and how such contentions are handled. After achieving the points aforementioned, the author can discuss the results of the comparative documentary legal analysis to draw conclusive remarks. Those remarks can then be compared to the literature review to determine whether the findings align with what the academic literature had shown or whether there are further points to add on top of what has previously been said. In brief, this methodology will help draw out a clear conclusion with practical recommendations by satisfying the research objectives and questions.

4. Analysis of and Results from English Case Law on Islamic Finance

4.1. Islamic Investment Company of the Gulf (Bahamas) Ltd v Symphony Gems NV & Ors

Islamic Investment Company of the Gulf (Bahamas) Ltd v Symphony Gems NV & Ors [2002] All ER (D) 171 is the first reported Islamic finance case in England and Wales. Islamic Investment Company of the Gulf ('IICG'), and the Symphony Gems NV ('SGNV') entered a master *murābahah* agreement, to facilitate a *Shariah*-compliant cost-plus sale. IICG agreed to two requests from the defendant to purchase diamonds from Hong Kong-based supplier, Precious Limited ('PL'). IICG and PL signed two *murābahah* contracts to purchase those diamonds—in accordance with the master *murābahah* agreement signed with SGNV and proceeded with the purchase. Under the agreement, IICG would be repaid in three separate instalments: [1] $1.98 million (15/07/2000); [2] $1.98 million (15/09/2000); and [3] $3,957,450.00 (15/11/2000). SGNV defaulted on the preliminary instalment, and upon failed settlement attempts, IICG decided to enforce its two bank guarantees to recover the gross sum initially paid and concurrently triggered proceedings against SGNV.

The payment default resulted from disputes between the defendants and from the PL's supplier failing to deliver the diamonds. The Court's construction was that one of the defendants did not receive the diamonds, as a result of PL not receiving its diamonds from its own suppliers. The *murābahah* assured IICG that it would receive its instalments irrespective of the status and timely means by which the diamonds would be delivered. IICG was relieved from the risk of payment under the *murābahah* by virtue of a clause that retrospectively allowed it to turn the *murābahah* into a conventional finance arrangement.

Additionally, the case facts did not make the interpretation of the *murābahah* under Islamic law necessary because the contract was governed under English law. Nonetheless, the High Court first resorted to advice from two experts to better understand the commercial nature of a *murābahah*. One of the experts, Dr Yahya Al-Samaan, deemed this *murābahah Shariah* non-compliant, explicating to the High Court the formalities and constituents of a valid *murābahah.*

Subsequently, Tomlinson J clarified that the *murābahah*'s *Shariah*-compliancy status was irrelevant for the purposes of the legal proceedings, emphasising that the agreement was an ordinary English contract governed by English law. Based on the inferences above, judgment was sought, and three arguments were raised: –

[1] The first argument motioned that the *murābahah* bore elements of interest, which deemed it

illegal under *Shariah*. SGNV also argued that Saudi Arabia was the base from which IICG initiated its activities. Tomlinson J disregarded the contention of the agreement conflicting with Saudi law, or any relevance of Saudi Arabia in the case because IICG was registered in the Bahamas as a Bahamian company. Also, under the principle of *lex situs*[*], the *murābahah* would have most likely fully applied in the UK and not in Saudi Arabia. Moreover, a company's legal personality differs from that of its employees and directors, which were Saudi Arabian. As for the illegality argument, the treatment of the *murābahah* as an ordinary conventional financial arrangement under English law rendered the *Shariah*-compliancy factor extraneous.

[2] The second contention deemed that SGNV bore no responsibility to pay IICG because the delivery of the diamonds acted as a condition precedent. However, a clause under the *murābahah* proved fatal because it stipulated that payment was not subject to any event's occurrence which amounted to no condition precedent therefor. Consequently, payment was required to be done timeously regardless of whether the diamonds were delivered by the date of due payment. Thus, the High Court rejected the second contention.

[3] The last contention was that IICG's articles of association barred it from carrying out undertakings that contravene *Shariah*. This compelled the High Court to apply Bahamian company law, which offered no support to the defendants' case. The defendants were ordered by the Court to pay a sum of $10,060,354.28 (13/02/2002); however, they rejected the order based on such practice being prohibited. Nonetheless, the Court refuted such a challenge because paying interest is completely permissible under English law.

It can be seen in this case that the High Court treated the agreements as ordinary English contracts. The Islamic finance substance of the agreements gave the High Court a reason to study and familiarise itself with the *murābahah* arrangement, which it did via expert advice. Such familiarisation also aided the Court in invalidating the *Shariah*-compliancy arguments put forth to it by the defendants—instead, focusing on applying contract law. This is one context under which the English and Welsh courts resorted to expert advice to better understand the nature of the commercial agreement at hand and the grounds from which the defendants were arguing. In *Islamic Investment Company of the Gulf (Bahamas) Ltd v Symphony Gems NV & Ors* [2014] EWHC 3777 (Commercial Court), the High Court considered the scope of the English and Welsh courts' power, under the Civil Practice Rules to vary or revoke an order—no specific comments were made regarding Islamic finance.

4.2. Shamil Bank of Bahrain EC v Beximco Pharmaceuticals Ltd & Others

In *Shamil Bank of Bahrain EC v Beximco Pharmaceuticals Ltd & Others* [2003] EWHC 2118 (Comm), the High Court undertook an indirect application of Islamic finance principles. During the period between 1995 and 1996, Shamil funded the working capital of two companies. The first was Beximco, and the second was Bangladesh Export Import Co Ltd ('BEIC')—conjointly, the two defendants.

The funding was undertaken by way of two separate *murābahah* agreements, of which each valued at $15 million. Following a few instalment payments by the defendants to the claimant, a payment default occurred. This compelled the parties to enter two 'Exchange in Satisfaction and User Agreements' under which each defendant would transfer titleship of certain assets to Shamil, whilst Shamil would relieve the defendants from outstanding sums. Also, the assets could be leased from Shamil to the defendants in return for a user fee and accumulated compensatory payments. However, another payment default occurred, instigating Shamil to raise the matter to the Court.

The gross sum contested by Shamil was $49,711,710.52, which was significantly higher than the original $30 million. Shamil backed up its argument by showing that it had a qualified *Shariah* supervisory board, which affirmed that Shamil's actions were *Shariah*-compliant throughout the course of the agreement. On the other hand, Beximco and BEIC argued that the earnings that Shamil was making from the *murābahah,* and the leases constituted interest. In addition, it was argued that the alleged interest would deem their contractual obligations unenforceable because the agreement stipulated that it would be subject to *Shariah* and governed by English law.

[*] The 'law of the jurisdiction' in which the Islamic finance arrangement was situated.

In the first instance, the Court considered the notion of examining the position of Islamic law over the matter; however, this was disregarded given the conflicting interpretations of the case facts under Islamic law. The grounds over which the Court defended its decision was that the parties had agreed for a secular jurisdiction to govern the agreement. To the Court, this would have implied that it was implausible for the parties to assume that a secular court would interpret Islamic law on their behalf, primarily were *madhāheb* differed on the matter. Morrison J also alluded that Beximco and BEIC's actions prior to the lawsuit implied no rejection of, but rather an affirmance to, the contract they had entered.

It was stated that the Court could have ruled over certain matters of Islamic law had it possessed a well-rounded understanding of *Shariah*. Additionally, under the Rome Convention, the choice of law ought to be articulated with reasonable certainty. This could have been done by expressly stating the parties' true intentions under the agreement's terms or where the case facts could only lead to such a conclusion. Dicey J then stated that the reference to the parties' choice of a contract's governing law could only be a reference to the law of a country, and that there cannot be a contract that is governed concurrently by both Islamic- and English law. The judgment was held in favour of Shamil. The defendants appealed this decision.

In *Beximco Pharmaceuticals Ltd & Others v Shamil Bank of Bahrain* [2004] EWCA Civ 19, Beximco and BEIC argued that the rules of *Shariah* under the agreement were applicable within the framework of the governing English law. Yet, Potter J dismissed the appeal and held that *Shariah* principles could only be enforceable contractual terms if they are inferred into the agreement from an overall law of an actual nation. This means using the laws of a country that is influenced by Islamic law, such as Saudi Arabia. Potter J also classified Islamic law as a non-national system of law, characterising it as a *lex mercatoria*[*]; thus, emphasising its commercial importance for the financial arrangement, but also severing it from the contractual element of the financial arrangement. The Court of Appeal's ruling deemed that a *murābahah* is capable of being equated to an interest-bearing loan, especially in the case at hand, where the *murābahah* agreements were merely concealed loans that did, in fact, charge interest.

The Beximco case demonstrates the English and Welsh courts' capability of interpreting Islamic finance principles. Such interpretation was carried out to identify the agreement at hand and whether the *murābahah* was a genuine Islamic finance arrangement or a mere cover-up of a conventional one. Had there been a genuine *murābahah*, an indirect application of Islamic law could have taken place—the application was disregarded due to the case facts, in addition to the veiled nature of the *murābahah* agreement. However, even if there were a genuine *murābahah*, the Court would have still disregarded the indirect application due to the lack of an applicable 'national *Shariah*-influenced law' being contractually stipulated, and due to the judges' scepticism towards Islamic finance. After all, the High Court was confident that the defendants had accepted contracting with the claimant under terms that remained questionable. The defendants only refuted the contract's terms and questioned its true *Shariah* compliancy upon bearing onerous contractual liability. Despite this, Morrison J and Dicey J mentioned that had the parties plainly contractually expressed and verbally implied their true intentions in wanting *Shariah* values to prevail, the High Court *might* have taken a different approach.

4.3. The Investment Dar Company KSCC v Blom Development Bank SAL

The Investment Dar Company KSCC v Blom Development Bank SAL [2009] EWHC 3545 (Ch) was the first case in which the High Court reached a judgment after making a significant interpretation and an indirect application of Islamic finance principles. Blom Development Bank SAL ('Blom') appointed The Investment Dar Company KSCC ('TIDC') under a master *wakāla*, whereby Blom, the investor, deposited investible funds to TIDC, the agent. TIDC then invested Blom's \$10.7 million via *Shariah*-compliant tools. The *wakāla* mandated TIDC to pay Blom capped rates of return whilst being entitled to any surplus returns. Retrospectively, TIDC would ensure Blom through indemnities for losses incurred under the *wakāla,* should TIDC default. Upon undertaking poor investments, TIDC defaulted in repaying Blom, prompting Blom to seek summary judgment from the High Court.

Blom's main argument was that its monies were held by TIDC on trust and that TIDC had acted in breach

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[*] *Lex mercatoria* (Latin for 'merchant law') refers to a body of commercial and trading principles that were adopted by merchants throughout medieval Europe. In the context of the case at hand, the judge used this expression to equate Islamic finance to a body of commercial principles that are contemporarily adopted by Muslims to carry out financial activity in alignment with their faith.

of its duties by failing to repay Blom. Blom sought after two actions. The first action requested an order from the High Court to TIDC to repay the initial invested sum of $10,733,292.55. The second action also requested an order from the High Court to make TIDC pay the surplus sums that would have originally accrued from the *wakāla'*s rate of return on the investments.

The High Court held in favour of Blom over the first contention but did not grant the repayment of the surplus sums. Based on the High Court's decision, TIDC appealed on the grounds that the *wakāla* contravened *Shariah*, meaning that it was never allowed to enter the agreement due to its articles of association. TIDC's articles of association banned it from entering agreements that were *Shariah* non-compliant. The High Court allowed TIDC's appeal upon satisfying one condition. The Court believed that it was adequately debatable that no trust existed between Blom and TIDC. Accordingly, the High Court ordered TIDC to pay the principal sum to Blom directly without doing so through the Court. This was based on the Court's confidence in Blom, being a highly respectable Lebanese company that owed no allegiance to the English court. The Court's reasoning rendered TIDC liable to repay Blom in any case—if the master *wakāla* was *intra vires,* Blom's claim would succeed via a claim in contract; if the master *wakāla* was *ultra vires*, a restitutionary claim by Blom would succeed.

The key taking from the High Court in Blom is the extent to which it was willing to interpret and understand the *wakāla* agreement and the additional Islamic principles laid out by the parties' *Shariah* advisory boards. This was affirmed by Purle QC's remarks in the judgment where TIDC's evidence and the *Shariah* compliancy contentions were deemed 'rather exiguous evidence of Sharia law' (*TIDC v Blom*, 2009, para. 16). However, the experts that gave advice to the High Court had different views on the *wakāla's Shariah* compliance. The Court stated that it was in no position to resolve which expert was correct and focused on the Islamic principles in their common denominator form.

Henceforth, it can be deduced that the English and Welsh courts may interpret and indirectly apply the Islamic commercial element of an alternative finance arrangement, insofar as such interpretation and application are necessary to reach a final judgment about the overall contract at hand. Another noteworthy taking from this judgment is the different lights through which the High Court viewed TIDC's breach, and the different approaches the Court laid out to return Blom back to the position they would have been in prior to the breach. This reaffirms English law's impartial approach in treating Islamic finance arrangements in equation to their conventional parallels. On a final note, Blom's compliance with the Accounting and Auditing Organization for Islamic Financial Institutions' standards guaranteed enforcing TIDC's obligation to pay Blom. This concurs with the view in the academic literature regarding standardising documentation and practices—in the sense that the standardisation of procedural practices in Islamic finance has shown to make it more obliging on a defaulting party to meet its payment obligations and easier to litigate through the courts.

4.4. Dana Gas PJSC v Dana Gas Sukuk Ltd and Ors

The challenges raised in *Dana Gas PJSC v Dana Gas Sukuk Ltd and Ors* [2017] EWHC 2928 (Comm) shed light on the enforceability of security documents under an Islamic finance transaction that was concurrently subject to English law by virtue of a purchase undertaking agreement (the 'Agreement'), and Emirati law by virtue of a *mudārabah*. It also dealt with the extent to which conducts that are *Shariah*-non-compliant are likely to deem such security documents unenforceable. In 2007, Dana Gas PJSC ('DGP'), an Emirati public joint-stock company, levied $1 billion through an issue of *Shariah*-compliant certificates, or *ṣukūk ('mudārabah-ṣukūk*' in this case)*,* which could be traded on the Irish Stock Exchange. In 2013, the Islamic finance transaction was restructured, and the Parties were assured by a *Shariah* legal and financial consultancy that the transaction was *Shariah*-compliant and concurrently lawful under Emirati and English law. The *mudārabah-ṣukūk* were redeemable on 31/10/2017; however, in the same year, DGP informed Dana Gas Sukuk Ltd ('DGS') and the other Parties that the *ṣukūk* were deemed by their advisors as *Shariah*-non-compliant. As a result, DGP sought an order recognising the *ṣukūk* as *Shariah*-non-compliant by the courts in the UAE and the UK.

The first contention put forward by DGP was that its obligation to pay was subject to the condition of having a valid agreement. The choice of English law as the governing law of the Agreement applied certain legal principles which deemed the Agreement valid *prima facie*. The High Court stated that the Agreement was enforceable under English law, even where presumed that such document was unlawful under Emirati law. The High Court illustrated that the condition precedent alleged by DGP was invalid, *in toto*, as it conflicted with the order in which the parties entered into the agreement. This was backed up by the fact that the agreement expressly stated that the *mudārabah-ṣukūk* certificate holders' rights to the *mudārabah-ṣukūk* did not affect DGP's obligation to pay, rendering the condition precedent invalid—meaning that DGP was still bound to pay the certificate holders.

The next contention put forward by DGP claimed that the Agreement was void for mistake, by the common assumption of the parties that the *mudārabah* and the Agreement were valid. The High Court held that the doctrine of mistake could not be framed based on DGP's subjective beliefs, which led the Court to adopt an objective approach to ascertain what the parties had actually agreed upon—resorting to *Associated Japanese Bank (International) Ltd v Credit du Nord SA* [1989] 1 WLR 255. Thus, the agreement would only have been void for mistake where it was evident beyond reasonable doubt that the agreement was never intended to be used in the manner for which it had been used. Moreover, the agreement had expressly foreseen the probability of the *mudārabah* being unlawful under Emirati law.

Lastly, DGP argued that it would be opposing to English public policy for the High Court to enforce an agreement that is unlawful under the national law of a foreign state, in which part of that agreement's work is being carried out. The High Court found no evidence of the parties intending under the agreement to carry out work in the UAE. That also did not conflict with the fact that payment was designated to happen in London. DGP also claimed that such matter, if overlooked by the Court, induced a penalty. This argument was refuted on the ground of legal precedent from *Cavendish v Makdessi* [2016] AC 1172. The parties had agreed to separate the *mudārabah* from the agreement to assure the trustees that DGP would pay any outstanding monies.

In this case, the High Court implied that the lack of *Shariah* compliance carries no weight over the enforceability and validity of an English contract. Thus, the reputational damage caused by one being *Shariah* non-compliant carries no weight over any moral standard by which a secular court should rule. This does not seem to conflict with Islamic law either, because a Muslim cannot force a secular court to apply *Shariah* in a manner affecting that court's just decision—especially where the contending party knows that the secular court would lack understanding of *Shariah*. The conclusive remarks of Leggat J reflected a rather incredulous view of the commercial integrity and certainty of Islamic finance arrangements. Yet, at the same time, one can also argue that Leggat J's view illustrated the reality of the Islamic finance industry as epitomised in the lack of standardised documentary instruments and practices to optimise the legal enforceability and transparency of Islamic financial undertakings.

4.5. Project Blue Limited v Commissioners for Her Majesty's Revenue and Customs

The UK Supreme Court's decision in *Project Blue Limited v Commissioners for Her Majesty's Revenue and Customs* [2018] UKSC 30 is significant for the purpose of affirming the *no obstacles, but no special favours* principle. In 2007, Project Blue Limited ('PBL') purchased a former London military property from the UK Ministry of Defence ('UKMD') for £959 million. As a means of obtaining capital to purchase the property, PBL secured funds from an Islamic bank—Al Rayan Bank UK ('Al Rayan'). PBL secured its funds from Al Rayan through an *ijāra*.

Subsequently, PBL and the UKMD contracted to execute the property's purchase. In 2008, PBL sub-sold the freehold of the property to Al Rayan, which then leased the property back to PBL, as *per* the *ijāra.* Thus, the UKMD ceded the property's freehold to PBL, which was then ceded to Al Rayan, with the property finally being leased to PBL by Al Rayan. The implication of having the sub-sale arranged as such was to relieve PBL and Al Rayan from SDLT. This was based on the grounds that PBL owed no liability to pay SDLT because it was entitled to 'sub-sale relief' under the Finance Act 2003, section 45(3). Al Rayan retrospectively lodged that the sale agreement and lease between it and PBL fell under the 'alternative property finance relief', as *per* the Finance Act 2003, section 71A.

In other words, the 'Islamic' finance arrangement was structured in such a way that affixed the transaction to two SDLT-relief provisions. The function of this would result in none of the parties being subject to paying SDLT, specifically PBL. Upon the matter reaching Her Majesty's Revenue and Customs ('HMRC'), it was decided that £50 million in SDLT were due, which drove PBL to take the matter to the Upper Tribunal. PBL argued that Al Rayan was not relieved under the Finance Act 2003, section 71A because the original seller of the property was the UKMD, as *per* section 71A(2). PBL also argued that certain sections of the Finance Act 2003 discriminated against those of the Islamic faith by not considering that adherents of Islam would be expected to use Islamic finance techniques.

The Upper Tribunal ruled against PBL, holding it accountable as the seller, but it did notably acknowledge the notion that section 75B could possibly be unfair. More importantly, the Upper Tribunal emphasised the objective of section 71A, which aims to place *ijāra* arrangements on par with conventional lending by taxing the purchaser of a property once, not multiple times, as the case would have been prior to 2003. The ruling was appealed to the Court of Appeal, which held that the UKMD was the seller and not PBL, on the grounds that the Finance Act 2003, section 45(3), negated the initial agreement between PBL and the UKMD. By doing so, PBL had escaped from paying its taxes, which pushed HMRC to appeal the matter to the UK Supreme Court.

The question at hand was whether PBL was due to pay the outstanding SDLT sum of £50 million. The Supreme Court accepted and ruled that PBL was due to pay that sum. The Supreme Court based that decision on key facts of English law but also considered PBL's arguments relating to sections 75A(5) and 75B, concerning their unfairness towards those of the Islamic faith. The Supreme Court made significant remarks, affirming the natural position of Islamic finance under English law as an alternative yet *equal* form of finance to conventional finance. Lord Briggs, who was the only dissenting judge, interpreted the principle of *riba*, stating that *Shariah* does not prohibit the taking of security but rather forbids the payment of interest, *particularly* in dealings concerning the lending of money (*PBL v HMRC,* 2018, para. 97). He then interpreted the standard *ijāra* form of a lease and applied it to the *ijāra* at hand, which was an *ad-hoc* form.

The Supreme Court ruled in favour of HMRC, restoring the Upper Tribunal's finding—ordering PBL to pay the SDLT due. The Supreme Court held that section 75A of the Finance Act 2003 was enacted by Parliament to fill the grey area that the finance arrangement procured as a vehicle for avoiding SDLT. Lord Hodge, giving the majority's judgment, stated that the finance arrangement appeared to be drafted in deliberately broad terms to catch a wide range of arrangements that would ultimately result in tax loss. The Supreme Court also held that there was no need to consider the merits of PBL's 'discrimination' challenge because PBL had not impliedly or expressly established that it had entered the *ijāra* for religious reasons. Even in that case, Islamic finance principles would have been corresponded to *lex mercatoria*, not a binding system of law governing the *ijāra* at hand.

5. Direct Application of Islamic Finance Principles under English Law

Under the Arbitration Act 1996, section 46(1)(b), parties have the freedom to choose the rules their arbitral tribunal will apply. Such freedom extends to the choice of law, which can be Islamic law *per se*. The outcomes in *Halpern v Halpern* [2007] EWCA Civ 291 and *Hashwani v Jivraj* [2011] UKSC 40 have shown that arbitral tribunals can apply religious law principles, where the parties have laid sufficient ground and scope for such application to take place. Thus, the English and Welsh courts may directly apply Islamic finance principles where the arbitration agreement clearly reflects the parties' true intentions in having such *Shariah* principles being applied and honoured; unless an exceptional context holds otherwise.[*]

The Muslim Arbitration Tribunal ('MAT') issues legally binding arbitration services concerning Islamic commercial issues. Established in the early 2000s, the MAT operates under the Arbitration Act 1996. The MAT issues arbitral awards and decisions that are *Shariah*-compliant, which can then be enforced in the English and Welsh courts like any ordinary arbitral award. The only conditions that must be met in ensuring that such awards will be enforced in the courts are that: –

[1] the Islamic finance arrangement is a legal contract under English law; and that

[2] it does not procure elements and activities deemed illegal or contrary to English law.

The two scenarios in which an arbitral award will not be enforced are when it undermines public policy, as *per* section 33 of the Arbitration Act 1996; and, where the matter of the arbitration is not a civil matter, as *per* section 82 of the Arbitration Act 1996. The Arbitration Act 1996, section 46, also allows the parties to have their dispute decided in accordance with considerations other than English law. This can provide leeway for the extent to which the parties want a court to honour Islamic principles.

6. Further Analysis: Findings and Discussion

6.1. Synopsis: qualifying conditions and overarching challenges found in Islamic finance arrangements

There are general circumstances under which a court will interpret *Shariah*-based principles and indirectly apply them. A qualifying condition enabling such consideration is where the matter at hand is subject to a *Shariah*-based and/or *Shariah*-influenced national law. Another qualifying condition is where the case facts raise reasonable grounds for the interpretation and application of *Shariah* principles to reach a well-rounded

[*] For example, the arbitrator's duty to issue an enforceable award is jeopardised by the direct application of *Shariah*.

judgment. A third qualifying condition is where the commercial- and contractual elements are not clearly divisible without carrying out an interpretation of the Islamic element of the finance arrangement—in other words, where the essence of an English contract is vested in, and intertwined with, its *Shariah*-compliant structuring. When it comes to arbitration, Islamic finance principles can be directly applied by incorporating Islamic law into the arbitration agreement. This is by virtue of the *parties in arbitration* retaining their autonomy in choosing a forum of their convenience to resolve disputes that may arise thereof, and the courts being bound to follow the *lex loci*. However, this can only work insofar as the *Shariah* substance of the arbitration agreement does not contravene English law, and where there is a genuine and express intention for *Shariah* to take effect.

The overarching challenge associated with Islamic finance arrangements, as *per* the academic literature, revolves around *Shariah* integrity. The author believes the problem is more profound because disputing parties privy to an Islamic agreement may be bound to carry out such an agreement as if *Shariah* never existed in the first place. The other challenge conveyed concerns the *ultra vires/intra vires* contention in which the English and Welsh courts will have jurisdiction over an English contract of Islamic finance. The author does not believe that to be a 'challenge' in the meaning of the word because the English and Welsh courts' jurisdiction is, *de facto*, vested in the divisibility of the financial arrangement's contractual and commercial agreements. Even if such divisibility is rendered obsolete, the courts are *ipso facto* secular rulers that are not expected to profess Islamic law. This does not contradict both English- and Islamic law.

Thus, in the eyes of the author, the overarching problem when dealing with *Shariah* principles at large under English law is satisfying what they like to call the *goldilocks principle*—that being an optimal habitable *nexus* for Islamic- and English legal principles to coexist without contravening one another. In an Islamic finance context, the *goldilocks* zone of an Islamic alternative finance arrangement is where *Shariah* principles can be honoured without breaching well-established English law. Thus, a good Islamic finance arrangement is one that satisfies the *goldilocks principle*. An excellent Islamic finance arrangement is one that protects the *Shariah* integrity of the parties even where disputes arise. This is a contract that enables the courts to resolve disputes between the parties without rendering the commercial and contractual agreements discordant with one another. The illustration of such an ideal arrangement is not a creation of fiction, but rather so, an undertaking that is achievable if precautions are considered at the outset of the Islamic finance arrangement. The question that begs to be asked is *how can this be achieved… realistically?*

The notion in the academic literature, favouring the standardisation of Islamic financial documentation and procedures, is undoubtedly a step in the right direction. The current level of standardisation is not enough on its own to achieve: [1] good enforceability of Islamic principles; and [2] the transparency of practices, which, in turn, tend to be veiled under Islamic finance. The problem lies in the fact that such standardisation processes might be outpaced by the developments in the UK Islamic finance sector. Therefore, further standardisation is needed to create an environment that is more accommodating to the use of Islamic finance products under English law in a way that minimises legal complexities. Importantly, these standardisation processes should not be one-off endeavours—instead, they should be responsively adaptable and continuously updated to keep up with the developments taking place in the UK's financial sector.

6.2. Implications for practice and further research

When parties intend on entering an Islamic finance arrangement that is governed by English law, they should consider the following points to avoid unnecessary complications. First, it is essential for such parties to clearly state and outline their intentions in entering the Islamic finance arrangement. Doing so clarifies at the outset what the parties genuinely intend to contract. It helps any potential court identify whether the paramount intentions of the parties were inspired by a common commercial view for making a profit or whether they were inspired in doing so whilst committing to their faith—if both, the court could then designate which of the two would take primacy considering the case facts at hand. Where the prime intention lies in commerce, then the approach would be tantamount to the approaches seen in the case law presented by this paper. Where the prime intention is one of religion, then the court would look to provide further consideration to the religious element of the agreement.

Second, the parties should acknowledge at the outset that the Islamic element they chose in commissioning their financial arrangement raises no ground for exceptional treatment had such element been of a conventional nature. Doing so places emphasis on the fact that alternative finance arrangements exist under English law only to accommodate specific commercial needs that would otherwise be unavailable through conventional finance—not for the enablement of parties to secede from their contractual obligations when they choose to believe that there is an 'issue' of *Shariah* non-compliance. This acknowledgement can be satisfied by introducing 'pain gain' sharing clauses under Islamic finance agreements, whereby the *Shariah* integrity of the contract bases a moral *gain* for the parties involved, *not* a contractual one—and *Shariah* non-compliance would base a moral and ethical *loss* for the parties, again, *not* a contractual one. The parties would thereby, clearly imply an acknowledgement of the separation of *Shariah* and its commercial integrity from the contractual nature of the contract. By that, the burden of being *Shariah* compliant would fall on the remit of both parties and their joint effort, not on the contractual conduct of the parties.

Lastly, parties to an Islamic finance arrangement should understand the divisibility of the contractual element of their arrangement from that arrangement's commercial element—in other words, their arrangement's contractual agreement is justiciable by the English and Welsh courts irrespective of the *Shariah* nature of their *entire* agreement; let alone the commercial agreement. Parties should also understand that Islamic law is not recognised under English law and that 'there is no legal duty on a citizen to comply with any religious law' (Secretary of State, 2018). The Rome Convention and Rome I, as retained by the EU Exit Regulations 2019, still effect the 'law of a nation' principle. Such a stance is not targeted at Islamic law *per se*. Rather so, all religions are equally treated with no preference of one religion taking primacy over another, which is why religious law can be affected using a country's national laws. An interesting area for future research pertains to cases where the contractual and commercial agreements of an Islamic finance arrangement are indivisible. What if a future case compels dealing with both elements concurrently and thoroughly? What if a contract is formed in a way rendering the two elements inseparable?

7. Conclusion

In conclusion, Islamic finance arrangements can be interpreted through many lights. As a result, it is rational for a secular court to interpret Islamic finance and its underlying principles from the perspective of Islamic law in its common denominator form, if need be. Looking back at the case law analysed, it is conclusive that there is no one-fit-for-all approach for the English and Welsh courts when dealing with Islamic finance arrangements. However, the unanimous principle is that Islamic finance arrangements will never be treated in an exceptional manner to their conventional counterparts. Thus, when the context makes it right to do so, the English and Welsh courts will accommodate the interpretation and application of Islamic finance principles.

Principles of Islamic finance are interpretable and applicable—both directly and indirectly—under different circumstances. These mainly relate to cases where: [1] the agreement at hand is subject to the law of a nation that is influenced by *Shariah*; [2] where Islamic law is stipulated under an arbitration agreement; [3] where an interpretation aids in understanding the case facts; and [4] where an interpretation is constructive for the courts to reach a well-rounded judgment. Islamic principles are capable of being honoured insofar as: [1] they are not contravening English law; [2] they are expressly stipulated under the agreement; and [3] they are integral to the commercial purpose of the arrangement.

Finally, if the contractual agreement is governed by a *Shariah*-influenced law of a nation, Islamic principles conveyed through that law are more prone to be honoured. Where the English and Welsh courts are ruling over matters that require them to interpret and apply Islamic principles in line with well-established English law, they will separate the contractual- and commercial elements of the alternative finance arrangement. Then, the courts will rule over the contractual matter if that is what the dispute is hinged on. If the issue is of a commercial nature, the court may also interfere, subject to the nature of the dispute at hand or the breach of commerciality. The courts will also rule on areas that could, if left unresolved, conflict with English law—otherwise, the courts will not necessarily interfere with the commercial element of an Islamic finance arrangement.

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Does Mobile Payment Promote Financial Inclusion Among Palestinians Women: A Quantitative Approach Through Structural Equation Modeling

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Abstract

An attempt at validating the notion of whether women's access to financial services through mobile payment enhances their empowerment necessitated this study. Mainly, it focuses on the extent to which mobile payment can contribute to financial inclusion in the context of Palestinian women, which seems to be sparse and lacking in the literature. A quantitative approach was employed using 147 questionnaires designed based on the theory of planned behavior and reflective model for measuring financial inclusion. The research found that with successive increases in mobile payment usage, financial inclusion further increased. Precisely, the growth of mobile payment usage by 1 percent can improve women's financial inclusion by 0.449 percent. By increasing women's financial inclusion, women's economic empowerment could be effectively and positively improved, which boosts productivity, increases economic diversification and income equality, and other positive development outcomes.

Keywords: *women's empowerment, mobile payment, financial inclusion*

1. Introduction

Women's empowerment has driven the attention of researchers worldwide, especially in developing countries, where they have been the subject of discrimination socially, economically, and financially, thereby denying them access to basic life aspirations (Okunlola et al., 2020). Relative to men, women face the added challenge of having access to financial services. This was documented by Doss et al. (2019) where it is learned that women tend to have a lower probability of accessing institutional finance and a higher probability of accessing non-institutional finance. The Palestinian context is no exception, where women are less likely to use financial services. Only 16 percent of Palestinian women have access to financial services than 34 percent of men (Demirguc-Kunt et al., 2018). About 19 percent of Palestinian women have borrowed from family or friends, and 12 percent have saved using a savings club or a person outside the family, compared to 3 percent who borrowed from a financial institution and only 5 percent who saved in a financial institution (Demirguc-Kunt et al., 2018).

Being financially excluded somehow increases poverty, unemployment and undermines economic activity, especially for women (Apiors and Suzuki, 2018; Porter et al., 2015). Financial exclusion is a classic dilemma facing the financial sector that requires non-traditional means to overcome by leveraging the latest technology such as smartphones (Ajouz, 2019). The smartphone quickly becomes a key instrument in various economic sectors, including payment, financing, insurance, banking, and E-commerce (Donovan, 2012). The features of smartphones in general and mobile payments, in particular, have made it an innovative tool to overcome financial exclusion (Ajouz, 2019).

Financially, including the underserved and unserved through mobile payment is likely to increase payments volumes at a domestic level and stimulate the participation in the formal economy, with the benefits of

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smoothing incomes, defending against vulnerabilities, facilitating daily living, and advancing the Sustainable Development Goals (Apiors and Suzuki, 2018). The remarkable growth of smartphone users in Palestine offers a chance that can be harnessed to expand access to financial services to the underserved and unserved women who own smartphones (around 83 percent of women) which allows more opportunities for financially excluded women to participate in the formal financial system (Lenka and Barik, 2018; Ssonko, 2010).

There is already substantial literature on the potential economic impact of mobile money, especially its contribution to financial inclusion. As we explain, there is a high rate of smartphone users but a low financial inclusion rate among women in the Palestinian context. Therefore, there is a gap in knowledge that the new research needs to fill. This paper seeks to provide a remedy to this problem by empirically investigating the potential role of mobile payment in fostering financial inclusion concerning women in the Palestinian context.

2. Literature Review

2.1 Mobile payment, financial inclusion, and women empowerment

The primary objective of mobile payment or mobile money is the pursuit of making financial services available and accessible at affordable costs to all individuals and businesses. It is, indeed, expected to be a key driving force in reducing financial exclusion especially for those who are traditionally marginalized in the developing world such as women. The body of literature is not a different case, where the literature is replete with theoretical and empirical research that focuses on mobile phones' impacts on financial inclusion but pays too little attention to women generally and Palestinian women particularly.

For instance, numerous studies have attempted to explain mobile money or mobile payment and its contribution in promoting financial inclusion in general such as (Ahmad et al., 2020; Ajouz, 2019; Donovan, 2012; Kim et al., 2018; Ndung'u, 2018), as well as other empirical studies that mainly focused on expanding financial inclusion through mobile money or mobile banking (e.g., Behl and Pal, 2016; Bongomin et al., 2018; Bongomin and Munene, 2019; Bongomin and Ntayi, 2019, 2020; Deb and Agrawal, 2017; Siddik et al., 2014). The problem with their approach is that they were general and have not focused on women's methodology.

Nevertheless, from the few studies that have dealt with how mobile money can drive financial inclusion for women, focusing on urban Indian centers in Chavan et al. (2009). The study investigated the challenges and opportunities that women face at the bottom of the pyramid of mobile money as a means for financial inclusion. Together, these studies were limited by the use of a theoretical design. Additionally, Kemal and Yan (2015) analyzed qualitative data from semi-urban women in Pakistan and argued that mobile banking extends financial inclusion to these women. While Kemal (2019) critically examines mobile banking usage for receiving social, financial aid by women in Pakistan. However, Kemal (2019) and Kemal and Yan (2015) methods were limited in terms of using qualitative data.

Although research regarding financial inclusion through mobile payment in developing countries has been reasonably extensive, the literature has not been equally thorough in addressing financial inclusion empirically in the context of women. Overall, previous studies highlighted the need for more insight using quantitative methods and explored the potential economic impact of mobile payment, especially its contribution to financial inclusion among Palestinian women, which seems to be sparse and lacking in the literature.

On the other hand, numerous studies have identified how women's empowerment interacts with financial inclusion. In line with this, Demirguc-Kunt et al. (2013) documented how access to financial services, even a primary deposit account, can increase economic empowerment among women in developing countries. In the same venue, Chakraborty (2014) noted that improving women's access to financial services will increase their contribution to household income, and this, together with other interventions to increase household wellbeing, translate into improved livelihoods for the entire community and women's ability to bring about broader positive changes to society. Thus, undoubtedly improving women's financial inclusion, which is believed to be driven by mobile payment, can positively enhance their ability to participate equally in existing markets.

Notably, Barasa and Lugo (2015) examined the influential role played by M-PESA (a mobile payment company) in improving financial inclusion and women's empowerment in Kenya, while Porter et al. (2015) argue about the role of technology in advancing women's financial inclusion. However, little is known about the empirical evidence on mobile payment and its contribution to promoting financial inclusion in the context of women. Moreover, it is not clear to what extent mobile payment influences financial inclusion from the perspective of Palestinian women.

3. Theoretical Model

3.1 Mobile payment intentions-related beliefs

Beliefs can be defined as the underlying psychological determinant determining behaviors ((Ajzen, 1991; Tan et al., 2019). It encompasses indirect or belief-based measures of attitudes, subjective norms, and perceived behavioral control (Peredaryenko, 2016). Fishbein and Ajzen (1975) hold the view that belief-based measures of these constructs should be well connected with their direct measurements since they measure the same unobservable phenomena. In other words, as stated in the theory of planned behavior (TPB), the behavior-related beliefs of an individual directly affect the formation of one's perceived behavioral control, subjective norms, and attitude towards a behavior (Peredaryenko, 2016).

What we know about these links is primarily based on empirical evidence demonstrated by Hrubes et al. (2001) and McCarthy et al. (2003) where they investigated the relationships between behavior-related beliefs and the three mentioned constructs (attitudes, subjective norm, and perceived behavioral control). The results of their investigation showed a strong positive correlation between belief-based measures and perceived behavioral control, subjective norms, and attitude, as it has been conceptualized by Ajzen (1991) and Fishbein and Ajzen (1975). Depending on the above theoretical and empirical evidence, it could conceivably be hypothesized that:

H1: Beliefs of mobile payment intention have a positive relationship with attitudes.
H2: Beliefs of mobile payment intention have a positive relationship with the subjective norm.
H3: Beliefs of mobile payment intention have a positive relationship with perceived behavioral control.

3.2 Subjective product knowledge

The term subjective product knowledge is generally understood as "what individuals perceive that they know about a given product" (Brucks, 1985). In other words, it refers to how much people think they know about a specific item and how much their level of confidence regarding their knowledge (Brucks, 1985; Peredaryenko, 2016). Subjective product knowledge is self-evaluation (Laroche et al., 2003) or self-report of an individual's knowledge of a given product (Raju et al., 1995).

Previous research and findings add empirical support to the relationships between subjective product knowledge and the theory of planned behavior's antecedents of intention to use. McEachern and Warnaby (2008) drew our attention to the relationship between subjective product knowledge and TPB constructs, namely perceived behavioral control, subjective norms, and attitudes within the same model, and found significant positive relationships. In the same vein, Tang et al. (2011) provide evidence on the significant positive relationship between subjective product knowledge and perceived behavioral control and attitude.

Notably, Peredaryenko (2016, 2019) revisited the relationship between subjective product knowledge and the theory of planned behavior constructs and found that subjective product knowledge has significant positive relationships with perceived behavioral control while it has non-significant relationships with attitude even though literature provides unanimous support for this link. It can therefore be hypothesized that:

H4: Subjective product knowledge of mobile payment intention has a positive relationship with attitude.
H5: Subjective product knowledge of mobile payment intention has a positive relationship with perceived behavioral control.

3.3 Attitude

As stated by Ajzen (1991, p. 188) the term attitude refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question." A large and growing body of literature has investigated the role of attitude in predicting behavioral intention to adopt mobile payment, which indicated a significant positive impact (e.g., Cao et al., 2018; Dlodlo, 2014; Giovanis et al., 2020; Lu et al., 2017; Tan et al., 2019; Verma et al., 2020; Wamuyu, 2014; Zhou, 2013). In addition, recent evidence by Tan et al. (2019) suggests that attitude mediates the relationship between beliefs and intention to adopt mobile payment, while Peredaryenko (2016) discussed the mediation role of attitude between subjective product knowledge and intention. Therefore, it is vital to investigate the mediation role of attitude between mobile payment intention and beliefs and subjective product knowledge. Thus, it is possible to hypothesize that:

H6: Attitude has a positive relationship with mobile payment intention.
H7: Attitude mediates the relationship between beliefs and mobile payment intention.
H8: Attitude mediates the relationship between subjective product knowledge and mobile payment intention.

3.4 Subjective norm
The term subjective norm refers to “the perceived social pressure to perform or not to perform a behavior” (Ajzen, 1991: p. 188). In this manner, subjective norm represents the importance of the social influence of parents, friends, and colleagues on potential users’ intention to adopt mobile payment ((Minton et al., 2018; Verma et al., 2020). Palestinian potential users may rely on other groups’ and/or peers’ opinions before adopting mobile payment. Traditionally, it has been argued that subjective norm has a significant positive impact on intention to adopt mobile payment (see for e.g., Del Bosque and Crespo, 2011; Giovanis et al., 2020; Kim et al., 2009; Pedersen, 2005; Schierz et al., 2010; Verma et al., 2020). In addition, previous studies have reported the mediation role of subjective norm between beliefs and intention to adopt mobile payment (Tan et al., 2019). Consequently, it could conceivably be assumed that:

H9: Subjective norm has a positive relationship with mobile payment intention.
H10: Subjective norm mediates the relationship between beliefs and mobile payment intention.

3.5 Perceived behavioral control
In the literature, Ajzen (1991) defined perceived behavioral control as "assurance that individuals can execute given activities under designated situational demands" (Bandura, 2007: p. 646). In other words, perceived behavioral control in the context of mobile payment is conceptualized as the individual's ability to control the decision to perform or not to perform a mobile payment transaction (Verma et al., 2020). Several authors have explored the positive impact of perceived behavioral control on intention to adopt mobile payment (Dorfleitner et al., 2017; Giovanis et al., 2020; Lerner, 2013; Peredaryenko, 2019; Verma et al., 2020). In addition, Tan et al. (2019) investigated the mediation impact of perceived behavioral control between beliefs and intention to adopt mobile payment, while Peredaryenko (2016) discussed the mediation role of perceived behavioral control between subjective product knowledge and intention. It can therefore be hypothesized that:

H11: Perceived behavioral control has a positive relationship with mobile payment intention.
H12: Perceived behavioral control mediates the relationship between beliefs and mobile payment intention.
H13: Perceived behavioral control mediates the relationship between subjective product knowledge and mobile payment intention.

3.6 Mobil payment and financial inclusion
Financial inclusion is a relatively growing topic that received increased attention from the financial and regulatory institutions at the international or local level. According to the Palestine Monetary Authority (2018), financial inclusion refers to "enhancing access to, and use of, financial products and services to all segments of the society via formal channels, while meeting their needs in a timely and affordable manner; thus, protecting their rights and promoting their financial knowledge to enable them to make well informed financial decisions." Numerous studies have attempted to explain the contributing factors in promoting financial inclusion, such as (Ahmad et al., 2020; Donovan, 2012; Kim et al., 2018; Ndung’u, 2018), as well as other empirical studies such as (Behl and Pal, 2016; Bongomin et al., 2018; Bongomin and Munene, 2019; Bongomin and Ntayi, 2019, 2020; Deb and Agrawal, 2017; Siddik et al., 2014). Thus, there is no doubt that mobile payment usage has a growing impact on financial inclusion but needs to be appropriately measured.

In this research, the financial inclusion was expressed based on a reflective model according to country-specific factors associated with financial inclusion, which contains three dimensions, namely accessibility, availability, and usage of financial services as suggested by Sarma (2008, 2015). The relationship between mobile payment adoption and financial inclusion has been fairly investigated in numbers of empirical and theoretical research; therefore, it could conceivably be hypothesized that:

H14: Mobile payment intention has a positive relationship with financial inclusion.

4. Methodology

4.1 Measurement

To achieve content validity, the development of measurement items was based on an intensive literature review of the planned behavior theory. The items to measure potential users' intention to adopt mobile payment were adopted from Bian and Moutinho (2011), Cook and Fairweather (2007), and Im and Ha (2011). Attitude toward using mobile payment was adopted from Taylor and Todd, (1995); subjective norms toward using mobile payment were adopted from Francis et al. (2004), Peredaryenko (2016), and Tan (2013). Perceived behavioral control was adopted from Peredaryenko (2016); Tan (2013); belief about using mobile payment was adopted from Peredaryenko (2016). While subjective products knowledge towards using mobile payment was adopted from Flynn and Goldsmith (1999).

In addition, to measure financial inclusion, a reflective model was developed based on Sarma (2008, 2015). The measurement items that are peculiar to financial inclusion were newly developed to suit the research purpose. Thus, to ensure the items measured their designated constructs and that they have high reliability, an exploratory factor analysis (EFA) with varimax rotation technique was carried out where it was found that the newly developed items belong perfectly to the three constructs, accessibility, availability and usage of financial services (Hair et al., 2019).

Finally, to make the questionnaire accessible to the respondents, the research instrument was translated back-to-back from English into the Arabic language. Thus, before proceeding with the main survey, a pilot test was conducted to establish the validity and reliability of the questionnaire. The result of the pilot test supports the completion of data collection.

4.2 Sample and data collection

The primary target respondents have been identified as the women in West Bank and Gaza Strip, Palestine, economically active residents. The data collection process took place between the 28th of November 2019 and the 12th of April 2020. However, since no sampling frame could be used for this research, G*power rules were adopted to determine the adequate sample size. Accordingly, the number of arrows pointing at a construct in the proposed PLS path model is eight, the minimum sample size recommended is 114 observations to achieve a statistical power of 80% for detecting R2 values of at least 0.25 with a significance level of 0.001 (Hair et al., 2016).

The data was collected using self-administered and electronic questionnaire techniques. Thus, around 650 questionnaires were distributed based on purposive sampling, and 147 valid responses were received. The overall response rate was about 22.6 percent, which is reasonable for research on this scale. The demographic profile of the respondents shows that the majority, 53.7 percent of respondents, have never used electronic payment mechanisms in their transactions. Notably, 84.3 percent of respondents are within the age range of 18 to 31 years. The vast majority of respondents (74.1 percent) came from lower-class income groups who earn less than USD 1,000 per month, while the rest earn a monthly income higher than that. Respondents with a diploma and bachelor's degree accounted for 89.2 percent of the data, while 8.1 percent hold doctorate and master's degrees. The demographic profile also showed that the respondents belong to several occupation categories, including students (67.3 percent), private sector (12.9 percent), public sector (12.2 percent), self-employed (3.4 percent), and 4.1 percent still looking for job opportunities.

5. Results and Discussion

5.1 Measurement Model

To evaluate the fit of the hypothesized model, confirmatory factor analysis was carried out on the 147 sampled data collected from potential mobile payment users in Palestine through partial least squares (PLS) in Smart-PLS 3 (Ringle et al., 2015). Following the best practices in structural equation modeling, the measurement model was assessed for indicator and internal consistency reliability and convergent and discriminant validity (Hair et al., 2016).

The indicator reliability was carried out based on Hair et al. (2016) criteria, where the outer loadings for each item must be greater than 0.70, and any item with loading less than 0.4 must be eliminated. Five items were dropped due to the low outer loading (IU2, PC4, SK1, SK5and BF2). The remaining items have outer loading greater than 0.708, values between 0.750 and 0.909, and all the items were statistically significant at 0.00. All in all, the research instrument presents acceptable indicator reliability.

In addition, internal consistency reliability was evaluated by conducting Cronbach's alpha and composite reliability tests. As shown in Table 1, all the constructs have Cronbach's alpha values between 0.851 and 0.932 which is regarded as acceptable (Straub, 1989). However, finding composite reliability has become a more rigorous estimate (Gefen et al., 2000). Thus, composite reliability values were between 0.899 and 0.947, which is acceptable (Straub, 1989).

On the other hand, the convergent validity was established by carrying out average variance extracted (AVE), where the value of AVE must be higher than 0.5, as advised by Hair et al. (2016). As presented in Table 1, the AVE values of all constructs were between 0.603 and 0.810, which support convergent validity in this research.

Table 1: Assessment of The Measurement Model

Constructs	Cronbach's alpha	Composite Reliability	AVE
Belief	0.869	0.901	0.603
Intention to Use Mobile Payment	0.875	0.914	0.727
Subjective Products Knowledge	0.883	0.927	0.810
Attitude	0.905	0.930	0.726
Subjective Norms	0.871	0.907	0.660
Perceived Behavioral Control	0.851	0.899	0.691
Financial Inclusion			
Accessibility	0.932	0.947	0.748
Availability	0.879	0.912	0.675
Usage	0.888	0.918	0.692

In addition, discriminant validity was evaluated using three criteria: cross-loadings criteria, Fornell-Larcker criteria, and Heterotrait-Monotrait ratio of correlations (HTMT) criteria (Hair et al., 2016; 2019). Accordingly, by evaluating indicators loading (square root of AVE) and cross-loading, all the indicators loading have greater factorial loads on their respective construct than all cross-loadings according to Fornell and Larcker (1981) criteria. However, the Fornell-Larcker criterion was criticized by Henseler et al. (2015) as it failed to detect discriminant validity in PLS-SEM, while they suggested the use of HTMT criteria, which contrasts the indicator correlations between constructs with the correlations within indicators of the same construct (Hair et al., 2019). The results of HTMT were below 0.85, and all the indicators were statistically significant from 1, which indicates the establishment of discriminant validity based on Kline's (2011) criteria.

The results from the measurement model indicate that the indicator and internal consistency reliability and convergent and discriminant validity of the constructs are satisfactory. Therefore, the hypothesized constructs can be used to test the structural model.

5.2 Structural model

Figure 1 presents the results of PLS estimation. It shows that the proposed model explains 20.2 percent of the variation in financial inclusion and validates the hypothesis (H14) that mobile payment intention positively correlates with financial inclusion. The effect of mobile payment was found to have a median effect on financial inclusion as the R2 value was above 13 percent, as mentioned by Cohen (1988). In addition, the proposed model explains 62.3 percent of behavioral intention to adopt mobile payment and confirms the hypothesis. As shown in Tables 2 and 3, all models' paths were supported at the 0.05 level, except for H4 and H8, which were irrelevant to the formation of women’s attitude. Furthermore, the proposed model supports the mediation role of attitude, subjective norm, and perceived behavioral control between beliefs and mobile payment intention. Notably, the mediator effect of perceived behavioral control between subjective product knowledge and mobile payment intention was significantly positive while, the mediator effect of attitude was not statistically significant.

Figure 1: Structural Model Results

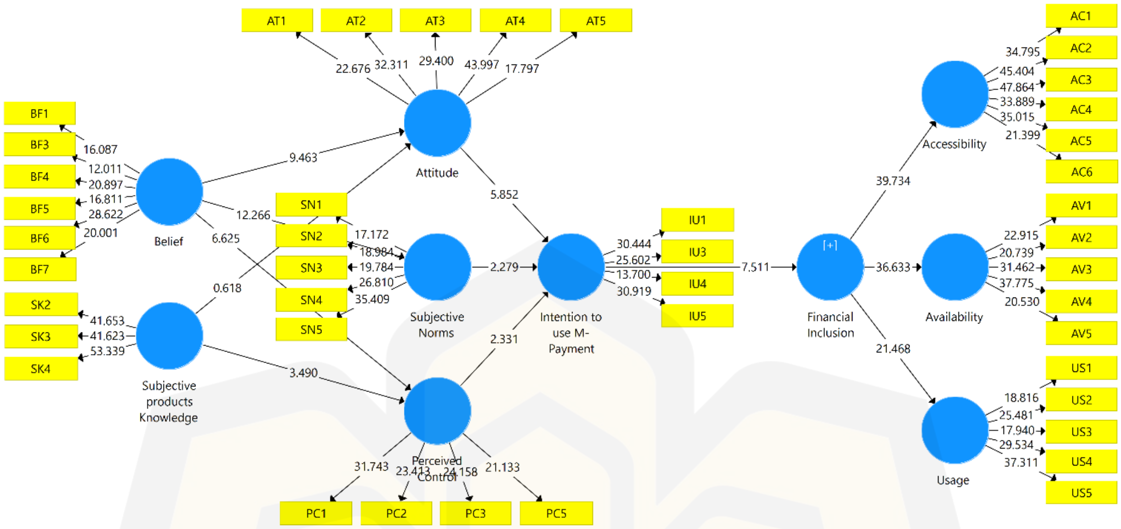

Table 2: PLS-SEM Results (Path Coefficients of the Adjusted Model)

Hx	Relationship	Std Beta	Std Error	t-Value	p-Value	Decision
H_1	BLFS -> ATT	0.703	0.074	9.463	***	Supported
H_2	BLFS -> SN	0.630	0.051	12.26	***	Supported
H_3	BLFS -> PBC	0.511	0.077	6.625	***	Supported
H_4	SPK ->ATT	-0.051	0.083	0.618	0.537	Not Supported
H_5	SPK -> PBC	0.273	0.078	3.490	0.001	Supported
H_6	ATT -> M-P	0.508	0.087	5.852	***	Supported
H_9	SN -> M-P	0.185	0.081	2.279	0.023	Supported
H_{11}	PBC -> M-P	0.178	0.076	2.331	0.020	Supported
H_{14}	M-P -> FI	0.449	0.060	7.511	***	Supported

In details, the potential users' beliefs of mobile payment intention as presented in H_1, H_2 and H_3 had significant positive effects on attitude ($\beta = 0.703$; $t = 9.463$, $p < 0.05$), subjective norm ($\beta = 0.630$; $t = 12.260$, $p < 0.05$), and perceived behavioral control ($\beta = 0.511$; $t = 6.625$, $p < 0.05$). The path coefficient between beliefs and attitude or subjective norm were greater than the causal relationships between beliefs and perceived behavioral control. The results unexpectedly showed that subjective products knowledge had no significant effects on attitude (H_4: $\beta = -0.051$; $t = 0.618$, $p > 0.05$), while, showing a significantly positive effect on perceived behavioral control (H_5: $\beta = 0.273$; $t = 3.490$, $p < 0.05$). The results also showed that the attitude (H_6: $\beta = 0.508$; $t = 5.852$, $p < 0.05$), subjective norm (H_9: $\beta = 0.185$; $t = 2.279$, $p < 0.05$), and perceived behavioral control (H_{11}: $\beta = 0.178$; $t = 2.331$, $p < 0.05$) had significantly positive effects on mobile payment intention.

Interestingly, the results showed that the mobile payment intention has a positive relationship with financial inclusion (H_{14}: $\beta = 0.449$; $t = 7.511$, $p < 0.05$). The effect of the mobile payment intention on financial inclusion was 0.449. The proposed model accounted for 20.2 percent of the variance in financial inclusion, which indicates a median effect of mobile payment intention on financial inclusion (Cohen, 1988). Finally, the above results have empirically explained the factors that affect mobile payment usage for achieving financial inclusion from the perspective of Palestinian women.

Table3: PLS-SEM Results (Path Coefficients of Indirect Effects)

H_X	Relationship	Std Beta	Std Error	t-Value	p-Value	Decision
H_7	BLFS -> ATT -> M-P	0.357	0.075	4.736	***	Supported
H_8	SPK ->ATT -> M-P	0.026-	0.042	0.621	0.535	Not Supported
H_{10}	BLFS -> SN -> M-P	0.117	0.054	2.175	0.030	Supported
H_{12}	BLFS -> PBC -> M-P	0.091	0.043	2.098	0.036	Supported
H_{13}	SPK -> PBC-> M-P	0.049	0.025	1.982	0.048	Supported

In addition, the mediation role of attitude (H_7: $\beta = 0.357$; $t = 4.969$, $p < 0.05$), subjective norm (H_{10}: $\beta = 0.117$; $t = 2.175$, $p < 0.05$), and perceived behavioral control (H_{12}: $\beta = 0.091$; $t = 2.098$, $p < 0.05$) between beliefs and mobile payment intention were statistically significant at the 0.05 level. Notably, the mediation role of attitude between subjective product knowledge and payment intention as presented in H_8 had no statistically significant effect ($\beta = -0.026$; $t = 0.535$, $p > 0.05$), while subjective product knowledge had significant positive effects on mobile payment intention through the mediator role of perceived behavioral control (H_{13}: $\beta = 0.049$; $t = 1.982$, $p < 0.05$). These results are in line with the findings of Peredaryenko (2019).

5.3 Discussion and implications

Despite the worldwide spread of mobile payment services, the Palestinian mobile payment business is not widespread as required compared to other countries because of the considerable uncertainty of the business environment. As Palestinian's financial sector is traditionally known for its complications and high entry barriers, most women (around 84 percent) are still financially excluded compared to 66 percent males. This shows the gap between men and women in accessing financial services (Demirguc-Kunt et al., 2018). There is no doubt about the importance of involving women in economic activities, especially in the case of Palestine, where 49 percent of the population is women.

These women can demonstrate an excellent opportunity for the Palestinian economy. According to Demirguc-Kunt et al. (2018) around 19 percent of women have borrowed money from family or friends, while only 3 percent borrowed from a financial institution. This shows the gap that formal financial institutions can fill to empower these women. The restrictions and obstacles facing women informal financial institutions denied many of them access to banking services. This is clearer when knowing that around 12 percent of women have saved using a savings club or a person outside the family, while only 5 percent saved at a financial institution Demirguc-Kunt et al. (2018). This shows a great opportunity that mobile payment can make available by facilitating the saving process of these women. Using mobile payment, they can save, transfer, and receive money quickly in the palm of their hand.

Additionally, more than 41.9 percent of women are unemployed in Palestine, the highest rate in the Middle East and Arab countries. This clearly shows the opportunity that the Palestinian economy could have otherwise leveraged. Women's involvement in entrepreneurial projects is even disappointing as only 2 percent and 3 percent have saved or borrowed to start, operate, or expand a farm or business, respectively (Demirguc-Kunt et al., 2018; PCBS, 2020). This also shows the lost opportunity where around 20.1 percent of the workforce is disrupted. This requires more actions to improve the access of Palestinian women to financial services using current technology. Improving women's access to financial institutions can improve their living standards, especially by offering them special financing contracts that enable them to feel more secure such as diminishing partnership and trust financing contracts offered by Islamic financial institutions.

However, this research attempted to investigate how mobile payment affects financial inclusion from the perspective of Palestinian women. It was found that the increase of mobile payment usage by 1 percent can improve women's financial inclusion by 0.449 percent. Increasing women's financial inclusion could effectively and positively improve their economic empowerment, which boosts productivity, increases economic diversification and income equality, and other positive development outcomes (IMF, 2018).

6. Conclusion

This study sets out to determine the impact of mobile payment intention on financial inclusion from the perspective of Palestinian women. One of the most significant findings to emerge from this study is that mobile payment intention positively correlates with financial inclusion. It was also shown that the effect of mobile payment on financial inclusion is a median effect, where the proposed model explained that around 20.2 percent of variation is in financial inclusion. This has significant implications, as financial inclusion is influenced by other factors not explored in this research. It is recommended that further research be undertaken to discover and investigate the factors influencing financial inclusion from the perspective of Palestinian women. Considering a high expected value of financial inclusion, more active development of electronic payment business and a more pragmatic approach of electronic payment management by the government are needed to meet user demands.

This finding of the current research extends the body of knowledge that benefits the researchers, public, business community, and policymakers. This is because dealing with financial exclusion among women is a contemporary and growing issue as they are being financially excluded. This somehow increases poverty and unemployment and undermines economic activity. Therefore, by benefiting from current technologies, particularly smartphones in this study, Palestine can overcome this problem, especially as 83 percent of women in Palestine already own a smartphone but need to leverage these phones properly to empower themselves.

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Waqf Effectiveness in Nigeria: Problems and Solutions

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Abstract

The efficiency of the institution of *Waqf* in alleviating poverty is undisputable and Nigeria as a country with a significant Muslim population stands to benefit immensely from well-functioning *Waqf* institutions. Despite the presence of *Waqf* in Nigeria, the country still experiences increasing levels of poverty. This study aims to find the problems hindering the effectiveness of the *Waqf* operation in alleviating poverty in Nigeria. It uses the thematic framework medium of interviewing as a methodology of retrieving the necessary data. From the analysis, it was evident that a combination of a lack of awareness, lack of transparency as well as corrupt practices is what has led to the inefficiency of *Waqf* operations in Nigeria. The study concludes by discussing solutions that can be employed to remedy the challenges, including producing experts in *Waqf* management, providing tax exemptions for *Waqf* donors, enacting Federal laws relating to *Awqaf* and awareness creation.

Keywords: *waqf, poverty, Nigeria*

1. Introduction

The word "*Waqf*" means an asset that is set aside such that its usufruct is dedicated in perpetuity to a charitable cause. The term "*Waqf*" originates from the root word "*Waqfa*" which literally means to hold or to restrict the movement or exchange of a particular thing.

Although *Waqf* is not explicitly mentioned in the *Qur'an*, it is alluded to in *Suratul Kahf* (Chapter 18)*, of* the *Qur'an*. In this *Surah*, there is a story of Prophet Musa and Khidr in which the two found a wall about to collapse. Khidr explained to Prophet Musa that the father of two orphans had left some treasure for his heirs under the wall (*Suratul Kahf*: verse 82). *Waqf* is also alluded to in some *hadith* of Prophet Muhammad (ﷺ). An example is the following authentic *hadith* (*Ṣaḥīḥ* Muslim: 1631): "When a man dies, only three deeds will survive him: continuous charity, beneficial knowledge and a pious child praying for him."

Having explained what *Waqf* is and its textual evidence in Islam, it is necessary to explain the motivation for this paper. The main motivation for this paper is the high incidence of poverty and inequality in Nigeria. Even though Nigeria is blessed with abundant natural and human resources, the problems of widespread poverty and inequality still linger. The ideal situation in Nigeria is that of an egalitarian society. However, the reality is different. We are therefore proposing, through this paper, that *Waqf* be harnessed to reduce the incidence of widespread poverty and inequality in Nigeria. *Waqf* is an important Islamic Social Finance instrument that has the potential of reducing poverty and inequality in a country such as Nigeria. Through *Waqf*, well-to-do Muslims can make bequests that will benefit the less-privileged members of the society. A common misconception is that *Waqf* is only for religious purposes such as building mosques and *Qur'an* memorization schools. This in untrue because *Awqaf* (plural of *Waqf*) can be established for projects such as the provision of

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secular education, healthcare, accommodation for travellers and the construction of roads. The use of *Waqf* for non-religious purposes was particularly witnessed during the Ottoman empire (Fakhrunnas and Liutammima, 2017; Hasan et al., 2019; Rabiah Adawiah Engku Ali et al., 2019). Usage of *Waqf* for non-religious purposes has also been done in recent times. A very good example of this can be found in the activities of *Finterra* (https://finterra.org/), a startup that integrates blockchain technology with *Waqf*, among other activities.

It is a conundrum that although Nigeria, a country with a sizeable proportion of its population being Muslim, lags when it comes to the effectiveness of *Waqf*. A summary of the literature shows that several problems beset the institution of *Waqf* in Nigeria. These include lack of confidence by members of the public in *Waqf* institutions, lack of Government support, lack of awareness amongst the populace about what *Waqf* is and inadequate legal framework for *Waqf* as an institution (Ahmad, 2019). Therefore, this study aims to close a gap in knowledge by comprehensively identifying what authorities in *Waqf* in Nigeria perceive to be the challenges facing *Waqf*'s efficacy. Specifically, the objectives of this study are as follows:

1. To find out whether perceived mismanagement of *Waqf* properties due to lack of capacity or corruption discourages prospective *Waqf* donors from engaging in *Waqf* donation in Nigeria.
2. To investigate whether perceived lack of transparency on the part of the *Mutawalli* (*Waqf* trustee) discourages prospective *Waqf* donors from engaging in *Waqf* donation in Nigeria.
3. To inquire whether there is a lack of awareness among Muslims in Nigeria about *Waqf* and its characteristics.
4. To report other challenges facing *Waqf* as an institution in Nigeria from the perspective of the *Mutawalli*, and
5. To proffer solutions to the challenges towards *Waqf* effectiveness in Nigeria identified in this study.

Having established the study's objectives, we turn now to the hypotheses of this study, as follows:

1. *Waqf* bodies in Nigeria are faced with lack of capacity, corruption, and lack of transparency, and
2. There is a lack of awareness among Nigerian Muslims as to what *Waqf* entails.

This study is of both practical and academic importance. It is of practical importance because the recommendations at the end of this study will inform the Nigerian Government as well as Nigerian Muslims what needs to be done to fulfil the potentials of *Waqf* in Nigeria. When properly administered, the institution of *Waqf* could be a complement to provisions of the Government in the areas of health, education, infrastructure, and social amenities. This study is of academic importance because it provides insight to researchers in academia regarding the undocumented challenges facing *Waqf* in Nigeria.

This study employs qualitative data through semi-structured interviews. The sample of interviewees was selected using judgement sampling, a non-probability sampling method. The rest of this paper is organized as follows: the next section covers the literature review, the third section covers research methodology, the fourth section covers data analysis, the fifth section handles discussion of findings while the last section concludes.

2. Literature Review

The benefits of *Waqf* institutions have become more apparent as the years go by. Aliyu (2018) pointed out that *Waqf* institutions have helped tremendously in lessening tax burden and budget deficits, increase public good as well as combat issues of inequality and poverty alleviation among other things. More evidence of their role is in the maintenance of social welfare as witnessed in the implementation by Ottoman rule where it was used to finance health, education and other welfare services (Zuki,2012). Likewise, in a more contemporary perspective Mikail and Adekunle (2017) is of the notion that *Waqf* and *Zakat* can be used as tools in micro-*Takaful* and will promote social security and economic empowerment. It can be used in a more contemporary form of promoting financial inclusion via micro-*Takaful*.

In the case of Nigeria, the institution of *Waqf* is governed by trustees as compared to it being governed by the law which is in the case with other countries such as Malaysia (Chabbal, 2020). It is important to highlight that there is no existing Federal law that directly overlooks the management as well as administration of *Waqf* in Nigeria. The only provision made for *Waqf* in the Federal constitution is in highlighting that all issues pertaining to *Waqf* are to be handled under the *Shariah* law (Oseni, 2012). More so, the institution of *Waqf* has played a very important role in promoting widespread religious activities by encouraging the developments of mosques and catering to its maintenance.

To narrow down on the challenges faced by *Waqf* globally, studies have shown that the condition of *Waqf* institutions remain poor as many areas which were once powerhouses of Islam have experienced a tremendous collapse of their *Waqf* institutions (Rashid, 2011; Shirazi, 2011). Several of the *Waqf* buildings are lacking basic maintenance. A recent study by Laallam et al. (2020) noted that there are several issues with *Waqf* performance around the Muslim world and most of them are linked to the state's direct control and management of the *Waqf* sector. In addition to this, the sector also faces issues such as corruption, weak legal protection, inadequate legal and financial reforms amongst others. Similarly, according to (Omar and Sanyinna, 2018) who used a qualitative approach to evaluate the situation of *Waqf* in the Muslim world in general, the cumulative cause for the decline in Waqf assets on the global front is a combination of legislative negligence, administrative failure, lack of political determination, a lack of public awareness of the advantages of *Waqf* and a high rate of corruption. The situation in Nigeria is not very different, neither is it impressive because *Waqf* institutions are currently still underdeveloped. This has been the case since the fall of the *Sokoto* caliphate in 1903 (Sunni Muslim caliphate who ruled the West Africa between 1802-1903) where Islam and the *Waqf* administration flourished (Oseni, 2012). However, some states in the country have tried to revive the *Waqf* institution such as *Zamfara* State. This saw the re-establishment of *Waqf* alongside *Zakat* institutions which was also experiencing a downfall. However, since their reestablishment, not much growth has been noticed. Ahmad and Rashid (2017) attribute this failure to lack of adequate corporate governance.

As highlighted by Aliyu (2018), the institution of *Waqf* in the northern parts of Nigeria has failed to achieve the desired result despite the presence of laws to govern its operation. This issue is one not only inherent to the situation in Nigeria but also globally. Boudjellal (2008) highlighted that the institution has not reached its potential and is still widely overshadowed by conventional methods of philanthropy and this calls for more effort to be used in scrutinizing the current situation of the institution and what it needs to reach its potential. One challenge is the practice of *Waqf* following the Maliki law which permits for properties given out as *Waqf* to be revoked by the endower at any time of their choosing (Abubakar, 2014). Other challenges faced by the institution of *Waqf* in Nigeria are the attitude of Muslim leaders towards the *Waqf* establishments, a lack of adequate *Waqf* legislation, the existence of unregistered *Waqf* properties and lack of proper public awareness of the concept of *Waqf* (Ahmad, 2019).

In agreement with Abubakar (2014), studies carried out by Ahmad (2019) have shown that Nigerians in the north are very likely to donate and contribute to cash *Waqf* if there is adequate awareness of it. This, according to the author, proves that the institution can eliminate or at the least reducing poverty in Nigeria. An empirical study by Ahmad (2019) to investigate the cause of the low performance of *Zakat* and *Waqf* institutions in Nigeria shows the presence of gaps among which are: the erosion of trust and confidence in the institution, public displeasure with the involvement of government in appointing officials for the institution, disregards of public opinion as to their preferred choices for administrative officials, lack effort by the government to increase public awareness, lack of adequate knowledge of the potential as well as latest modification of *Waqf* among board members which limits the use of *Waqf* in poverty alleviation. An interview by Ahmad (2019) presented strong evidence to support his finding that another challenge faced by the *Waqf* institution is the difference in religious ideologies which contributes to a lack of trust and confidence. He further explained that if the board is headed by an official from a different group, members from other groups are not likely to accept his authority and vice versa. The solution to this predicament was to have a representative from each sect as part of the board. A recommendation by Ahmad (2019) on how to improve the efficiency of the *Zakat* and *Waqf* institutions in Nigeria is the domination of the boards of these institutions by respected Muslim scholars who are under the leadership of the *Emirs* (rulers). The successful implementation of this practice can be seen in *Jigawa* State *Zakat* committee. Secondly, measures to ensure accountability and transparency should be developed and implemented. The third recommendation is to ensure limited interference of the State Government to only the supervision of the appointed officials as compared to the current practice of appointing them. The last recommendation of the author is to grant the board semi-autonomy which would increase innovation and expansion.

Seeing the importance of *Waqf* in the development of various sectors of an economy, ways to enable its continuous development and stable operation must be identified and implemented especially in evidence from previous studies (Dandy et al., 2018; Jafri and Mohd Noor, 2019; Tutuko et al., 2017). Besides, having reviewed a considerable number of studies on the issue of *Waqf* both on the global front as well as locally in Nigeria, using empirical data, this study would focus on investigating the general effectiveness of *Waqf* in Nigeria while highlighting its challenges.

3. Research Methodology

3.1 Data collection

The concept of *Waqf* is known in Nigeria but its activation is very scarce among the Muslim communities. Although studies have shown that the legality of *Waqf* in Nigeria can be traced to the federal government law on endowment (1999 constitution of the Federal Republic of Nigeria as amended; Section 262 sub section 1 & 2), yet challenges are confronting the potentials of *Waqf* as socio-economic Islamic instruments in Nigeria. Few *Waqf* institutions in operation are witnesses to the success stories and problems of *Waqf* effectiveness in Nigeria.

The works of Muhammad (2014), Bakar et al. (2017), Amuda (2019) and Ishola (2019) have indicated that most of the literature on the *Waqf* system in Nigeria is based on literature review, legal analysis, and implications. Other studies focus on the potential socio-economic impact of *Waqf* and proposed models for activating *Waqf* in Nigeria. Considering the dearth of primary data on the practice of the *Waqf* system in Nigeria, this study undertakes interviews to explore the pragmatic perspectives of *Waqf* operators, administrators and legal experts on the achievements and challenges of *Waqf* institutions in Nigeria. This research interview method aligns with the study of Saad et al. (2017) which combines a literature review with an in-depth research interview to gather relevant data for its research. The choice of research interview is based on the fact that primary data from the practitioners, operators and administrators in a specialized field will display first-hand information and perception about the condition of the subject matter (Saunders et al., 2003). A qualitative research method is designed to explore related information and infer from relevant data on the selected respondent's opinion, perspective, and views about the study (Williams, 2018). This study therefore designs an interview method for collecting relevant data to align with the main objectives of the study towards illustrating the extent of effectiveness in the application of *Waqf* institutions in Nigeria. Selected interviewees are from the existing and functioning *Waqf* institutions in Nigeria.

The selected interviewees are sufficient to represent the practical opinion and perceptions about the success and challenges in Nigeria because they represent registered *Waqf* institutions from different states across the southern and northern parts of Nigeria. However, due to the limited numbers of *Waqf* institutions in Nigeria, five prominent personalities from different institutions accepted the call for participation in the interview sessions. Creswell (2003) suggests that saturation in qualitative interview aiming at interpretative experience of the informants is sufficient when researcher perceived no further new data may be received.

3.2 Data analysis through interviews

This study examines qualitative information from the selected interviewees using the Framework Analysis Approach (FAA). FAA is a research approach used to analyze interview data based on observation of participants (Srivastava and Thomson, 2009; Nili et al., 2017, Hackett and Strickland, 2019; Busari and Aminu, 2021). This method is employed to evaluate the perception and opinions of interviewees about the opportunities and challenges of the *Waqf* system in Nigeria. The data analysis process includes the identification of themes and sub-themes in coded form. These codes represent in-depth information about on-the-field perceptions and opinions on the challenges of *Waqf* in Nigeria. This study, therefore, uses a thematic framework to encapsulate and illustrate the interview data based on themes and sub-themes.

3.3 Participants

A total of five participants in Nigeria were interviewed. Three out of the five people interviewed were directly involved with *Waqf* while the other two individuals were active researchers in the field of *Waqf*. The names of the institutions of the Waqf practitioners are: Jaiz Charity and Development Foundation; Gombe State *Waqf* and *Zakat* Foundation; and *Baytul Hikma wal Ulum* foundation. The other two individuals were: a researcher with the International *Shariah* Research Academy for Islamic Finance (ISRA), Malaysia and a Senior Lecturer in Islamic Law at Kwara State University, Nigeria. All the interviews were conducted on the Zoom platform because of the current Covid-19 challenges regarding to face-to-face meetings. The gender category of the interviewees is male (four) and female (one).

Table 1: Participants' Characteristics

Alias	Gender	*Waqf* NGO	Position
R1	Male	Department of Islamic Law, Kwara State University, Nigeria	Lecturer of *Waqf* Law & Practices
R2	Male	International *Shariah* Research Academy for Islamic Finance, Malaysia	Researcher of *Waqf* Law & Practices
R3	Male	Jaiz Charity & Development Foundation, Nigeria	Executive Director
R4	Male	Gombe State *Waqf* and *Zakat* Foundation, Nigeria	Chairman
R5	Female	Baytul hikma wal ulum, Nigeria	Management

4. Thematic Framework

This study identified two major themes and seven sub-themes from the framework analysis. One of the two themes focuses on the opportunities while the other focuses on the challenges of the *Waqf* application in Nigeria. The seven sub-themes are the research interview questions captured in this study. For this study, Waqf effectiveness is labeled as WE, the study labeled interview questions as Q while data from respondents are labeled as R1, R2, R3, R4 and R5. The analysis and interpretation of the data in this study is represented as N.

4.1 Thematic framework and data analysis

4.1.1 Opportunities and challenges

1. *Demographic information (Name, Institutions, Specialization, Years of Experience in Waqf Management)*

The respondents are professionals, researchers and academicians that are directly involved in *Waqf* projects in Nigeria. The researcher interviewed five respondents with the saturation of information based on the objectives of the study. By implication, there are few qualified *Waqf* experts in Nigeria to provide *Waqf* intervention for about 190 million people whereby over 90% of the population is living below $5.50 per day.

2. What is the name of Waqf institutions you have deal with, and did you perceive any mismanagement in the system of operation?

R3: Jaiz Charity and Development Foundation: about five years.

R4: Chairman, Gombe State *Waqf* and *Zakat* Foundation: In reality, I, do not have more than three to four years of experience.

R5: *Baytul hikma wal Ulum*: 6 years

3. Are you familiar with the responsibility of Waqf Mutawallis and how do you perceive their transparency in managing Waqf donations?

Interviewee R2 highlights the roles of *Mutawalli* in the management of *Waqf* properties. "Firstly, the position of a *Mutawalli* is based on trust. We may want to equate the requirement to be a *Mutawalli* to that of a judge with the need for high level of integrity. Secondly, the goodwill and personality, for example, if you look at the Chairman of *Sokoto* State *Zakat* and *Waqf* Commission, *Mallam* Maidoki, even though the institution is there, everything that is going on is based on his personality that people respect, and they know him to be trustworthy. Thirdly, a *Mutawalli* must have self-restraint in the sense that he is going to be exposed to a lot of properties that will be worth millions of Naira. Fourthly, *Mutawalli* should have some skills in management and administration, especially of humans and property".

These concise highlights suggest that the respondents have significant knowledge of *Waqf* administration and how it has been working in Nigeria. It also shows that the role of *Mutawalli* in the management of *Waqf* properties cannot be overemphasized (according to R2).

4. Do you believe there is a lack of transparency in managing Waqf donations in Nigeria?

All the respondents from the interview suggest that there are challenges of transparency of the *Waqf* institutions in Nigeria except that they differ on the causes of the lack of transparency in *Waqf* institutions. It seems the lack of expertise and trust have triggered transparency challenges in *Waqf* institutions. For instance; according to R1: "The problem of *Waqf* in Nigeria is the expertise in the management and administration of *Waqf* institutions. There is a lack of innovation in the Waqf institutions in Nigeria and the Waqf is not performing to the level that will enable them to actualize the *Maqasid Shariah* of *Waqf* which is poverty alleviation". "Then people have this fear of lack of trust and confidence in the institutions of *Waqf*. Another thing is that the people are not comfortable with the State Government appointing personnel that will manage the *Waqf* institutions".

However, respondents R2, R3 and R4 posit that there is transparency challenge from documentation and data submission to the regulatory body. In this regard, R2 said: "It is a case-by-case basis and this is where the issue of documentation comes in in the areas of the challenging situation in the country, because there is no established system. There is a need to confirm whether *Waqf* established with Corporate Affairs Commission that is expected to submit what is called annual report are complying or not to the rule of transparency".

While respondent R3 said: "*Awqaf* institutions like other non-profit organizations (NPOs), are not insulated from this challenge of transparency while some *Awqaf* has a strong element of transparency as a parameter for good governance. Above all, there is a need for all *Awqaf* institutions in the country to raise their transparency bar above average in the management and administration of *Waqf* donations".

5. Do you believe there is a lack of awareness about Waqf dynamics among Nigerians?

It is interesting to note that all the respondents are unanimous that there is a lack of awareness about *Waqf* dynamics in Nigeria. The respondents submit thus:

R1: "This was also part of my findings. The awareness is not there. So, there is a need to create awareness among the people. Some people don't even believe that *Waqf* is an Islamic Social Finance instrument capable of alleviating poverty because awareness is limited to the traditional *Awqaf* like graveyards and *masajid* (mosque)".

R2: "There is high level of lack of awareness even among the elites. Even some highly-rated Muslim scholars do not pay much-desired attention to *Waqf*. The lack of awareness is because *Waqf* is not a pillar of Islam like *Zakat* which is known to everybody. Some people even ask what *Waqf* is, what it is about and how it can impact the society."

R3: "Based on United Nations data, the population of Nigeria is about 200 million people, slightly above 100 million for Muslims. Over 80% of Muslims in Nigeria are ignorant about *Waqf* as one of the Islamic Social Finance instruments. The few ones who are aware of *Waqf* are suffering from misconception and poor understanding of this important institution".

R4: "There is not even a little bit of high level of awareness".

R5: "The lack of awareness is so much".

6. Have Waqf institutions contributed to the socio-economic and religious development in Nigeria?

All respondents to the interview agreed there are elements of socio-economic and religious impacts of *Waqf* institutions in Nigeria but they differ in the approach and segments of the contributions. For instance, respondent R1 said: "People in Nigeria and anywhere in the Muslim world do *Waqf* but it is unknown to them that they are doing *Waqf*. For example, there are a lot of schools in Nigeria that have been built by people because some people donated land for the school to be built. When you donate land for a school to be built, that land is *Waqf*. The school is also *Waqf* because it is promoting scholarship and knowledge. So, from this perspective, I will say that *Waqf* has contributed to the socio-economic development in Nigeria but it is very meagre."

Also, the respondent R2 said: "This reflects in various segments especially in the areas of provision of water and mosque structures. Some people make a certain amount of money available with some banks requesting to them that the funds be given out as interest-free loans. Some institutions that have been established that are *Waqf*-based. For instance, *Kaduna* orphanage school".

Respondent R3 seemed more expository by mentioning samples of socio-economic and religious contributions of *Waqf* institutions in Nigeria. R3 said: "Few *Awqaf* institutions are contributing to the thematic areas such as health, water, sanitation, education, Muslim cemeteries, mosques, orphanages, economic empowerment and agriculture. For example, since 2016 to date, Jaiz Charity and Development Foundation has established three major cash *Waqf* schemes which we call *Waqfu Nuqud* under corporate *Waqf* model valued at over N1.3 billion, equivalent to about US$3.5 million partly for Jaiz Takaful Insurance Plc. The second corporate *Waqf* of Jaiz foundation is Jaiz Investments and Services Ltd and corporate *Waqf* of Jaiz foundation is Jaiz International Halal certification Ltd."

There are the socio-administrative contributions of *Waqf* to Nigeria. Respondent R3 explained stakeholders' efforts in developing *Waqf* institutions in Nigeria. R3 said: "Some of the practitioners of *Zakat* and *Waqf* in the country, myself inclusive, met to standardize the practice, management and administration of *Waqf*. The Sultan of *Sokoto*, his eminence Alhaji Sa'ad Abubakar, CFR (Commander of the Order of the Federal Republic), gave his blessings, leading to the establishment of the Association of *Zakat* and *Waqf* Operators in Nigeria with the acronym AZAWAN to serve as the Umbrella organization for all *Zakat* and *Awqaf* institutions in the country with a view to setting standards, documentation of the contributions of the various institutions and co-ordinating and synergizing all organizations under AZAWAN in one place." Respondent R4 said: "When it comes to poverty and inequality reduction, I can say there is little contribution in that area. Even in the provision of healthcare, there are a very few clinics established by religious organizations but they are not run as Waqf. They are run sometimes like private clinics and not necessarily *Awqaf*."

Some of the respondents contend that there are elements of unknown *Waqf* contributions in Nigeria. Some of the Muslim institutions and organizations have projects that are not called *Waqf* but operating on the structure and philosophy of *Waqf*. According to R3, R4 and R5, Muslim organizations in Nigeria are engaged in health care provision, free or subsidized education, microcredit facilities and hajj initiative program.

7. What challenges do you believe are facing the administration and management of Awqaf in Nigeria?
The respondents highlighted several challenges facing the development of *Waqf* institutions in Nigeria. The challenges mentioned by the respondents are as follows:

(i) Challenge of knowledge and expertise in *Waqf*

Respondent R2 argued thus: "One of the major challenges is the education and knowledge about *Waqf* among *Waqf* managers and administrators". R3 further stated: "There is the inadequacy of experts and practitioners in this industry, there is a very wide misunderstanding of the concept of *Waqf* and *Waqf* practices, we have lack of awareness about *Waqf* amongst most of the Muslims, there is low patronage of *Waqf* by high net-worth individuals, Muslims, corporate bodies, communities, and Governments alike.

There is the negative impact of colonialism and neo-colonialism. The colonialists met the *Waqf* institutions but they dislocated them, overshadowed them and made them insignificant from that time till date". Respondent R4 opined thus: "One of the important challenges I will mention is the lack of expertise. We do not have experts that have training in *Waqf* management. It is different from lack of awareness."

(ii) Challenges of record-keeping and documentation

Response from R2 is: "Record-keeping is very important and this is related to the issue of documentation. *Waqf* requires that when any *Waqf* is made, the *Waqf* deed should be prepared. However, I don't know how many *Awqaf* have their own *Waqf* deed. This is a major problem because in future if there is no *Waqf* deed, there may be a challenge that if the heirs of the person who made a *Waqf* are not conscious enough, they may deny the *Waqf*".

(iii) The challenges of registration and disclosure

Information from R1 shows thus: "There is a lack of knowledge of *Awqaf* and inadequate research on *Awqaf* up till now. In terms of *Waqf*, there is no National law although, it is recognized by the Nigerian constitution. We have no specific Act, just as we have the CAMA (Companies and Allied Matters Act) regulating businesses and charitable organizations.

Respondent R3 contended as follows: "There is poor documentation of *Awqaf* projects and activities by several *Awqaf* organizations. There is lack of legal framework of *Waqf* in Nigeria. There is this challenge of jurisdiction and constitutional conflicts on *Waqf* matters in the 1999 constitution of the Federal Republic of Nigeria as amended. For example, the *Shariah* Court of Appeal is vested with jurisdiction to adjudicate on appeals on any case concerning *Waqf* as the subject matter. Its jurisdiction is determined in Section 262 subsection 1 while Section 262 subsection 2 and paragraph (c) states that the jurisdiction of the *Shariah* Court of Appeal on Waqf is only applicable where the endower/donor/testator/deceased is a Muslim. So, another conflicting provision of the 1999 constitution as amended is in Section 39 subsection 1 of the Land-use Act of Nigeria". "Also the case of CAMA 2020; that is, the Companies and Allied Matters Act 2020 that subjects all *Awqaf* organizations registered with the CAC, that is Corporate Affairs Commission, a Federal Government Agency, to file their annual returns seems challenging while such *Awqaf* organizations are State-based. In addition to these is the fact that currently in Nigeria, there is no *Shariah* Court registry for *Awqaf* properties. So *Awqaf* land or property are registered at the State High Court Registry."

(iv) The challenge of corruption

Respondents R2 and R3 allude to the challenges of corruption in the operation and management of *Waqf* institutions in Nigeria. In this regard, respondent R2 argued thus: "There is also the challenge of corruption and lack of trust that has become a menace in the country. If you come up now that you want to engage in *Waqf* management, people will begin to suspect that perhaps you want to be defrauding people. Beyond that, there should be an institutional advancement of good image for *Waqf* institutions such that people will not have doubts when it comes to *Waqf*." Respondent R3 noted that there is lack of good Corporate Governance in Waqf in Nigeria. He also opined that trustworthy and honest *Awqaf* managers are absent. The last challenge noted by R3 is the challenge of sustainability of *Awqaf* projects.

(v) Other challenges

Respondents R2 and R3 also suggest the need to address the challenges of mismanagement and lack of cooperation between the public and private authorities. On the other hand, respondent R5 expressed concern about the level of sincerity among the operators of the *Waqf* institutions in Nigeria.

Respondent R2 said: "I also see as a challenge, the existence of a disjointed effort in the management and administration of *Waqf* in the country in the sense that there has not been a close link between the public and private authorities. For instance, I expect that the *Shariah* Court of Appeal across the country especially where they have it in the North should have a *Waqf* registry that will make it possible for those who are engaged in *Waqf* to register their *Waqf*. The *Shariah* Court of Appeal has not realized its role in the advancement of *Waqf*."

Moreover, respondent R3 explained thus: "These are challenges that the *Awqaf* operators and organizations are currently contending with in Nigeria, undue Government interference in the *Awqaf* administration. There is poor investment portfolios of *Awqaf* projects by several *Awqaf* organizations. Some people are still holding rigidly to traditional ways of dealing with *Awqaf*." According to R5, another problem is the lack of sincerity on the part of *Waqf* managers. Respondent R5 mentioned that donors not completely keeping their hands off the donated property even after giving it away as *Waqf* as another challenge. Another problem is lack of sincerity on the part of *Waqf* managers, according to R5.

8. What solution can you proffer towards alleviating the challenges of Waqf development and management in Nigeria?

Considering the significance of government policy in socio-economic development of the society, some respondents suggested the need for effective government policies towards redistribution of wealth in the society. Respondent R1 stated: "Just as I have said, we need a Federal law that will take care of *Awqaf*. This is very easy because the Nigerian 1999 constitution recognizes *Waqf* under the jurisdiction of the *Shariah* Court of Appeal. Thus, Muslims can sponsor a bill at the National Assembly to enact a law on *Waqf* because being a religious-based institution requires a specific law which should be able to convince the Federal Government to enact a law as part of the Federal Government efforts to alleviate poverty from the grassroots. Enacting laws that permit temporary *Waqf* provides an alternative to people who do not have money to give in perpetuity. The law should also allow permanent Waqf just like we have in Common Law, revocable and irrevocable trust".

Respondent R2 suggested means of alleviating challenges of *Waqf* in Nigeria thus: "National Universities Commission should review the University Curriculum to incorporate concepts such as *Awqaf*, its management and administration. It should also make it *Waqf* visible with a view to producing well-informed graduates of *Awqaf* in Nigerian Universities to shape their understanding of *Waqf*."

Practical suggestions

There were practical propositions from different respondents ranging from increase in knowledge sharing and awareness, partnering between public and private entities, and provision of enabling environment for the *Waqf* operators. The first respondent, R1, proposed thus: "The Government should provide tax relief for persons who donate to *Waqf*. This is what is happening in Malaysia. If you pay *Zakat*, you will get tax reduction so long as you have evidence that you have paid *Zakat* to an officially-recognized *Zakat* institution. If you give *Waqf*, you get tax reduction so long as you can provide evidence that you have paid *Waqf* to an officially-recognized *Waqf* institution. By doing this, we are empowering the *Awqaf* institution so that they will be financially resilient."

Respondent R2 said: "Private organizations may establish *Waqf* academies to build the capacity for more Waqf practitioners in Nigeria thereby closing the gap of inadequate Waqf experts. *Awqaf* organizations especially AZAWAN should embark on grassroot enlightenment, advocacy, and public lectures on *Waqf* with a view to creating more awareness about *Waqf* in the country. *Awqaf* organizations also need to make the minds of high net-worth individuals and corporate bodies key into *Awqaf* projects to deepen the provision of social services in the country. All stakeholders in the *Awqaf* industry especially AZAWAN and Muslim Lawyers Association of Nigeria (MULAN) should embark on serious lobbying with members of the National Assembly to review the conflicting provisions of the 1999 constitution of the Federal Republic of Nigeria as amended about *Waqf* as well as make provision for a robust *Waqf* legal framework. *Awqaf* institutions including AZAWAN should work diligently to revive and revitalize *Waqf* system in Nigeria in synergy with Government agencies in the provision of social services to stakeholders".

Administrative suggestions

Some of the respondents proposed the need to promote management culture in *Waqf* institutions, while emphasizing on the need for transparency to enhance the purpose of *Waqf* towards alleviating the challenges of the needy and the poor. Respondent R1 proposed thus: "The personnel working in the administration of *Awqaf* institutions should not be taking a giant share from the proceeds of *Awqaf* to pay their salary. If they do so, then the people will lose trust and confidence in them. This may not be possible unless that *Waqf* is under the State Government so that the State Government will be using the State money to pay the salaries such that the personnel managing the *Waqf* proceeds will not have any reason to use the *Waqf* proceeds for their salaries. Where the *Waqf* belongs to a Muslim community and not under the State Government, it will require the *Waqf* administrator to invest in low-risk businesses so that the *Waqf* can pay their salaries and assist the poor by alleviating their poverty. When the people working on *Awqaf* are able to prove to the public what they have made in profit and what their overhead costs were and what the reserves are, then nobody will nurse any fear. Rather, people will give them more support. What is there is that we must prove to the public that we are transparent. The website should have everything, receipts should be issued to people and donors should be given the permission to see what the *Waqf* bodies are doing."

Respondent R2 suggested as follows: "All *Awqaf* organizations should endeavor to develop the organizational culture of documentation of *Awqaf* projects for efficient and effective database and data storage of *Awqaf*. Successive State Governments especially in the Northern region should be non-partisan on State *Awqaf* institutions to grow the industry and support *Awqaf* managers to deepen the knowledge and experiences on *Waqf* management and administration in the country. That is, experienced investment analysts and risk managers should be brought on board as part of the people that will run *Awqaf* institutions to help grow *Awqaf* projects and investments for profitability and sustainability. Strong corporate governance culture should be entrenched and strengthened to overcome the challenge of bad governance. Last but not the least is that strong ethical codes of practice such as trustworthiness, honesty, transparency, accountability, responsibility, and professionalism should be institutionalized in *Awqaf* organizations in Nigeria".

Knowledge-based suggestion

Respondent R2 proposed a knowledge-based solution thus: "So, even though there is some impact that *Waqf* is making, it is not so direct that people appreciate that what the *Waqf* institutions are doing. This is because they only see it as some form of *Sadaqah* which creates the problem that such projects are not managed as they ought to be managed as *Waqf*. When I was undergoing a field work, I had an encounter that a well that was dug for a mosque had to be filled up when they wanted to expand the mosque and those who donated the well did not feel bad about that. However, if it had been appreciated that the well was *Waqf*, provision would have been made for a replacement of that well. So, this is part of the challenges that even when people do something that is *Waqf*, they do not really appreciate that it is *Waqf* and that makes it difficult for such projects to enjoy the status of *Waqf* and be respected as such". In addition, respondent R4 said: "The greatest suggestion is awareness creation through different means including workshops for stakeholders, sermons, publications, and the media (traditional media and new media). The other solution is producing experts in *Waqf* management. Another is redirecting people's awareness from pure religious *Waqf* to philanthropic *Waqf* related to healthcare, education and so on". Respondent R5 suggested the creation of awareness and enlightenment about the value of *Waqf* as solutions to the challenges facing *Waqf* in Nigeria.

Smart suggestion

Respondent R3 posits that: "*Awqaf* institutions and practitioners should be open-minded and ready to go digital in their operations to take *Awqaf* management to greater heights". In addition, respondent R2 agreed that blockchain technology is one of the best ways to address the issue of transparency.

5. Discussion of Findings

Waqf is an Islamic social financing instrument capable of providing economic empowerment and amenities such as hospital, schools and housing for less privileged in the society. Despite the potential benefits of *Waqf* in the society, responses from this study point to challenges towards achieving higher objectives of *Shariah* in the activities and initiatives of *Waqf* institutions in Nigeria. The information from the interviewed respondents indicates that *Waqf* in Nigeria is facing the challenges of lack of awareness, transparency and corrupt practices in the administration and management of the *Waqf* institutions. By corrupt practices, we mean that fund misappropriation and embezzlement might persist with lack of proper accountability. The respondents all posit applicable and sustainable suggestions towards the realization of the objectives of *Waqf* institutions in Nigeria. This study suggests engaging the government to enact laws that empower the administration and recognition of the *Waqf* institutions towards collection and effective disbursement of the *Waqf* proceeds to beneficiaries. It also proposed practical solution such as providing tax exemptions for donors to *Awqaf* and *Zakat* institutions. Moreover, the interview responses suggest the dire need to increase the knowledge-base of *Waqf* institutions in Nigeria through education, research and publications. One of the respondents opined that modern technology such as blockchain technology be harnessed to combat the problem of lack of transparency.

6. Conclusion

The legality of *Waqf* institutions in Nigeria has an element of reference in the Federal constitution of the nation but requires review because the existing *Waqf* entities still have registration, documentation, recording and disclosure issues. Hence, for *Waqf* institutions to remain relevant in the contemporary society, there is a need to address the lingering challenges of lack of awareness, transparency issues and inadequate expertise in *Waqf* practice in Nigeria. The efficacy of *Waqf* institutions in Nigeria depends on the collaborative efforts between the policymakers and the operators of the institutions.

The interviews with some *Waqf* operators in this study bring to limelight the challenge of knowledge deficit and the need for public and private stakeholders of the *Waqf* institutions to enrich the existing body of knowledge through teaching, research and publications. *Waqf* is a potential Islamic social financing tool that requires urgent attention to encourage the attitudes of donors towards participation in the socio-economic initiatives in Nigeria. However, there are issues that require urgent attention. The knowledge sharing, research, and innovation in the management of *Waqf* in Nigeria needs improvement. It is fair to say that the loopholes in knowledge sharing, awareness and research have contributed to increasing lack of public trust in some of the *Waqf* institutions in Nigeria. This study suggests the need to explore the use of modern technology like blockchain in the collection, recording, investment and distribution of *Waqf* proceeds. Our suggestion for further research is to investigate the factors that provide impetus for individuals to donate to Waqf institutions and projects.

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Determinants of *Zakat* Compliance among Muslim Individuals: A Systematic Literature Review

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Abstract

Zakat, also known as almsgiving, is the fourth pillar of Islam. Extensive literature has reported different factors in influencing *zakat* compliance. This study aims to identify, review and synthesize the determinants of *zakat* compliance among Muslim individuals. The present paper carried out a systematic literature review (SLR) of the related literature. The inclusion criteria were: i) publication date between 2000 and 2020, ii) being an empirical study, iii) written in English, and iv) published in the Scopus or Google Scholar database. Following Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) procedures, 12 eligible empirical studies were included. The review suggests that compliance to pay *zakat* is determined by 1) psychological factors, 2), environmental factors, 3) organizational factors and 4) socio-demographic factors. This study contributes to the literature by consolidating studies on the factors determining *zakat* compliance among Muslim individuals and offers some implications for practitioners in implementing appropriate strategies to increase *zakat* collection.

Keywords: *zakat, compliance, PRISMA, SLR*

1. Introduction

Zakat is the fourth pillar of Islam. The purpose of paying *zakat* is to purify one's wealth as well as to increase faith and devotion to Allah. *Zakat* is compulsory among all adult Muslims who are sane and possess the *nisab* (minimum amount) and *haul* (the minimum period of wealth retention). The importance of paying *zakat* has always been emphasized in the *Qur'an*. For instance, in Surah An-Nur, verse 56, Allah says "Perform prayer, pay *zakat*, and obey the Messenger so that mercy may be shown to you." This verse obviously shows Muslims the instructions of Allah on the obligation of paying *zakat*. *Zakat* is important because it will not only benefit the individuals, but also the recipient and society at large. At the individuals' level, giving from personal wealth diminishes the tendency of greed (Abu Bakar and Abdul Rashid, 2010; Al-Qardawi, 1999). At the society level, *zakat* collection that has been distributed will generate income for the poor and the needy, increasing their purchasing power and at the same time reducing the gap between the rich and the poor.

Zakat collection will be distributed to the eight *zakat* recipients based on the *Shariah* requirement. The Prophet (ﷺ). is reported to have said that *zakat* is distributed to eight (8) categories of people known as *asnaf*. This is in reference to *Surah Al-Taubah*, verse 60, where Allah says, "Alms are for the poor and the needy, those employed to administer (the funds), those whose hearts have been reconciled (to the truth), for those in slavery, those in debt, in the cause of Allah and for the wayfarer; (thus it has been) ordained by Allah, and Allah is full of knowledge and wisdom." Islamic scholars have interpreted this verse as identifying the following eight (8) categories: 1) the poor (*Al-Fuqara*), 2) the needy (*Al-Masakin*), 3) administrators of *zakat* (*Al-'Amilina 'Alayha*), 4) those expected to convert to Islam (*Al-Mu'allafati-Qulubuhum*), 5) those to be free from slavery (*Fir-Riqab*), 6) those in debt (*Al-Gharimin*), 7) those in the cause of Allah (*Fi-Sabilillah*) and 8) the wayfarer, stranded travellers (*Ibnas-Sabil*).

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Zakat can be categorized into *zakat fitrah* and *zakat* on wealth. *Zakat fitrah* is compulsory to be paid by an individual in the month of *Ramadhan*, while zakat on wealth is only paid by the individual when the wealth had fulfilled the *Shariah* requirement. *Zakat* on wealth can be further divided into: 1) *zakat* on employment income which is paid based on the salary received, 2) *zakat* on business which is paid based on the profit received during the year, 3) *zakat* on saving which is paid when savings, fixed deposits, current accounts or unit trust funds fulfilled the *nisab* and *haul* requirements during the year, 4) *zakat* on gold and silver which is paid when both fulfilled the requirement of *nisab* 85 gm for gold and 595 gm for silver, 5) *zakat* on shares which is paid when the money is invested in the business or companies, 6) *zakat* on livestock which is paid on livestock products such as goats, sheep, cows, buffalo and camels, 7) *zakat* on crops which is paid on staple foods such as wheat and paddy, and 8) *zakat* on natural resources that should be paid including *ma'adin*, *rikaz* and *kanz*. *Ma'adin* is the zakat paid for all the minerals that can be extracted from the earth, such as gold and silver, while *kanz* refers to property buried in the earth. The term *rikaz* covers both *ma'adin* and *kanz*. Generally, every property buried in the earth is known as *rikaz* (PPZ-MAIWP, 2020).

Among the categories of *zakat*, *zakat* on wealth is usually given less attention as it has several categories. For instance, in terms of *zakat* on employment income, while payment of *zakat* on employment income through salary deduction has been introduced, the number of *zakat* payers that take up this method of payment is still unsatisfactory. It has been reported that out of 16,000 educators in Kuala Lumpur, Malaysia, only 6,500 pay *zakat* on employment income in monthly salary deductions (Muhammad Nasir, 2020). In Kedah, another state in Malaysia, data showed that only 44 percent of State Education Department staff pays *zakat* on employment income through monthly salary deductions although it is believed that the *zakat* payers pay at *zakat* collection centres (Bernama, 2017). For other types of *zakat* on wealth such as *zakat* on business, less than five percent of publicly listed companies (PLCs) paid *zakat* on business in 2018, while 77 percent of PLCs were categorised as *Shariah*-compliant (Eza, 2019). In the context of *zakat* on savings, Nor Azman and Bidin (2013) reported that only 56 percent of the respondents who were working in the public sector pay *zakat* in the state of Kedah. In addition, Md. Idris (2002) and Bidin et al. (2009) found that while most of the employees paid income tax which is a legal obligation, they did not comply with *zakat* payment which is a religious obligation. Furthermore, it was reported that the total collection of *zakat* funds was still far behind compared to the collection of tax by the Inland Revenue Department (Sapingi et al., 2011).

In terms of studies related to *zakat*, there is a considerable body of research investigating factors determining *zakat* compliance among individual Muslims. Compliance refers to the action of paying *zakat* according to the fatwa and regulation gazette by authorities of *zakat* (Muhamad Sukri et al., 2016). Despite the growing number of studies on this topic, no systematic literature review (SLR) has been conducted on the determinants of *zakat* compliance by Muslim individuals. SLR synthesizes the literature in a systematic, transparent and reproducible manner (Tranfield et al., 2003). Hence, the objective of this study is to identify, review and synthesize the determinants of *zakat* compliance among Muslim individuals. A systematic review can provide useful insights to both academics and practitioners. A systematic review will also assist academics in understanding the factors that determine *zakat* compliance among Muslim individuals which are more highly cited or less cited in the literature, and they can design their study accordingly to ensure there is justification for further research. For practitioners, the findings of this review can help to develop a reliable knowledge base by accumulating knowledge from a range of studies (Tranfield et al., 2003). Therefore, practitioners and managers could accordingly design necessary strategies to tackle practical issues.

The structure of the paper is organized as follows: Section 2 focuses on the methods used to extract and synthesize relevant journal articles from search engines employed to search the relevant articles for the study; in Section 3, characteristics of studies that include descriptive results (such as year of publication, research methods and geographic scope) of this study are presented; Section 4 is a discussion of factors determining compliance of *zakat* organized into themes and discussed individually; Section 5 provides a summary of the study, its contributions, limitations and recommendations for future research studies.

2. Methods

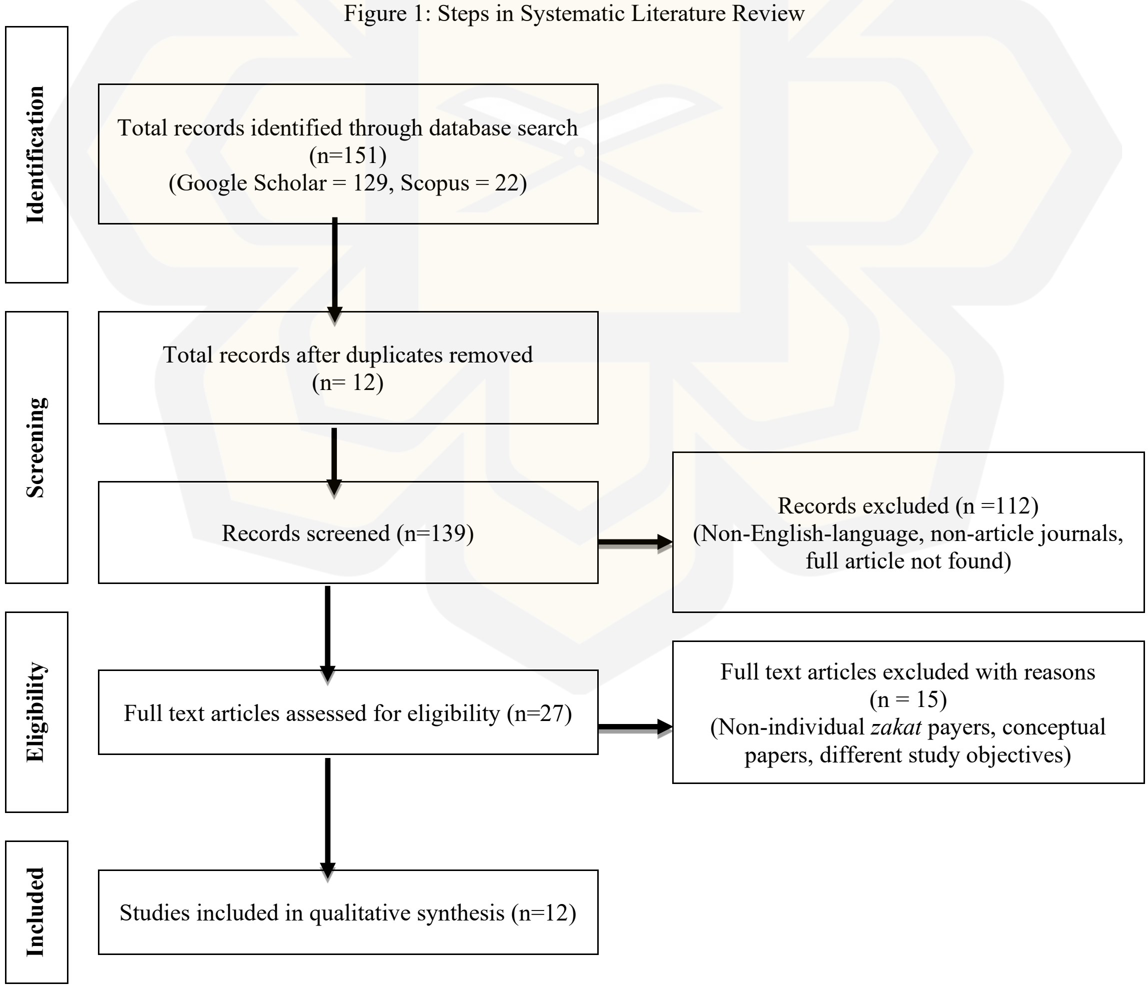
The SLR approach in this current study adopted the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) proposed by Moher et al. (2009). The PRISMA statement was initially designed for researchers in the field of healthcare. Then, it was widely adopted in the field of business and marketing (e.g

Rowley and Keegan, 2020; Floren et al., 2019; Gamble et al., 2016). The PRISMA statement suggests information flow in four phases: identification, screening, eligibility and inclusion. Figure 1 presents the number of studies screened and excluded at different stages of the review.

The objective of this study is to identify, review and synthesize the determinants of *zakat* compliance among Muslim individuals. The first stage of the PRISMA protocol was identification of records. For the purpose of this study, to identify as many eligible studies as possible, all synonyms of “determinants” such as “factor” OR “motives” OR “motivation” OR “antecedent” AND “*zakat*” AND “compliance” OR “intention” were used in the article search. The literature search was conducted utilizing the Scopus and Google Scholar databases. These electronic databases provide coverage for research publications in the related disciplines. The publication year was set between 2000 and 2020. The literature search against the two databases resulted in 151 records. 129 records were identified from the Google Scholar database, and the remaining 22 records were identified from the Scopus database.

In the second stage, 12 records were excluded due to duplication, resulting in 139 records. The records were further screened and only research articles published in English-language, peer-reviewed journals were considered. Non-journal publications such as conference papers, book chapters and theses were eliminated. The screening process resulted in 27 records. In stage three, each of the remaining 27 studies was examined, and after a full-text review, 15 studies were excluded. Only studies related to individual *zakat* payers and empirical studies were considered. Studies related to business *zakat* payers were also excluded since this study focuses on individual Muslim *zakat* payers. A final total of 12 studies were selected and included in qualitative assessment and synthesis.

Figure 1: Steps in Systematic Literature Review



3. Characteristics of Studies

The present section presents descriptive results obtained from the analysis of the 12 papers included in the SLR. The profiles of the studies extracted are presented in Figures 2, 3, 4 and 5. In this study, the publication year was set between 2000 and 2020. As shown in Figure 2, the first study was published in 2015 (Noor Azman and Bidin, 2015), and the remaining 11 studies were published from 2016 onwards. This shows an increasing interest among researchers to investigate on *zakat* specifically on *zakat* payment at the individual level. This trend also is consistent with the findings by Biancone et al. (2020) whereby they found an increasing trend of publications in Islamic finance publications from 2008 to the year 2020.

In terms of the country of publication, as shown in Figure 3, a majority (59%) of the work was conducted in Malaysia, followed by Indonesia (33%). Only one (8%) study was conducted in the Philippines. In Figure 4, *zakat* on employment income (42%) was the most researched type of *zakat*, followed by general/ wealth *zakat* (42%), *zakat* on savings (8%) and *zakat* on gold (8%). As far as the methods of analysis are concerned, as shown in Figure 5, all the studies reviewed were conducted by quantitative methodology. The quantitative studies mainly apply factor analysis, structural equation modeling (SEM) and regression analysis. A number of concepts and theories were used in the analyzed articles, which include the Theory of Reasoned Action (RA), the Theory of Planned Behaviour (TPB) and Extended Theory Planned Behaviour (ETPB).

Figure 2: Distribution of Articles Over Time

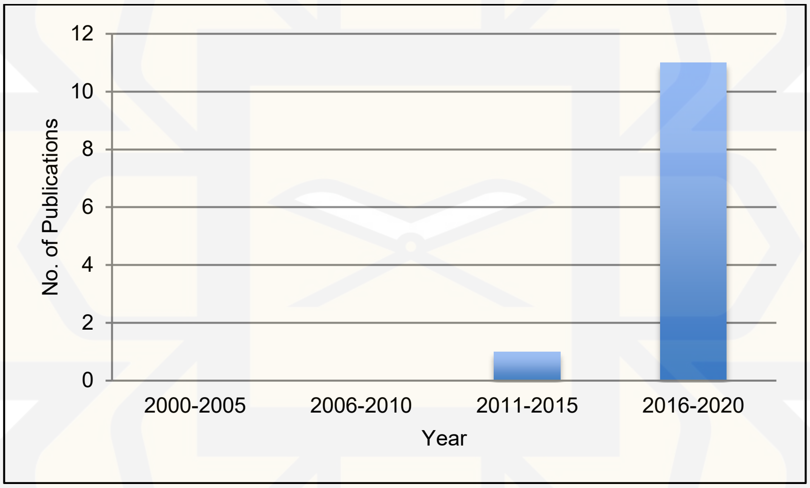


Figure 3: Country of Publication

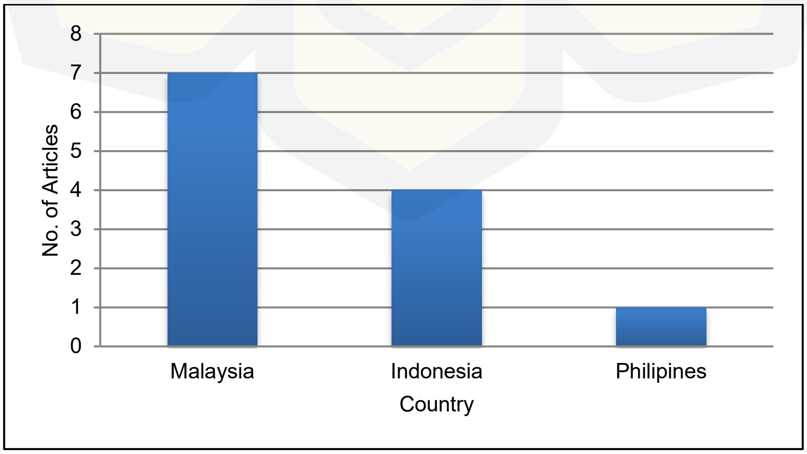


Figure 4: Types of *Zakat* Researched

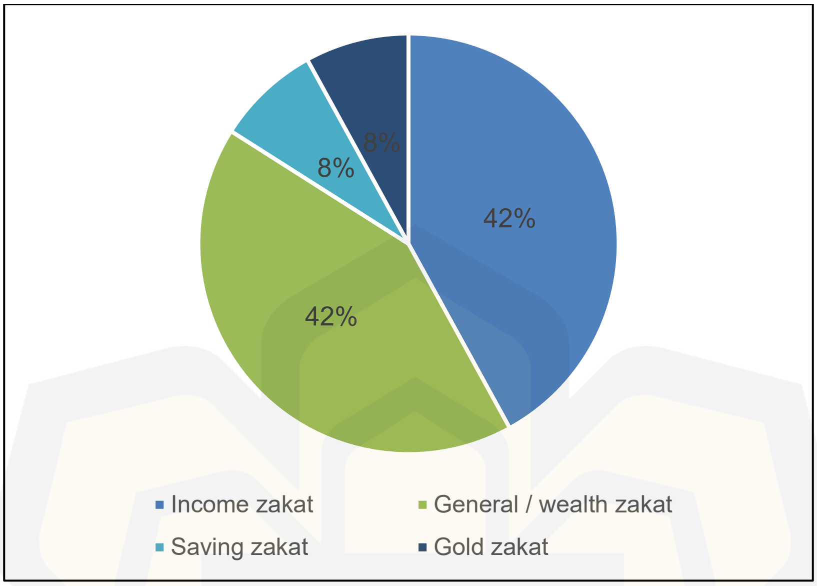
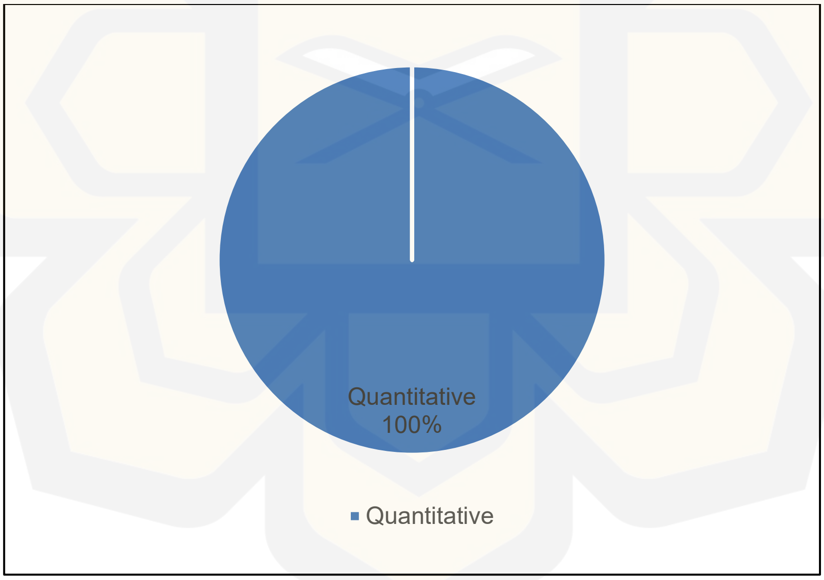


Figure 5: Methodology Used in Studies



4. Results and Discussions

This section discusses the themes and subthemes that explain the determinants of *zakat* compliance among Muslim individuals. As shown in Figure 6, *zakat* compliance can be driven by several factors: 1) psychological factors, 2) environmental factors, 3) organizational factors and 4) socio-demographic factors. The theme mentioned the most is psychological factors. Almost all the articles reviewed have included psychological factors as a determinant of *zakat* compliance. The second-highest factor is related to environmental and organizational factors. Lastly, the least-mentioned factor is socio-demographic that includes gender and level of education. The subsequent subsections discuss the subthemes.

Figure 6: Themes, Subthemes and Associated Keywords

4.1 Psychological factors

Psychological factors represent a major element in determining *zakat* compliance. This theme covers individual psychological and other elements that determine compliance of *zakat*. The review indicates several psychological elements such as i) religiosity, ii) attitude, iii) moral/ethical obligation, iv) knowledge and vi) perceived behavioural control.

4.1.1 Religiosity

A substantial body of literature in *zakat* studies has focused on the role of religiosity and how it influences the intention and motivation of people to pay *zakat* (Abdullah and Sapiei, 2018; Noor Azman and Bidin, 2015; Sheikh Mokhtar et al., 2018). Religiosity can be defined as the extent to which an individual is committed to their religion and its teachings (Johnson et al., 2001) (e.g., "*Qur'anic* teachings are applicable in today's life.") Noor Azman and Bidin (2015) claimed that individual who are highly religious tend to participate in the act of *zakat* compared to individual who have a low level of religiosity. The research explained that religiosity will influence a person's character to perform a good act including paying *zakat*. A similar finding is recorded by Pangestu and Jayanto (2017) whereby a person who has a high level of faith will certainly understand how to act according to Islamic teachings, i.e., paying *zakat*. The findings from these studies are consistent with Floren et al. (2019) who conclude that much consumer behaviour has to do with Islamic beliefs and practices which include the behaviour of paying *zakat*.

4.1.2 Attitude

In investigating *zakat* compliance behaviour, there is general agreement that attitude represents a major factor that has been examined in most of the previous studies (Noor Azman and Bidin, 2015; Sheikh Mokhtar et al., 2018; Othman and Fisol, 2017; Muhamad Sukri et al., 2016; Yusoff and Hanapi, 2016; Andam and Osman, 2019). Attitude refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question (Ajzen, 1991). Attitude comes from the belief of every individual based on the object of the attitude. An individual who has a positive attitude toward performing the behaviour will motivate the person to execute the desired behaviour (e.g., "I consider paying *zakat* on employment income favourable both to the individual payer and society as a whole.") Therefore, *zakat* institution can be predicted from a person's attitude as to whether that person will comply or not in paying *zakat*.

4.1.3 Moral/ethical obligation

Moral or ethical obligation refers to people's personal beliefs about what is morally right and wrong (Othman et al., 2020). Study has shown that perception towards moral obligation is important in predicting compliance, while low moral obligation leads to non-compliance (Braithwaite et al., 2006). Similar to the context of compliance to pay *zakat*, a sense of high ethical or moral obligations plays an important role in influencing an individual to pay *zakat*. Othman and Fisol (2017) found that moral obligation is significantly related to paying zakat on employment income. Another study found that a Muslim who has a positive perception towards ethical obligation has an intrinsic motivation to pay *zakat* because doing so is the ethical thing to do, which would end up helping other Muslims (Othman et al., 2020).

4.1.4 Perceived behavioural control

Some scholars have shown that perceived behavioural control (PBC) (Othman and Nayan, 2019) along with attitude is another psychological factor that is linked to an individual's compliance to pay *zakat*. It is the belief on resources accessibility that enables the person to achieve the desired behaviour (Ajzen, 1991). In paying *zakat*, among the factors considered include whether the person has money to pay and knows how to pay (Hassan et al., 2019).

4.1.5 Knowledge

Knowledge about *zakat* is another important psychological factor that influences individual *zakat* compliance. Knowledge about *zakat* can include a Muslim understanding the basic knowledge about *zakat* such as the types of *zakat*, the *nisab* rate, the type of property that is subjected to *zakat*, the *zakat* calculation method, *zakat* laws and recipients of *zakat*. As regards to the knowledge factor, Muhamad Sukri et al. (2016) found that an individual's knowledge of *zakat* is one of the important factors that increases *zakat* compliance payment. The study demonstrated that the higher a person's knowledge in terms of *zakat*, the higher propensity to pay *zakat*. Therefore, individual knowledge about *zakat* is an important factor that influences individual compliance to pay *zakat*.

In short, religiosity, attitude, moral/ethical obligation, perceived behavioural control and knowledge are psychological factors that positively influence *zakat* compliance among Muslim individuals.

4.2 Environmental factors

Numerous studies have examined the role of environmental factors in determining individual's *zakat* compliance (e.g., Sheikh Mokhtar et al., 2018) as individual will learn from their environment. The environmental factors from the SLR include social influence and law enforcement.

4.2.1 Social influence

The social influence variable has been explored in studies concerning *zakat* compliance behaviour, and the importance of this construct in consumer behaviour is widely recognized. Social influence can include external factors that can influence individuals' decision to pay *zakat*. For instance, reference groups are individuals/groups whose perspective is that an individual considers such as family members, friends or celebrities. In paying *zakat*, Noor Azman and Bidin (2015) found that a reference group is significant in influencing zakat compliance behaviour on savings. A study by Sheikh Mokhtar et al. (2018) further explains that subjective norms that relate to social pressure from surroundings will increase the compliance level and collection for *zakat* institutions.

4.2.2 Law enforcement

In addition to social influence, law enforcement is another environmental factor that determines *zakat* compliance behaviour. Md. Idris (2002) argued that law enforcement is required to control and guarantee that all individuals will act in accordance with the law. Also, it has been acknowledged in the literature that sanctions and reward systems in religious institutions might also influence followers to act in line with accepted rules and laws (Abdullah and Sapiei, 2018). It seems that law enforcement is crucial in ensuring *zakat* compliance behaviour as studies by Md. Idris (2002) and Bidin et al. (2009) found that most employees paid income tax, a legal obligation, but did not pay *zakat*.

4.3 Organizational factors

Another theme that explores factors influencing Muslim individuals' *zakat* compliance is the organizational factors. These factors represent elements on the *zakat* institution level that influence Muslim individuals to pay *zakat*. The factors include perceived corporate credibility, accountability, transparency and promotional exposure by the *zakat* institutions.

4.3.1 Perceived corporate credibility

Perceived corporate credibility explains how far the perceptions of customers toward the ability to execute its promise and sincerity in revealing the truth (Newell and Goldsmith, 2001). In the context of *zakat*, Noor Azman and Bidin (2015) found that perceived corporate credibility significantly influences *zakat* compliance behaviour on *zakat* savings. The authors further explained that *zakat* institutions should be transparent in managing *zakat* collection and distribution whereby the amount of *zakat* collection and distribution should be disclosed to the stakeholders.

4.3.2 Transparency

Transparency practiced by *zakat* institutions will influence individuals' intention to pay *zakat*. Transparency deliberately provides all information which is able to be released legally, either positive or negative, on time, balanced and firmly with the aim to improve the ability of public reasoning and maintain the responsibility of the organization for its actions, policies and practices (Pangestu and Jayanto, 2017). Results from Pangestu and Jayanto (2017) study showed that transparency is built on the freedom of accessing information needed by the community. That is, information that relates to the public interest directly can be obtained by those in need.

4.3.3 Accountability

Other than practicing transparency, *zakat* institutions should be accountable in performing their functions to the stakeholders. Pangestu and Jayanto (2017) defined accountability as the responsibility of management or the recipient of the trust to the giver of the trust on the management of the resources entrusted to him either vertically or horizontally. A study by Pangestu and Jayanto (2017) found that accountability plays a significant role in motivating *zakat* payers to pay *zakat*.

4.3.4 Promotional exposure

Promotional activities such as advertising, promotion, public relations, personal selling and direct marketing conducted by a *zakat* institution can influence Muslim individual's decision to pay *zaka*t. Othman and Nayan (2019) revealed that promotional exposure was among the significant variables influencing intention and compliance behaviour. Through promotional exposures, *zakat* institutions can inform, convince and remind individuals to pay *zakat*.

4.4 Socio-demographic factors

Socio-demographic factors (e.g., gender, education) have also been explored in studies concerning factors determining compliance. For example, with regards to gender, a large body of scientific literature confirms that gender plays an important role in determining consumer behaviour as males and females are traditionally, culturally and socially different (Liao et al., 2015). In the context of *zakat*, a study by Abdullah and Sapiei (2018) found that working females are less compliant to *zakat* obligation compared to their male counterparts, and there is a possibility that working females perceive that *zakat* obligation is only related to the males or head of the household. Another socio-demographic element that influences an individual *zakat* compliance is the individual education level. A study by Sobana et al. (2016) found that the level of education an individual attains is positively related to *zakat* compliance.

5. Conclusion, Limitations and Future Research

This paper presents an SLR of 12 papers that focus on the determinants of *zakat* compliance among Muslim individuals. The review of the literature shows that the determinants of zakat compliance can be categorized into four main themes: 1) psychological factors, 2) environmental factors, 3) organizational factors and 4) socio-demographic factors. All the studies adopted quantitative research design and were published in Malaysia, Indonesia or the Philippines. The main contribution of this study is that it makes the first attempt to provide a more holistic explanation of the determinants of *zakat* compliance. It consolidates the limited and scattered literature, and organizes them into several themes and subthemes. It also summarizes and describes the methods used by existing research and provides guidance for future researchers on choosing the suitable methods for their study.

The study has several limitations. First, in terms of types of publications, only articles were included in the dataset, and books, book chapters and conference papers were excluded. This meant that papers that could potentially have been relevant were excluded from the study. Similarly, only articles published in English were considered for this study. Therefore, inclusion of articles from other languages, such as Malay, may increase the number of determinants of *zakat* compliance. Secondly, this study extracted papers from the Scopus and Google Scholars databases only. Even though these databases provided a wide coverage of the academic literature, the inclusion of other databases in the search of articles could have increased the number of themes and sub-themes identified in this study.

This study also has implications for *zakat* institutions in implementing appropriate strategies in encouraging Muslims to pay *zakat*. For instance, psychological factors such as knowledge and religiosity were found to be important determinants in zakat compliance. Therefore, zakat institutions should play a role in educating the public on the importance of paying *zakat*. Otherwise, this study found that Muslim individuals placed importance on the transparency, accountability, perceived corporate credibility and promotional activities of zakat institutions. Hence, *zakat* institutions should be transparent in managing *zakat* collection and distribution whereby the amount of *zakat* collection and distribution should be disclosed to the stakeholders so that *zakat* payers who perceived the *zakat* institutions positively will encourage them to pay *zakat* because they know how their contribution has been utilized. In addition, the importance of promotional exposure is highlighted in the previous studies. Therefore, *zakat* institutions should make a proper plan and organize marketing activities that include direct marketing, advertising or public relations in order to increase individual *zakat* compliance behaviour.

Future research that aims to identify the determinants of *zakat* compliance can use qualitative methods such as conducting interviews or focus groups. Research that primarily focuses on quantifying the factors that influence individual *zakat* compliance could use a combination of descriptive statistics and correlational analysis such as regression analysis or structural equation modelling, after collecting observational or experimental survey data from *zakat* payers. Lastly, future research could investigate more in-depth the role of law enforcement that could affect *zakat* compliance behaviour.

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A Systematic Literature Review on *Zakat*

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Abstract

Although *zakat* is an extremely studied topic in Islamic Social Finance, a systematic, comprehensive, and diverse review in the domain of zakat is lacking. This paper attempts to conduct a systematic review on the status of *zakat* literature, taking Malaysia as a case study. The article searched on the Scopus database and identified sixty-three (63) related studies. However, only thirty-one (31) studies throughout 2009-2020 met the criteria set for the study. This study examined several aspects of literature review which include research type, research approach and subject area. The outcome of this article is to provide direction for future studies.

Keywords: *zakat, systematic literature review, Scopus, ATLAS.ti, Malaysia*

1. Introduction

Previous literature is essential for the generation of new knowledge. Researchers conduct literature to analyze, interpret and critically evaluate the existing body of knowledge. The process enables them to identify patterns of previous results, comprehend the depth and details of the existing knowledge, and identify gaps for future research (Mohamed Shaffril et al., 2020).

Researchers usually performed the traditional way to conduct literature review, with a broad scope and do not follow a standardized methodology (Brown University Library, n.d.). In contrast to the traditional way of doing the literature review, currently, another alternative is available which is systematic literature review (SLR). According to Lame (2019), SLR is a way of reviewing literature that is transparent and reproducible. Moreover, it adheres to a planned and pre-defined procedure that requires rigorous methods to ensure the results are trustworthy (Munn et al., 2018). It is important to note that this type of review is firstly and frequently used in the healthcare studies. Yet, the SLR can be expanded and utilized on other field of studies (Kraus et al., 2020) since it has many advantages over the traditional literature review (Akobeng, 2005).

In the context of Islamic Social Finance (ISF), research on *zakat* has been popular, particularly in Malaysia. *Zakat* related issues are intensely and continuously debated by researchers year-over-year (Johari et al., 2014) especially with the advancement of ISF (Kuanova et al., 2021). However, not many research articles in *zakat* have claimed the 'systematic research' label so far. To address the scarcity in systematic research of *zakat* literature, this study utilized the Scopus database. This is due to Scopus database being regarded as an important database in academic research and currently the leading indexing database (Potts, 2020).

The objective of this study is to provide a map based on the gaps of previous literature on *zakat*. Thus, to meet the objective of the study, a systematic review of the literature on *zakat* is conducted by addressing three important research questions (RQ); RQ1: What is the frequent research approach used? RQ2: What is the frequent subject area? and RQ3: What is the frequent source title? The findings of this study are significant in providing direction for future research in *zakat*.

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2. Methodology

This study adopts a descriptive analysis based on SLR search on *zakat* for a period of twelve years from 2009 to 2020 from the Scopus database. Following the search, thirty-one (31) articles were gathered. The review focuses specifically on the articles written in *zakat* which is classified into three categories, namely *zakat* management, *zakat* collection and *zakat* distribution. The classifications are made based on the content of the articles. The descriptive analysis of this study will also highlight the general trend of the journal reviewed. The data obtained from the articles will then be coded through ATLAS.ti software (version 8.0) for documentation and analysis process. ATLAS.ti software is commonly used by researchers to uncover and systematically analyze complex phenomena hidden in unstructured data such as in text (Friese, 2021). The software provides tools that let the user locate, code, and annotate findings in primary data material, to weigh and evaluate their importance, and to visualize the often complex relations between them (Payambarpour, 2013).

According to Jayakrishnan et al. (2019), there are six steps in conducting the SLR. It begins with selecting a topic and searching the literature. Next, the argument is developed, then followed by survey and critical review of the literature. Lastly, writing the review. Table 1 below depicts the steps in the SLR process.

Table 1: The Systematic Literature Review Process

Step	Process	Justification
1	Select a topic	The topic for this paper focuses on *zakat* in Malaysia.
2	Search the literature	Various keywords are utilized to compile the articles published in Scopus.
3	Develop the argument	Research questions are designed to be answered by the review.
4	Survey the literature	Literature is surveyed for publication between 2009 and 2020 (twelve [12] years) on *zakat*, Islamic tax, Islamic levy and tithe.
5	Critical review	Excluding and including studies that related to *zakat* based on the research questions.
6	Review writing	Address the knowledge gaps and provide recommendation.

Source: Jayakrishnan et al. (2019)

The review process was initiated in early 2021 which started with the selection of the topic (*zakat*) and identifying the keywords used in the search process. Based on previous studies (Abdul Manan et al., 2011; Abdullah et al., 2015; Abidin et al., 2014; Htay and Salman, 2014; Rahman et al., 2012; Saad and Haniffa, 2014; Wahab and Rahman, 2011; Wahid et al., 2008; Wan Abdullah et al., 2013), keywords related and similar to *zakat* were used, as in Table 2. Abdul Manan et al. (2011), Rahman et al. (2012) and Wahid et al. (2008) used the word tithe in their study of *zakat*, meanwhile Abdullah et al. (2015) and Abidin et al. (2014) coupled *zakat* with the term Islamic tax. On the other hand, Htay and Salman (2014) and Wan Abdullah et al. (2013) defined *zakat* as an Islamic levy in their papers.

Table 2: Keywords and Searching Information Strategy

Database	Search string
Scopus	TITLE-ABS-KEY ("*zakah*" OR "*zakat*") TITLE-ABS-KEY ("Islamic tax") TITLE-ABS-KEY ("Islamic levy") TITLE-ABS-KEY ("tithe")

Then, research questions are designed to guide the research. Next, the literature is surveyed. The exclusion and inclusion are pre-determined. First, the type of literature to be included is only journal articles. Second, the search focused only on English publication. Third, in line with the objective of the study, only studies conducted in Malaysia are included in the review since the purpose of the study is to discover what are the frequent *zakat* research that were conducted in Malaysia. The inclusion and exclusion criteria are detailed in Table 3 and these criteria are used in the process of screening and identifying the relevant journal articles. Only Open Access journals are chosen for the study because it is free to access (McCullough, 2018) and it is easily accessible within Scopus database via the 'Browse Sources' interface (Beatty, 2015; Qureshi et al., 2020)

Table 3: The Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Access	Open Access only	Gold, Hybrid Gold, Bronze, Green
Document type	Article only	Conference paper, book chapter, review, book, conference review, editorial
Publication stage	Final	Article in Press
Country or territory	Only Malaysia	Other countries
Source type	Journal only	Conference proceeding, book, book series, trade journal
Language	English	Non-English
Availability	Available online	Not available
Subject	Related to *zakat*	Not related to *zakat*

Articles that fulfilled the criteria of selection were evaluated and analyzed. Extraction of data was done after going through the abstracts, followed by skimming through the full articles (in-depth) to determine the research approach and subject area of each article.

3. Main Results

Sixty-three (63) articles published between 2009 and 2020 which were related to *zakat* were extracted from the search of the Scopus database. However, only thirty-one (31) articles met the selection criteria of this review. The use of the Preferred Reporting Items for Systematic reviews and Meta-Analyzes (PRISMA) was adapted in this study (Chuah and Thurusamry, 2021; Hazira et al., 2021; Liberati et al., 2009; Moher et al., 2015). PRISMA is a set of components that can be used in systematic review (Preferred Reporting Items for Systematic Reviews and Meta-Analyses, 2020).

Figure 1 shows one of the examples on the search of Scopus database with the inclusion or exclusion criteria. PRISMA diagram in Figure 2 (following page) describes the search process and the selection of the 31 articles based on the set criteria.

Figure 1: Scopus Website with Inclusion and Exclusion Criteria

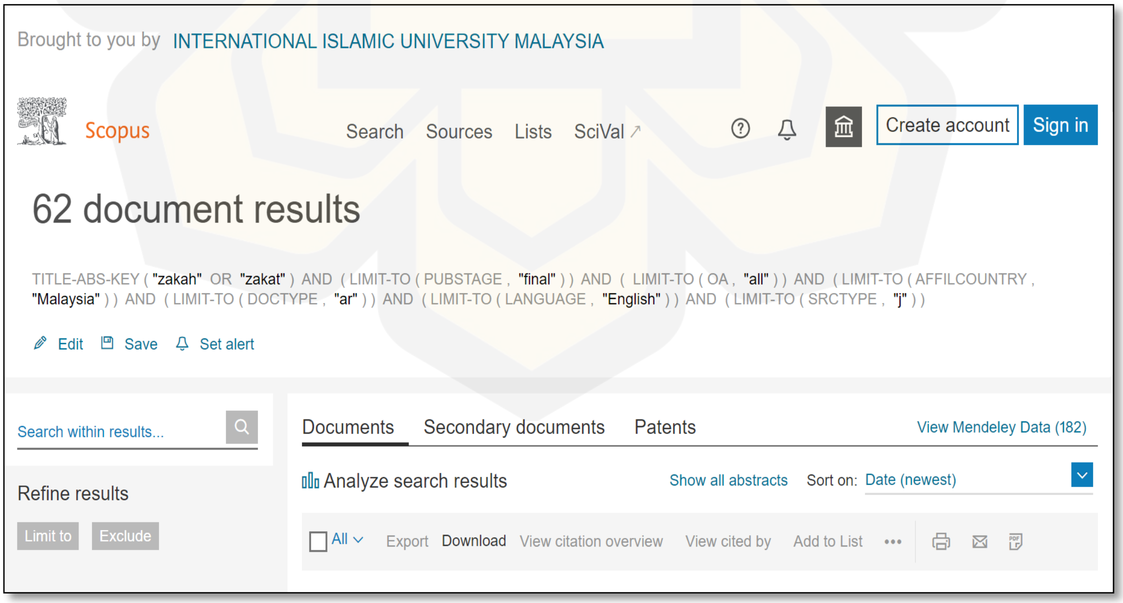
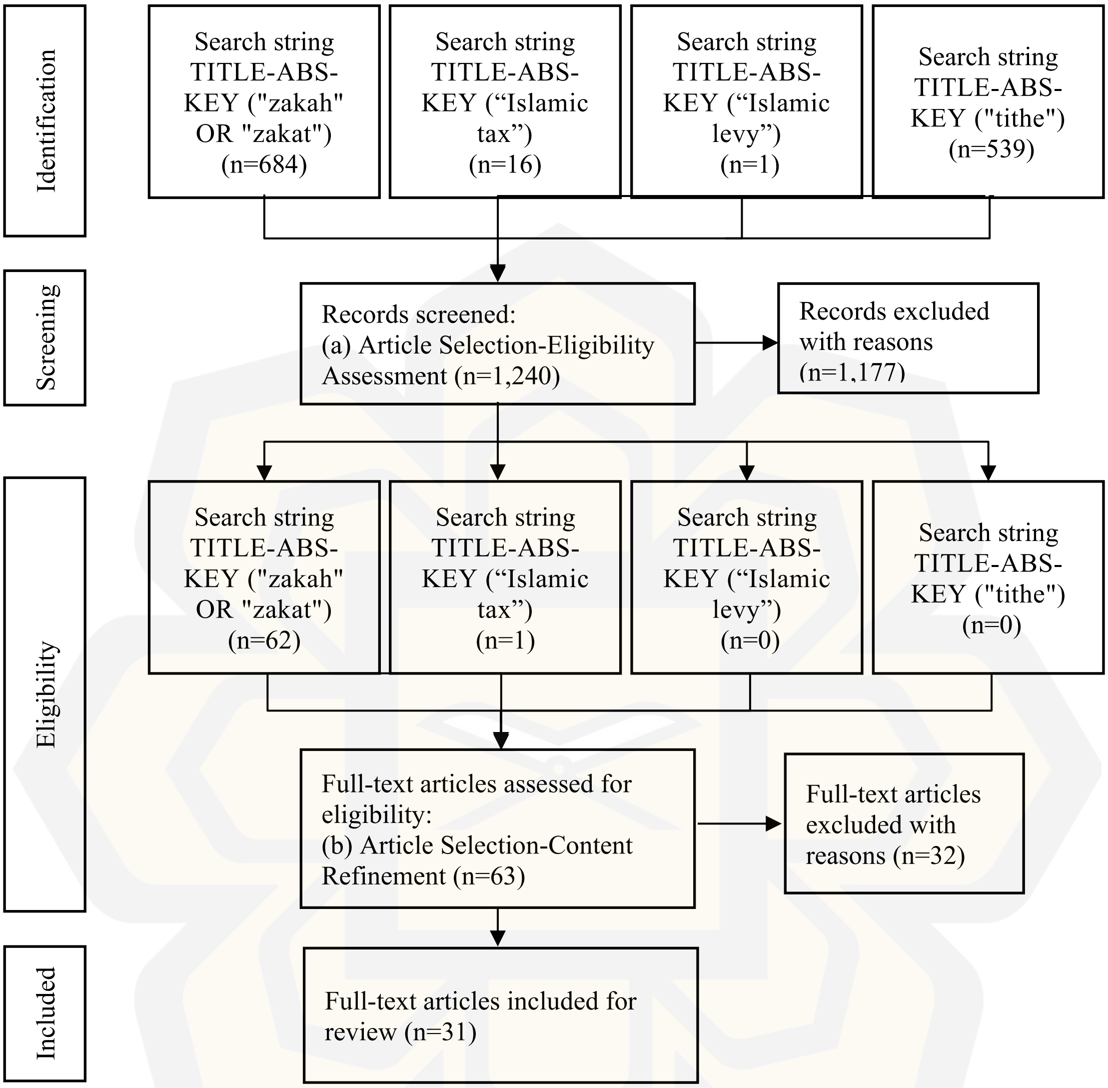


Figure 2: Preferred Reporting Items for Systematic Review and Meta-Analyzes (PRISMA) Diagram



Process adopted from (Preferred Reporting Items for Systematic Reviews and Meta-Analyses, 2020)

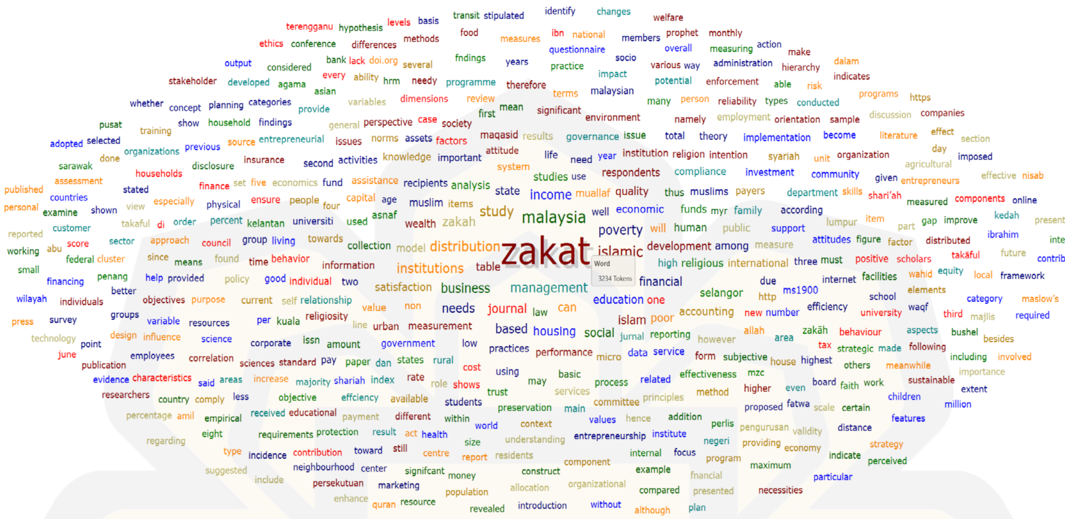
Following the selection process, all the 31 articles were downloaded and organized in ATLAS.ti software (version 8.0). The following Figure 3 shows the interface of ATLAS.ti showing the documents that were used in this study.

Figure 3: List of Documents in ATLAS.ti (version 8.0) Software

ID	Name
D 1	Sarif (2020) - THE ADVANCEMENT OF ZAKAT INSTITUTION IN MALAYSIAN POST ISLAMIC REVIVALISM ERA~
D 2	Adnan (2019) - The potential for implementing microfinancing from the zakat fund in malaysia
D 3	Shaharuddin (2019) - The relationship between impact of zakat distribution and religious practice among...
D 4	Hasan (2019) - A proposed human resource management model for zakat institutions in Malaysia
D 5	Aripin (2019) - Zakat houses design and planning (Quality and standard) from shariah perspective
D 6	Abashah (2018) - The impact of attitude and subjective norms towards zakat compliance behavior in Mala...
D 7	Doktoralina (2018) - Investment of Zakat Fund in Malaysia
D 8	Samargandi (2018) - Can disclosure practices and stakeholder management influence zakat payers' trust?...
D 9	Radzi (2017) - Educational Equity for Malaysian Urban Poor Muslim
D 10	Mikail (2017) - Utilisation of zakāh and waqf fund in micro-takāful models in Malaysia: an exploratory study
D 11	Abd. Wahab (2017) - Towards developing service quality index for zakat institutions
D 12	Mohd Ali (2015) - The effectiveness of Zakat in reducing poverty incident: An analysis in Kelantan, Malaysia
D 13	Abidin (2014) - Evaluating corporate reporting on the internet: The case of zakat institutions in Malaysia~
D 14	Zakaria (2014) - The influence of human needs in the perspective of Maqasid al-Syari'ah on Zakat distributi...
D 15	Hamat (2014) - Sustainable zakat accounting in Malaysia: An analysis
D 16	Said (2014) - Effectiveness of capital assistance programme: Evidence from Malaysia
D 17	Rahman (2014) - The inconsistency of assessing agricultural zakat
D 18	Rom (2012) - Financial protection for the poor in Malaysia: Role of zakah and micro-takaful
D 19	Abd. Wahab (2011) - A framework to analyse the efficiency and governance of zakat institutions
D 20	Mohit (2011) - Social housing programme of Selangor Zakat Board of Malaysia and housing satisfaction
D 21	Bidin (2009) - Predicting compliance intention on zakah on employment income in malaysia: An applicatio...
D 22	Zakaria (2019) - Governance and efficiency of Zakah distributions based on the dire necessities of Maqasid...
D 23	Dahlan Ibrahim (2019) - The Development of an Entrepreneurship Index for Low-Income Households Cen...~
D 24	Raflis (2019) - Assessing Strategic Orientation and Mosques Performance
D 25	Basir (2017) - Malaysian Islamic quality management system MS1900: An implementation steps at Malacca...
D 26	Ries Ahmed (2016) - Zakat and Accounting Valuation Model
D 27	Rahim Khamis (2015) - Does Law Enforcement Influence Compliance Behaviour of Business Zakat among...~
D 28	Johari (2014) - The importance of zakat distribution and urban-rural poverty incidence among Muallaf (ne...
D 29	Zakaria (2014) - Effects of human needs based on the integration of needs as stipulated in maqasid syaria...
D 30	Johari (2014) - Zakat Distribution and Programme for Sustaining Muallaf Belief and
D 31	Idris (2012) - Islamic religiosity measurement and its relationship with business income zakat compliance b...

Figure 4 below shows the Word Cloud or a detailed list of word frequencies generated from the software after all the 31 articles were imported into the software. It shows that the word '*zakat*' is the most frequent word with 3,234 counts, *zakat* being the main subject area of the articles with Malaysia being the second highest hit with 872 words.

Figure 4: Word Cloud Generated from ATLAS.ti (version 8.0) Software



3.1 Number of publications by year

Table 4 presents the distribution of articles by year. It shows that the number of articles published per year varies from 1 to 7, and most articles published in the year 2014 (7) and 2019 (7).

Table 4: Number of Publication by Year

Year of Publication	Number of Articles
2009	1
2011	2
2012	2
2013	1
2014	7
2015	2
2016	1
2017	4
2018	3
2019	7
2020	1
TOTAL	31

3.2 Research types of each publication

Table 5 shows the types of research used for every article published. According to Bougie and Sekaran (2020), there are three commonly used types of research; exploratory, descriptive and causal research. Exploratory research is developed under one of these four conditions: first, not much known about a particular phenomenon, second, existing research results are unclear, third, the domain is highly complex and lastly, there is not enough theory available. Moreover, this type of research often relies on qualitative approach to gather data. Descriptive research attempts to describe the researcher's topic of interest. Both qualitative and quantitative approaches can be used in this type of research. Causal research attempts to test whether one variable causes another variable to change. Table 5 shows descriptive is the most common type of research used while causal research the least.

Table 5: Research Types of Each Publication

Year of Publication	Research Types			Total
	Exploratory	Descriptive	Causal	
2009	0	1	0	1
2011	0	2	0	2
2012	0	1	1	2
2013	0	1	0	1
2014	0	5	2	7
2015	0	1	1	2
2016	0	1	0	1
2017	3	1	0	4
2018	1	0	2	3
2019	3	3	1	7
2020	0	1	0	1
TOTAL	7	17	7	31

3.3 Research approches of each publication

According to Bougie and Sekaran (2020), there are two approaches that can be employed to answer research questions. The approaches can be either qualitative (subjective approach) or quantitative (numerical analysis). On the other hand, a combination of both approaches or mixed methods are employed when the research questions cannot be answered by either approaches alone.

Table 6: Research Approaches of Each Publication

Year of Publication	Research Approaches		Total
	Qualitative	Quantitative	
2009	0	1	1
2011	1	1	2
2012	0	2	2
2013	1	0	1
2014	3	4	7
2015	0	2	2
2016	1	0	1
2017	3	1	4
2018	0	3	3
2019	2	5	7
2020	1	0	1
TOTAL	12	19	31

Table 6 above shows that quantitative is the most frequent approach used in *zakat* study. All articles which employed quantitative approach used a single method, which is questionnaire. However, their number of respondents varies, and ranges from 12 to 800 respondents. On the other hand, for qualitative approach, researchers employed the following methods; library study, content analysis or interview. There was only one article which employed focus group discussion. The study finds that there was not a single article that employed mixed method approach. It can be concluded that this particular approach is not much explored in *zakat* literature.

3.4 Subject area of articles

Table 7 shows the subject are for each written article. According to Noor and Che (2007), *zakat* institutions need to manage *zakat* funds profesionally in accordance to *syarak* (Islamic law) thus subsquently, increase the confidence of *zakat* payers towards the *zakat* institutions. Ultimately, *zakat* will benefit the *asnaf* (*zakat* beneficiaries) and hopefully, eventually they become *zakat* payers. Thus, the subjects of the article in zakat are divided into three; *zakat* management, collection and distribution.

Table 7: Subject Area of Articles

Subject of Article	Years of Publication											Total
	2009	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Management	0	1	0	0	2	0	1	2	1	3	1	11
Collection	1	0	1	1	0	1	0	0	2	0	0	6
Distribution	0	1	1	0	5	1	0	2	0	4	0	14
Total	1	2	2	1	7	2	1	4	3	7	1	31

Table above shows the most frequent subject area in *zakat* was *zakat* distribution since it was the end product of *zakat* management. Relatively however, studies on *zakat* collection was not much explored compared to *zakat* management and distribution.

3.5 Source title of articles

Table 8 shows the source title (journal publication) of each written article. This shows the journals which are most frequent in publishing *zakat* literature available in the Scopus database.

Table 8: Source Title of Articles

Source Title/Journal Publication	Frequency
Jurnal Pengurusan	4
Asian Social Science	3
Global Journal Al-Thaqafah (GJAT)	2
Journal of Islamic Accounting and Business Research	2
ISRA International Journal of Islamic Finance	2
Humanities & Social Sciences Reviews	2

Other source title is not included in the Table since it has only one article each. Future *zakat* researchers may consider pursueing these journal titles since they are the journals which publish *zakat* literature the most.

3.6 List of the most productive contributors

There are total of 106 authors contributed to the 31 articles, published between 2009 and 2020. Based on Table 9, there are 4 authors who published 3 articles and 5 authors who published 2 articles. Future researchers may find other articles written by these authors since they have been writing on *zakat* in source titles in Scopus. On the other hand, other authors only published one article each.

Table 9: List of the Most Productive Contributors

Author	Number of Publication
Ahmad Fahme Mohd Ali	3
Fuadah Johari	3
Maheran Zakaria	3
Muhammad Ridhwan Ab. Aziz	3
Kamil Md Idris	2
Norazlina Abd. Wahab	2
Ram Al Jaffri Saad	2
Zahri Hamat	2
Zainol Bidin	2

4. Conclusion

Although Scopus database is one of the leading databases in Malaysia, *zakat* literature is not that much published in this database. Thus, it is suggested that future researchers to publish their works in the Scopus database so that other researchers can rely on this database for *zakat* literature. In addition, it is also suggested that their works to be made available online via open access so that future researchers can refer to their articles without constraint. Despite addressing the important issues on *zakat* literature, this study has its limitation. The study limits its review to open access articles and articles published only in the Scopus database. Future researchers hence can include other databases and add on articles other than the open access articles.

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The Theory of Product Innovation and Its Application in Islamic Banking

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Abstract

The success of banking institution depends on continuous innovation and improvement of the product offering to increase profitability and marketability. Product innovation is also one of the important aspects for Islamic banking institution, but it requires attention in observing *Shariah* requirements. This article will analyze the principles of innovation and development and its application in Islamic banking product. The analysis is based on qualitative research approach where reference will be made to primary and secondary sources gathered through library research. The discussion will study several literature on the concept of product innovation and analyze the applicable *Shariah* principles in the aspect of innovation of Islamic banking product. From the study, it is concluded that the general concept of product innovation in conventional banking can be applied in the context of Islamic banking. This is because Islamic banking is still within the framework of banking which is also subject to similar commercial aspects but with the requirement to uphold *Shariah* principles. Product innovation in Islamic banking involves the role of creativity and the concept of reform in *Shariah* as well as the approach in the construction of *Shariah* ruling. Therefore, continuous product innovation is significant for Islamic banking institution to remain competitive with other financial institutions in the industry.

Keywords: *product innovation, Islamic banking product, Shariah principle, islah, tajdid*

1. Introduction

Commercial banking institutions like the rest of the financial industry around the world are undergoing drastic changes. With these rapid market changes, most commercial banks are increasingly relying on innovation and development capability to increase profitability and marketability to remain competitive (Stephan, 1995; Dereli, 2015; Nnodim et al., 2020). The success of a product also depends on the strategy and process of innovation and development of the product itself. Therefore, continuous improvement throughout the life cycle of a product can help to extend and build a stronger brand (Murray, 2009; Nugroho and Harjanti, 2020). In the context of product development, building innovation programs and new product development is the most effective strategy for increasing productivity and profitability (Avlonitis, 2001; Dereli, 2015; Nnodim et al., 2020).

Product development and innovation is also an important aspect for Islamic banking. However, the flexibility in Islamic banking products should be understood in the context of *Shariah* principles and frameworks. In this regard, this article will analyze the principles of innovation and development in the context of Islamic banking product. The discussion will refer to several views on the concept of innovation and product development and analyze on the *Shariah* principles underlying the development of Islamic banking products. This refers to the role of creativity and the concept of reform in *Shariah* as well as ethics and approach in the construction of ruling in the activities of *mu'amalat* (Islamic commercial) for the purpose of the development of Islamic banking products.

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2. Literature Review

2.1 Product and service

Product refers to goods, services and so forth produced or offered by an institution (DBP, 2007). According to Junarsin (2010), a service is different from product in some aspects. Service has no physical value so it cannot be stored where the results of a service are not uniformed and the quality depends largely on the employee who delivers the service. Alam (2003) stated that new product refers to either products or services. These two terms are used interchangeably to refer to products offered by banks.

For product in Islamic banking context, it is a banking product that is governed by divine guidance in line with Islamic ethos and values (Ab. Ghani, 1999; Iqbal and Quitia, 2017). It is based on a banking system that offers banking products based on Islamic economic principles in a *Shariah*-compliant banking arena (Ab Majid, 1994). In other words, it is a direct involvement with financial and banking practices based on *Shariah* and *fiqh* (Islamic jurisprudence*)* methods (Ab. Ghani, 1999; Dusuki, 2012). This means that all operations and products offered by banks whether deposit or financing are conducted in accordance with *Shariah* law. Therefore, even though Islamic banking is bound by *Shariah*, it still offers the same products and services as conventional banking offers such as deposits, credit facilities as well as fund transfers which creates banker-customer relationship through multiple *Shariah*-compliant contractual relationships with varying risk characteristics. (Ibrahim, 1997; Abu Bakar et al., 2019). The use of these principles also includes other bank transactions such as letter of guarantee, letter of credit, remittance, foreign exchange, etc. (Haron, 1996).

The main principle in Islamic banking products is profit and loss sharing based on contracts of *Muḍarabah* (profit-loss sharing) or *Musharakah* (partnership). Nevertheless, in practice, the widely used principles are commutative contracts such as *Bai' Bithaman Ajil* (deferred sale), *Murabahah* (sales with mark-up-profit), *Ijarah* (lease) and *Ijarah Thumma al-Bay'* (lease ends with sale) (BIMB, 1989; Lee, 2019). Therefore, if conventional banking products reflects the relationship of lender-borrower based on loan contracts with interest charging, in Islamic banking product, the relationship between bank and customer forms either 'seller-buyer', 'lessor-lessee' or 'financier-entrepreneur' relationship (Wan Ahmad, 2006).

Therefore, the conversion of conventional bank products into *Shariah*-based products not only replaces the contract underlies the product but it also uses mechanism that meets *Shariah* requirements. This is because the establishment of conventional banks is merely to maximize profits and not based on religious principles whereas Islamic banking is not only meant for profit maximation but also emphasized on religious factors guided by Islamic economics which operate based on *fiqh mu'amalat* (Islamic commercial law) in every banking transactions (Borhan, 2000; Abu Bakar et al., 2020).

2.2 Innovation and product development

Innovation refers to something that is newly introduced such as methods, systems, etc. Innovation is also be associated with development. There is also a view that the terms 'product innovation' and 'product development' share similar meaning. This is because both terms lead to similar processes, objectives and results. Development is defined as a process or effort to develop something (DBP, 2007). Alam (2003) stated in his study that most respondents comprising bank officers used the term 'innovation' which refers to 'development of new products or services'. In fact, Avlonitis (2001) states that any form of development and invention of new products, services or processes can be categorized as a form of innovation.

From the literature references and studies, there are various views and categorizations applied to the term product innovation and development. Among the earliest literature refers to studies conducted by Booz et al. (1982). Innovation of product refers to something that is newly introduced in the world and also to the customer. It brings new challenge to the company and adds to the company's existing product line. As for innovation to the existing product, it will provide improvements and changes to the original product. Product development also enables repositioning of strategies and targets for new market segments. Moreover, product development can lead to reduction and cost savings (Booz et al., 1982). However, Junarsin (2010) views that although new product and service can open up for new opportunities, the impact on profit and sales is very moderate. Nonetheless, if a new product differs from various angles and is difficult for other competitors to emulate, then it can lead to competitive advantages.

Kleinschmidt and Cooper (1991) categorized product innovation into three levels of innovation that also shares similar classification as Booz et al. (1982):

a. Highly innovative product includes product that is new to the world as well as the institution itself;
b. Moderate innovation product is new product to the existing product line but are not new to the world;
c. Low innovation product involves modification of existing product, cost reduction and product restructuring to achieve market targets.

Ulrich and Eppinger (2004) classified product innovation and development into four major groups that share similar aspects as Kleinschmidt and Cooper (1991).

a. Product that fundamentally require radical changes from product and production assets, technology and require an attempt to compete with new and unfamiliar markets.
b. New product built on a new platform to form a new a group of products for the existing market.
c. Update on existing product and platform to improve and enhance the level of competition with new product offering.
d. Improvements to existing products by making modification or addition of new feature to remain competitive.

According to Bergfors and Larsson (2009), product innovation leads to a desire-driven development to improve the performance of existing product. The objective of product innovation is either to build new products or improve the existing product and its quality. This view is consistent as set out in the Oslo Manual issued by the Organization for Economic Co-operation and Development (OECD). It states that innovation refers to new product and process or combinations of both which significantly improved the previous product offered to potential consumers (OECD, 2018).

In terms of factors that drive and lead to product innovation, it will be implemented according to market demand and eventually customer-driven (Bergfors and Larsson, 2009). This view is similar to Murray's view where successful innovation is when customer is regarded as the main driver (customer driven). An effective innovation is one that understands what, why and what are the latest customer's needs which will lead to experiences in improving processes and shaping new thing for the future. This is because innovation constantly changes as well as attitude and behavior of customers according to circumstances and times (Murray, 2009).

There are also researchers who consider the aspect of technology as a factor that leads to product innovation. According to Ali, the pioneer in product innovation is the result of technological advancement. However, there are also researchers that include technological reform with other forms of innovation (Ali, 1994). Veryzer (1998) suggested to classify innovation into four forms based on the level of novelty of product innovation that provides unique feature and benefit to the customer. This also includes to what extend technological change are used to create those benefits. The four forms of innovation according to Veryzer are:

a. Continuous innovation i.e., product that is developed based on technology and the original product capabilities.
b. Technologically discontinuous innovation i.e., product that is different from the original and existing technology capabilities.
c. Commercially discontinuous innovation i.e., product that is considered as new by the customer.
d. Technologically and commercially discontinuous innovation i.e., product that involves significant technology advancement that will give new benefit to customer.

In the context of financial industry, Llewellyn states that economic factor is the main factor that led to product innovation. In addition, innovation consist of four forms namely "defensive" which is introduced in response to policies introduced by authorities, "aggressive" i.e., innovation that is performed to meet market conditions with the aim of generating profit, "responsive" i.e., innovation to meet customers' needs; and "protective" that refers to innovation designed to address problems with current product (Llewellyn, 1992). Martivoy and Mention (2016) consider innovation in financial product based on the criteria objective for innovation to be carried out, degree of novelty, driving factors in innovating and objects for development.

Avlonitis (2001) classify the concept of innovation in the context of financial industry to six main forms. It includes something new to the market, something new to the service offered by company, new delivery process, service modification, addition of new service and reorganization of services. Frame and White (2001) explain product innovation in financial sector is represented in several forms such as new product (e.g., flexible profit rate), new service (electronic banking), new production process (credit scoring system*)* and new organizational approach (enhancement in electronic transfer approach).

2.3 Product innovation in the context of Islamic banking

Based on the foregoing literature, although the understanding and explanation refer to the general concept of product innovation and development in banking or finance, it can still be applied in the context of Islamic banking. This is because Islamic banking is still within the framework of banking and financial industry which is also subject to similar commercial aspects. In the context of Islamic banking, Ahmed (2011) explained that the importance of Islamic banking product development involves on how an institution wants to position itself in the future market. Institution that considers and understands current market changes will be more relevant in the future. The institution will place innovation as an important component of its mission and strategic goals. This is because product development is driven by development strategies, future business and market condition. Product development system is determined based on the legal environment, market growth potential and the bank's orientation towards innovation.

Therefore, based on the theory related to product innovation as described earlier, there are three interconnected terms in the subject of this discussion namely product development, financial engineering and innovation. According to Hassan and Lahsasna (2011), all these terms lead to a goal of change and invention. Financial engineering and innovation play an important role for Islamic banking in attracting international investors and industry players globally. Thus, innovation and product development together with financial engineering can build niche market, expand new market and create business opportunities. Moreover, it allows Islamic banking institution to offer more products covering diverse customer segments and options to the market (Ahmed, 2011; Alhasadi and Ilhusadi, 2018).

Creation is understood as the focus of human thought on change to the original creation that has practical used. Creations are usually patented but patenting is not necessarily a creation. Innovation is practical to bring creation to expansion through creative thinking, investment and marketing. Therefore, the fundamental to innovation typically requires creation. Innovation is a change in the thought process in implementing something or it forms something new such as an instrument or tool that gives advantages. It can be understood as a revolution in thinking and a change in the way of thinking, processes and organizations (Hassan and Lahsasna, 2011).

Innovation is a key player in the Islamic economy especially involving the structuring and design of new product categories or increasing productivity in the banking sector. The strong relationship between innovation and financial engineering and product development forms the appropriate instrument that reflects the maturity of Islamic banking products in the market. Suwailem and Hassan are of the view that product development is a broad term covering various techniques and issues when offering new products and modifications of the existing products. Financial engineering specifically refers to product development activities involving financial instruments. In other words, financial engineering involves designing and positioning value for financial products that offer a combination of profit-risk as well as increasing profit to institution. In addition, it involves the application of analytical on financial problems especially involving pricing and structuring of financial instruments such as derivative products (Suwailem and Hassan, 2011).

In comparing between product development and innovation in conventional and Islamic banking, the nature of new product in conventional banking industry is more to product enhancement rather than product development. This is because, in conventional banking, deposit and loan products are based on loan contract as expressly stated in the court case of *Foley v Hill.*[1] From the court case, the bank-customer relationship is merely as borrower and lender. Conventional banking is more likely to embed new feature on the existing product and claim it as a new product. This is true as a new product in the market but from the underlying contract point of view, the product remains the same which is based on the principle of loan contract. However, this cannot be compared in Islamic banking as each new product may have a different set of new *Shariah*-compliant contract. Otherwise, it is also just a product enhancement (Bakar, 2008).

Product enhancement is to improve and add value to the existing product so that it can be more attractive and competitive in the market. It does not change the original concept of the product but rather offer new features

[1] *Foley v Hill* (1848) 2 HL Case 28, 9 ER 1002.

for the product purpose. On the other hand, product development involves the development of product based on the existing product to a new structure and perspective in banking environment. This is because, although the existing product still meets the prescribed regulations, it is unable to meet the requirements of contemporary banking business. In other words, it requires a new *Shariah*-compliant contract to enable it to evolve for Islamic banking institution to continue to engage in financial activities (Bakar, 2008).
Based on the above literature discussion, there are various definitions in classifying innovation and development of new product. Each opinion can lead to the same objective of building a new banking product to meet the needs of customers and eventually derive profit to the banking institution. Therefore, based on the analysis, it can be summarized that apart from generating profit, innovation or development of Islamic banking products is a form of activity or financial engineering to create a new product or instrument involving the following aspects and criteria:

1. It is implemented to meet specific requirements. This includes meeting the needs of customer, authorities, industry, regulation, technology or due to all such factors.
2. It aims to achieve diversification or uniqueness in any aspect covering the structure, mechanisms, operations as well as the selection of underlying *Shariah* contracts without affecting the aspects of risk management. This is because each institution has different level of risk assessment which requires its own risk management plan depending on the features and structure of the product.
3. It requires various disciplines of knowledge covering *Shariah* theory, finance, economics and operational practices to achieve the ultimate goal. The main thing for Islamic banking products is to put ethics as well as *Shariah* principles including the construction of the *Shariah* law in *mu'amalat* (Islamic commercial) as the underlying pillar in the product development process.

The continuous innovation and development of product is important for Islamic banking institution to remain competitive with other financial institutions in the industry. This is pertinent especially for country adopting dual banking system such as in Malaysia that offers both the conventional and Islamic banking products in tandem which also contributes to the overall banking system and economy.

3. *Shariah* Principles in Islamic Banking Product Innovation and Development
In this subtopic, the discussion will examine the *Shariah* principles underlying the development of Islamic banking product. This refers to the role of creativity and the concept of reform (*islah*) in *Shariah* as well as the ethics and *fiqh* approach in the construction of Islamic law for the purpose of developing Islamic banking product.

3.1 The relation of creativity, islah and tajdid in innovation
Islam recognizes human as *khalifah* (ruler) on earth that puts every human being with the creativity and power to administer the world as mandated by Allah. The responsibility as *khalifah* is explained further by the trust offered by Allah and accepted by man to become *khalifah* in the world (Ab. Majid, 1994). Allah states in the *al-Qur'an*:

> *"And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know."* (*al-Baqarah*, 30).

As *a khalifah* to administer the land, *Shariah* provides a comprehensive set of rules as a guide and reference for every aspect of life including commercial transactions such as banking and finance. Although the rule has obstacles in certain aspects, it does not hinder and limit creativity. In fact, there is evidence of studies that show that creativity is optimized from tribulations and obstacles (Suwailem and Hassan, 2011). Silber (1983) noted that barriers and constraints are the main contributors to innovation in finance which also contributes to the improved economic performance and welfare.

Although creativity is encouraged in the framework of Islam, it should not be misused to avoid achieving the objectives set by *Shariah*. If the result of innovation in banking products involved in matters contrary to Islam, it is considered inappropriate and unacceptable. In general, Islam teaches and guides the right way for creativity and innovation. In principle, the human being is always asked to think for the truth and see the development of nature as a lesson. Allah commands the mankind to always think and see the history of mankind as stated in the statement of Allah below:

> *"…Travel through the land and observe how was the end of the criminals (sinners)."* (*al-Naml, 69*).

In the framework of Islamic thought, creativity is understood as the gift of Allah and that power is used in order to carry out the obligations (*taklif*) that are entrusted to mankind. *Taklif* is found in the understanding of *islah* (reformation). Its objectives are contained in the understanding of *ijtihad* (personal judgement) and the method of *ijtihad* is based on the actual understanding. This form of understanding leads to what is considered to be progress according to Islam (Ahmah, 2011).

With knowledge and creativity, it leads to a thought and recommendation to implement reformation (*islah*) and renewal or revival (*tajdid*) on matters that are originally not *Shariah*-compliant. This covers aspects of the modern world such as economics and commercial banking transactions. Islam is a religion of reformation (*islah)* that comes to improve and restore the condition of mankind. In the *al-Qur'an,* there are many commandments to perform *islah* as stated in the statement of Allah below:

> *"O children of Adam, if there come to you messengers from among you relating to you My verses, then whoever fears Allah and reforms - there will be no fear concerning them, nor will they grieve*." (*al-A'araf*, 35)

> *"… So fear Allah and amend that which is between you and obey Allah and His Messenger, if you should be believers." (al-Anfal*, 1)

Those who perform *islah* will be rewarded by Allah as mentioned in *al-A'araf*, 170. In addition, as long as there are people who has the effort to perform *islah* to improve their life, Allah will not destroy the group as stated in *al-Hud*, 117. This shows the importance of continuous efforts to ensure the well-being of the community.

> *"But those who hold fast to the Book and establish prayer - indeed, We will not allow to be lost the reward of the reformers."* (*al-A'araf*, 170)

> *"And your Lord would not have destroyed the cities unjustly while their people were reformers."* (*al-Hud*, 117)

The understanding *of islah* is closely related to the understanding of *tajdid* which is often described in the context of the current debate as renewal (or revival). These two understandings are inseparable i.e., not all reforms are valid and applicable. Only reforms that bring good to the public *(maslahah)* are acceptable and this means that a revivalist (*mujaddid*) must also at the same time be a reformer (*muslih*) (Ahmah, 2011).

Thus, to ensure that there is no end and retention of the Islamic law, the scholars have outlined *Usul al-Fiqh* (principles of *fiqh*) as well as the *fiqh* maxim so that each issue surrounding humankind can be resolved systematically. Their efforts are an interpretation of *fiqh* which is in fact part of the demands of *tajdid*. All that can only be done with a hard effort in understanding the fact of religion and wisdom contained in it which is considered as *ijtihad*.

Islah and *tajdid* is an effort to organize the good thus eliminates the damage to mankind, both for the life in the world and the hereafter. The goal to achieve by this effort is called *maslahah* (good) and the one that must be avoided or eliminated is *mafsadah* (harm) (Ahmad, 2011). *Tajdid* in religion does not mean to replace Islam with another religion or change it. Religious reform means reforming based on any new problems that arise by applying the correct *Shariah* ruling of the problem. Therefore, reform does not mean improving any verse from *al-Qur'an* or *Hadith.*

Based on the discussion, in the context of innovation and development of Islamic banking product, the command to make reform is the result of creativity and the role of knowledge to drive innovative thinking. More precisely, the process of blending knowledge and creativity will produce new concepts and approaches to explore new innovative solutions in accordance with *Shariah*. For that reason, the process of innovation of Islamic banking product requires diverse expertise and creativity to form a combination of ideas that can produce the desired reforms and changes. Innovation, Syariah expertise and modern contemporary knowledge in financial engineering will provide greater balance between creativity and compliance with standard norms in *Shariah*.

3.2 Ethics and principles of Shariah in mu'amalat

In Islam, it is not sufficient for Muslims to obey the five pillars of Islam[2] alone as every Muslim must also comply with the Islamic code of ethics. Therefore, every business and transaction must be based on Islamic faith and *halal* matters. Every Muslim should differentiate between ethical matters which are *halal* or *haram* and unethical which is fair and unfair as well as good and bad intentions. In Islam, ethic is not only limited to business practice and daily transaction. In Islam, ethic is divided into two dimensions, firstly ethic to Allah. Every Muslim should believe in Allah who needs to be worshipped. Second is ethic to other parties. Muslim should ensure ethical relationship with other parties (Abuznaid, 2009; Laldin, 2020).

Islamic ethic is based on rational method and revelation (*wahyu*). Revelation provides truth while rational leads to an understanding of belief. Therefore, Islamic ethic is based on *tauhid* (unification or oneness of Allah) which shows the unique relationship between Allah and man, among human and human with the environment (Abuznaid, 2009). Islam emphasizes the ethical rules as outlined in the *al-Qur'an*, *Sunnah* and *Ijma'* as the main source of law. This rule serves as a guide and code of Islamic ethic relating to daily life which includes in *mu'amalat*.

There are a number of ethical and rules in *mu'amalat* without it can cause contracts to be considered void. In terms of ethic in the context of banking, although in Islam, the term bank does not exist, but this does not mean that banking institution is not recognized in Islam. The principle is not new because it has been explained in general in the *al-Qur'an*[3] and *Hadith* more than 1400 years ago through the ban of *riba* (interest) (Abdul Ghani, 1997).

Among the other Islamic principle to be adhered to are prohibition of any form of *gharar (uncertainty), maysir (gambling)*, focus on *halal* activities and commodities and upholding the concept of justice. In addition, there is also view that outlines seven main principles and concepts of Islamic banking system which are Allah as the absolute owner, man as *khalifah,* profit sharing, elimination of *riba,* integration of moral values, being positive towards the economy and paying *zakat* (Abdul Kader, 2001).

Islam has provided a general guide regarding permissible transaction although it is not specific to the Islamic banking operation and practice. With the prohibition of *riba,* it initiates the idea to enable Islamic banking to grow over time to bring reforms in more dynamic and structured banking products. Islam prohibits all forms of *riba* because it involves elements of exploitation of wealth which can lead to economic instability (Haron et al., 2013; Gani, 2020). In the *al-Qur'an*, Allah says:

> *"O you who have believed, fear Allah and give up what remains [due to you] of interest, if you should be believers."* (*al-Baqarah*, 278).

Besides that, another important principle that governs economic activity is justice where *mu`amalat* transaction must be fair and equitable. In the *al-Qur'an*, Allah says:

> *"O you who have believed, be persistently standing firm for Allah, witnesses in justice, and do not let the hatred of a people prevent you from being just. Be just; that is nearer to righteousness. And fear Allah; indeed, Allah is acquainted with what you do."* (*al-Maidah*, 8).

In addition, Islam also emphasizes specific regulations in the activities *of mu'amalat*. There are many verses

[2] The declaration of faith (*shahada*), prayer (*salah*), alms-giving (*zakat*), fasting (*sawm*) and pilgrimage (*hajj*).
[3] See the ban of *riba* in *al-Rum*, 39, *al-Nisa'*, 160-161, *al-'Imran*, 130, and *al-Baqarah*, 275-281.

in the *al-Qur'an* that prohibit taking property wrongfully and illegally. Allah states in the *al-Qur'an*:

> *"Believers! Do not devour one another's possessions wrongfully; rather than that, let there be trading by mutual consent. You shall not kill yourselves. Surely Allah is ever compassionate to you."* (*al-Nisa'*, 29)

Islam also underlines the importance of fulfilling and complying with contractual agreements. Islam teaches the principles of truth, integrity and trust in every transaction. There is a statement of Allah in the *al-Qur'an* as stated below which emphasizes the moral obligation to fulfill every agreement in the contract.

> *"O you who have believed, fulfill [all] contracts."* (*al-Ma`idah*, 1)

Based on the above deliberation, the principle of justice involves the concept of rights, equality, balance and simplicity. It involves the right (*huquq*) to enjoy equal opportunities and not to exploit the rights of other parties. At the macro level, the goal is to achieve social justice. The Islamic banking principles aim to achieve fairness in the economy through the distribution of wealth and efficient use of resources including meeting the basic needs of society and social development. At the micro level, the principle of justice involves individual transactions. The requirements of economic transactions require a balance of rights and opportunities and cannot be carried out without agreement with the contracting parties. Therefore, unfair activities and transactions and exploitation are not allowed (Laldin and Furqani, 2013).

On that basis, there are many views and discussions that stress that Islamic banking should involve the social aspects as the main objective and not focus on maximizing profit. Moreover, the selection of *Shariah* contract plays a role in highlighting the social characteristics and values found in a product. Although the above discussions demonstrate the emphasis of *Shariah* principles on justice, social values and so on, it does not mean that Islamic banking does not meet the requirements set by *Shariah* simply because it puts profit as one of its goals. It should be viewed from holistic perspective including from the aspects of policies and regulations made by authorities based on the principle of *Siyasah al-Syar'iyyah* (i.e., rules related to policies and approaches taken to manage and organize the national policy to meet *Shariah* requirements) which also emphasizes the need to safeguard the interest of consumers, society and economy. Furthermore, even the bank's interest should also be taken into account in order to avoid exploitation and invite "moral hazard" from customer if the bank acts as charitable organization. Therefore, every regulation that needs to be complied by Islamic banking institution should has already covered all those aspects to ensure innovation and product development achieves its objectives and safeguards the interests of all parties. The question now is whether the regulations drafted and issued by regulator really reflect the principles of *Shariah* and several Islamic banking models based on views from Islamic economist. Perhaps future research can be undertaken to investigate this matter.

3.3 Constructing hukm (ruling) in mu`amalat matters

In the context of constructing *hukm* in *mu'amalat,* generally the concept of *mu'amalat* is broadly encompassed the question of family, criminal, judicial, inheritance, commercial and government. That is why Islamic banking transaction falls under the category of *mu'amalat al-maliyyah* (commercial dealing). In order to determine the ruling in that context, it is different from *'ibadah (worship). 'Ibadah* is a form of human relationship with Allah while *mu'amalat* refers to human relationships including contracts or transactions with each other. Therefore, any form of *'ibadah* must has its own *dalil* (authentic reasoning) on its sanctioning while *mu'amalat* is generally acceptable unless there is specific *dalil* that prohibits it (Che Abdullah, 2006).

This principle is based on the view that economic interaction is aimed at achieving human desires and choices. From the economic context, this principle is the basis for innovation. It allows imagination and creativity as long as it does not bring more harm than good. In product innovation, as long as there is no clear prohibition, it is not necessary to prove its permissibility as this is the general rule imposed by *Shariah* (Suwailem and Hassan, 2011). Therefore, if there is a new view in the problem of *mu'amalat* and Syariah does not bring any common or specific *dalil* which prohibits it, then the ruling of the matter remains permissible. This is also in accordance with the following Islamic legal maxim:

> *"The origin of the law in mu'amalat is permissible unless there is evidence that prohibits it."* (al-Shafi`i, al-Um).

In addition, in carrying out any transaction, each party in a contract is free to place any conditions as long as it complies with *Shariah* requirement. This is in accordance with the statement of Allah and the Islamic legal maxim which states:

> *"O you who have believed, fulfill [all] contracts."* (*al-Ma`idah*, 1).

> *"The original ruling in the contract is that both the contracting parties agree, and the effect of the contract is based on the rights and responsibilities they have agreed to in the contract"* (al-Zarqa', 1989).

In addition, the aspects in *mu'amalat* are among the things that rapidly change continuously based on the change of place and time. Allah does not prescribe the detailed ruling in *mu`amalat* context. Allah only provides the general principles which cover various aspects to make room for reform and modernization efforts, provided that it does not lead to things that are prohibited by *Shariah*. The system of *mu'amalat* is always ready to accept changes in accordance with the transition of life as well as the cultural reality *('urf)* provided that it is still within the scope of *Shariah.*

However, in order to innovate and develop *Shariah*-compliant banking product and instrument, it is not only necessary to adopt the classical transactions such as *Mudarabah, Musharakah* and so on. It involves the development and innovation of a completely new form of transaction based on the current needs of market and customer without violating *Shariah*-prescribed principles. Therefore, Islam sets out a number of fundamentals and important sources to interpret every ruling to reflect the modern financial transaction (Che Abdullah, 2006).

3.4 Source of mu`amalat ruling

The approach in constructing *hukm* (ruling) in *mu`amalat* particularly in banking aspect must refer to but not limited to the sources of *Shariah* and *manhaj* (methodology). The main sources used as references are based on any rulings contained in the *al-Qur'an*, *Hadith* and *Ijma'* (scholars' consensus). Apart from these main sources, the fundamental thing that derives the approach of each ruling is to meet the objectives and rationale of *Shariah* or referred to as *Maqasid Syari'ah* (objectives of *Shariah*). A comprehensive and thorough assessment of particular issues is aimed at safeguarding the public interest in all aspects of life. *Maqasid Shariah* is to promote the well-being of all human beings including preserving religion (*din*), life (*nafs*), intellect ('*aql*), descendants (*nasl*) and property (*mal*). Therefore, in the context of Islamic banking, the products offered should give priority to preserving these five components in order to meet the needs of the public interest.

Another applicable principle is based on analogies (*Qiyas)* which provides the space for scholars and practitioners to apply the laws contained in the *al-Qur'an* and *Hadith* as well as *Ijma'* to new cases or issues by applying the principle of *ratio decidendi* (*'illah*) for the original case to the new case because both have the same cause. Besides the above principles, there are also techniques and other secondary sources to be considered such as *maslahah, istihsan, istishab, dhari'ah and 'urf.* These techniques and methodologies have played great role in the past and will continue to make significant contributions in modern and future commercial innovation (Bakar, 2008).

In terms of the administration and policy of a country to safeguard the interests of society and the country, it depends on understanding and approach in the context of *Siyasah al-Syar'iyyah*. Matters involving economic management or known as *Siyasah al-Syar'iyyah al-Iqtisadiyyah* are part of *Siyasah al-Syar'iyyah* branch. It includes and based on the same principle of *maslahah* (public interest) which is the responsibility of each leader. This concept is important especially for regulator and authorities to regulate every transaction, financial and economic activity of a country. This includes building a legal framework and enforcing comprehensive regulatory and governance oversight based on continuous policies issuance.

Among other approaches that should be considered is reference to *fatwa* (ruling made by jurist) specific to particular *mazhab* (school of thought) or jurists which are contemporary in nature. The purpose of referring to this fatwa is to obtain justification and authority to strengthen the permissibility of a product which can be implemented in modern Islamic banking. However, point to note that it is not necessary to adopt conservative and safe approach by accepting stringent *fatwa* only. The reason is because the ruling in *mu'amalat* is *murunah* (flexible) because the majority of rulings are related to *maslahah* (public interest) and when there are changes in public interest, then the ruling will also change. This is very significant because in the financial and banking aspects, the changes and innovations in this sector are very rapid and increasingly complicated (Bakar, 2008).

Based on the above discussions, each application of principles and sources used and considered by the jurists will form *Shariah* rules which have been arranged and categorized according to the topic of the problem as a result of the interpretation of the jurist. The interpretation process is referred to as *ijtihad* (interpretation by jurist in solving issue). *Ijtihad* in *mu'amalat* is not an easy thing to do (Che Abdullah, 2006). By only observing the transaction or structure of modern banking product and then compared to the ruling found in the classical book is still not worth saying *ijtihad*. The reason is because the ruling produced in the past is the result of analysis and research that was done in view of the needs of that time. Although the process of *ijtihad* is difficult, it does not deny the importance of *ijtihad* to be performed today. In the current context of Islamic banking, the Islamic banking institution must appoint *Shariah* scholars to enable the *ijtihad* process to be carried out. In conducting *ijtihad* based on all the considerations and main sources of *Shariah* as described above, the scholar should also apply certain *manhaj* (methodologies) such as *ta'wil* (contextual *meaning)*, *istiqra'* (induction) or *talfiq* (integration).

4. Conclusion

Based on the discussion in this paper, innovation and development of banking product is very important aspects to ensure the continuity of a banking institution including Islamic banking. Products that constantly innovate according to current trends and the needs of society can facilitate not only in terms of generating profit but also to meet social value to the society and the economy of the country in general. Islamic banking also needs to innovate to ensure the continuity of product development and at the same time complies with *Shariah* requirements. In general, the concept of product innovation aims to build a new product to meet the needs of its customers and maximize profit for the institution. For Islamic banking products it also shares the same objective, but the innovation of Islamic banking products not only involves various disciplines covering financial and economic theory to ensure the productivity and its development in the market. The main aspect that sets it apart is that each innovation must meet *Shariah* requirements and at the same time in line with the needs of the market in view of the transformation in technology and lifestyle.

As stated earlier, the main principle in *mu'amalat* transaction is that any form of transaction is permissible unless there is clear evidence that prohibits it. In the context of constructing *Shariah* ruling and innovation of modern Islamic banking product, it is very unwelcome if Islamic banking practitioners including *Shariah* scholars and regulators only focus in seeking *Shariah* ruling that allows particular banking product or instrument. Innovation and developing Islamic banking products are essential as long as they meet *Shariah*-prescribed principles and are evaluated by *Shariah* scholars based on authoritative sources and references in the construction of ruling.

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How Middle-Low Income Muslim Group Financially Reacts in Pandemic Crisis

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Abstract

The purpose of this study is to determine factors constituting financial behavior of middle - low income group living in the sub-urbs area in Indonesia during a pandemic. This paper employs Structural Equation Modeling Partial Least Square (SEM-PLS), with a selection of 150 respondents that meet the criteria, based on: jobs, income, and house location (purposive sampling). The findings indicate that Islamic financial literacy, locus of control, and attitudes affect positively and significantly the financial behavior of this segment. While locus of control serves the highest factor, it is pertinent to emphasize the findings that Islamic financial literacy shows the lowest value than other variables. This situation has a real implication, essentially for policymakers and religious scholars, to create a continuous program targeting on improvements of Islamic financial literacy in general aiming on building a responsible financial behavior for middle-low income Muslim groups particularly during the pandemic crisis.

Keywords: *financial behavior, financial literacy, financial attitude, locus of control*

1. Introduction

A responsible behavior is the key factor to improve prosperity (Mudzingiri et al., 2018). A better and more responsible financial management is pivotal to climb up income ladder, otherwise poor behavior causes difficulties thus tend to force a decline in the welfare status. It is often observed that poor people make poor decision in financial management (Moga Dass and Fazli Sabri, 2017; Malik et al., 2020). The poor decision is indicated by poor cash management, heavily indebted, or if this segment possessed fixed assets –then he/she will attempt to liquidate or put it as collateral in the financial institutions or money lenders. Poor financial behavior is a common gate to a vicious debt trap, particularly during the period of pandemic like today.

Plethora of studies indicated that there are at least three factors influencing one's financial decision. They are; financial literacy, financial attitude, and locus of control. First is financial literacy. It is said that financial literacy or illiteracy has a serious implication on the decision to impart a responsible or ineffective financial behavior (Allgood and Walstad, 2012; Strömbäck et al., 2017; Widyastuti et al., 2020). Low financial literacy would result in a perilous financial decision and ultimately lead to a debt trap and poverty. A study by Indonesian Financial Service Authority (OJK) shows that financial literacy is still low among population in Indonesia (OJK, 2019), thus indicating a relationship between financial literacy and financial behavioral problem in a developing country like Indonesia.

The second factor influencing behavior is financial attitude. Financial attitude relates to one's inclination towards a certain issue based on moral, culture, and personal opinion. By default, poor financial attitude i.e., negligence on financial management, would result in poor financial decision, or event led to a debt trap. The third factors affecting behavior is locus of control, that describes internal motivation and peer-reference influence. Middle-low income Muslim group living in the suburb area tend to see their neighbors as the valid source of reference (Bohnet et al., 2005). This segment would likely to be provoked by consumptive motives

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and consider debt trap as common. The situation is now worsened due to pandemic crisis.

In a suburb area of West Hadimulyo, Metro City, province of Lampung, Sumatera, Indonesia, based on our pre-survey, the majority of households are in debt today. There are about 128 of 250 households currently in debt with financial institutions and/or moneylenders. By profession, they are blue collar workers at traditional market with income less than 140 US Dollar (IDR 2.000.000) per month. As their income do not suffice the living costs, other source of living is from financial institutions and loan sharks. The majority of the people have bad credit records at bank and other microfinance institutions, thus letting creditors legally seize their collateralized assets. This is essentially in contrast with study of the World Bank (2016) that shows relationship between financial inclusion and literacy but excluding variables like asset-management behavior as important aspect. In developing nation where the issue of financial inclusion is continuously under a spotlight, the government and policy makers must also pay attention to build a more responsible financial management behavior to the less-able segment.

It is important to understand how individuals decide upon his/her financial strategies, especially during a hardship like today. Therefore, it highlights the significance to understand the factors that affecting behavior of middle-low income groups in a developing nation. Understanding these factors will be crucial at least in two-folds. First, as the government prepare for an economic restart in the post-pandemic era, the government must first consider the debt trap effect due to the pandemic crisis. Based on our pre-survey, most of the middle-low income groups are able to survive due to credits and loans from money lenders. While servicing interest-debt potentially diminishes future consumption, an economic restart could not spark, or at least is less effective, if the middle-low income could not consume. Secondly, shaping people's behavior to become more conscious and responsible is a key gateway to prosperity. Lastly, in an event of pandemic, government, religious scholars, and society leaders must closely work together to maintain financially rationale community. Otherwise, it would be hard to rebuild the economy once the pandemic is under controlled.

At this junction, a better understanding on the phenomena on how middle-low income Muslim group make up their financial decision is as important as to show measures for assisting this segment regain control of their financial situation aftermath the crisis. Poverty is a socio-economic phenomenon of many developing countries (Mao et al., 2015) thus understanding factors affecting financial behavior are strategical keys to improve prosperity for all people.

2. Literature Review

Conceptually, financial behavior is related to human activities that relates to money management (Xiao, 2015). Financial behaviour includes consumption, credit and saving activities, investment decision, and cash management (Stolper and Walter, 2017). A person with good financial behavior will display a responsible financial management, where the outcome may range in the form of saving money and/or reducing debts. A responsible financial behavior is influenced by good understanding of financial literacy, a good financial attitude, and a positive locus of control.

Financial literacy measures one understanding and awareness on the financial products and risk management (OJK, 2013). The aspect involved comprehension towards individual's priority on the financial management given the limited financial resources (Herdjiono and Damanik, 2016). Many studies, such as Chen and Volpe (1998), Mandell and Klein (2009) and Lusardi and Mitchell (2013), find that there is no evidence to suggest education and financial literacy must correlate, and that welfare status (i.e., parental income) does not significantly affect literacy. In short, social status –indicated by income/education level, and wealth, are not the ex-ante factors for good financial literacy.

Despite such relationship, financial literacy is indeed the contributing factor to the prosperity (Margaretha and Pambudhi, 2015). Financial literacy enables individual to understand financial instruments, future planning, insurance, wise consumption, and managing unprecedented life events (Çera et al., 2020; Cohen and Nelson, 2011; Moga Dass and Fazli Sabri, 2017; Rousseau and Venter, 2019). A study by Purwidianti and Tubastuvi (2019) finds that financial literacy has a positive on financial behavior amongst Indonesian Small Medium Enterprises (SMEs). Studies by Allgood (2012) and Arifin (2017) indicate that financial literacy affects significantly and positively financial behavior. This suggests that the higher the level of financial literacy, the better one's personal financial management behavior. Otherwise, lower financial literacy signifies poor personal financial management behavior.

This paper introduces one novel aspect of financial literacy and behavior that is Islamic financial literacy. Islamic financial literacy covers the understanding and awareness of a Muslim towards Islamic financial principles and instruments (Abdullah et al., 2017). Islamic financial literacy is operationally indicated by understanding and priority of Islamic financial redistribution instruments, such as *infaq* (spend part of the property or income owned for interest and benefit that has been taught by Islam, *infaq* distributed to those in need, such as the poor fellow Muslims, *infaq* for natural disasters, etc.) and *sadaqah* (issuing assets or non-wealth by a person or business entity outside of *zakat* for the public benefit). By introducing Islamic financial literacy as a new variable, this study aims to gauge more information whether positive Islamic financial literacy will lead to a responsible financial behavior amongst middle-low income Muslim group. This makes the current study differs from past studies.

There are six concepts surrounding financial attitude, namely, obsession, power, effort, inadequacy, retention and security (Ameliawati and Setiyani, 2018; Dewi et al., 2020; Herdjiono and Damanik, 2016). Obsession entails one's paradigm or mindset on money management. Power refers to money as the medium for control and problem solving. Effort implies that money is earned by work. Inadequacy reflects the feeling of having not enough money. Retention tends to save money and not spend it all. Lastly is security, that refers to traditional mindset that money should be kept at own house (Herdjiono and Damanik, 2016).

There are also studies indicated the dominance of financial attitude in affecting financial behavior. Yap et al. (2018) describes that moral, cultural, and personal values are components of financial attitude that affect one's financial decisions. (Yong et al., 2018) highlighted the importance of attitude towards financial behavior, that it has greater influence on behavior than literacy. Financial attitude also makes an important contribution in achieving success or failure in financial management. As a convention, one who demonstrates positive attitude will be more likely to display a responsible and sustainable financial behavior for the future (Ameliawati and Setiyani, 2018).

Another variable is locus of control. Locus of control is a psychological concept that captures individual beliefs on the causal relationship between their own behavior and life events (Cobb-Clark et al., 2016). There are two types of locus of control, external and internal (Arifin, 2017). Internal locus of control describes the presence of a controller within a person, and external locus of control is the environment and peer references that influence one's behavior (Thi et al., 2015). A good environment and peer reference will be likely to enforce positive internal locus of control, hence ultimately influence a responsible financial behavior (Budiono, 2020).

Financial behavior is the variable of interest of this study. Financial behavior tries to uncover and explain how individual make his/her decision. It also explains inconsistency of one's financial behavior (Arifin, 2017). Financial behavior has two perspectives; cognitive psychology and its limits of arbitrage. Cognitive psychology refers to how individual manage his/her financial in terms of their financial knowledge or literacy (Purwidianti and Tubastuvi, 2019). While limits to arbitrage, limitation of a person to take advantage for himself (Herschberg, 2012). There are four measurement indicators of financial behavior, namely; consumption, cash-flow management, saving and investment, and credit management (Dew and Xiao, 2011). Based on the financial behavior theory and literature previously stated, several hypotheses can be made as follows.

Hypothesis 1 : Islamic financial literacy affects financial behavior.
Hypothesis 2 : Financial attitude affects financial behavior.
Hypothesis 3 : Locus of control affects financial behavior.

3. Research Methodology

This study employs Structural Equation Modeling Partial Least Square (SEM-PLS). SEM-PLS is a second-generation multivariate data analysis method (SEM) that is intended for data-rich and theory-skeletal study (Hair et al., 2013) and has advantage of no assumptions about data distribution (Wong, 2013). PLS-SEM also attributed to a number of advantages: (1) applicable to non-normal data (2) small sample sizes (Wong, 2013), and (3) formative indicators (Hair et al., 2013). SmartPLS version 2 is used to conduct the analysis in this study.

This study underwent the following steps:

(1) model specification

(2) outer model evaluation. This is done by checking the quality of outer model through: (a) validity tests, which are; Convergent Validity, Discriminant Validity, and Average Variance Extracted (AVE), and (b) reliability tests using Composite Reliability Coefficient and Cronbach's Alpha
(3) inner model evaluation. The *t*-statistics and R-Square for measuring the relationships amongst the variables and goodness of fit of the model.

The sample used is 150 respondents. These respondents were chosen using purposive sampling (Kadilar and Cingi, 2012), with the following criteria: (1) This area is selected for the study because people from this village is known to be heavily indebted to bank or non-bank financial institutions and moneylenders – Figure 1, 2 show location of West Hadimulyo and (2) income under USD 140/month. The questionnaires are in the form of Likert Scale of 1-5 (1 is extremely disagree, and 5 is extremely agree). Before data collection to 150 respondents, this instrument has been tested and evaluated using 20 respondents with 45 indicators. From the findings, it is indicated that only 21 indicators that are valid and could be used as instruments for this study.

Figure 1: West Hadimulyo Location, Metro City, Lampung, Sumatera

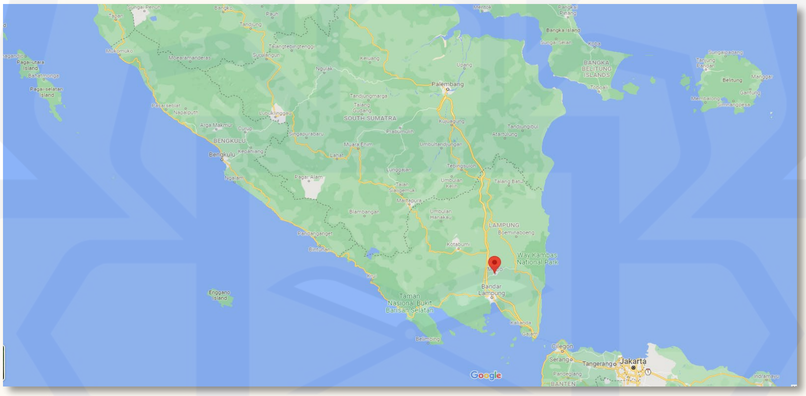


Figure 2: West Hadimulyo Location, Metro city

4. Results and Discussion

This study conducted validity and reliability test to measure how good the indicators reflect the inner model. Validity test is to measure the quality of the indicators reflecting the variables in this research (Taherdoost, 2018). The validity test employs convergent validity and discriminant validity tests. Convergent validity test assesses reflective validity to represent variables. This validity test could be observed from outer loading value, and is considered as valid if the test result has a loading factor above 0.5 (Vinet and Zhedanov, 2011). After the first trial using 21 respondents, the questionnaires consist of 21 valid indicators; in which 6 valid indicators represent Financial Literacy, 4 valid indicators represent Financial Attitude, and 4 valid indicators constitute Locus of Control, and 7 valid indicators represent Financial Behavior. Refer Appendix 1 for the detail of the variables (constructs) and its indicators.

Discriminant validity test is the extent to which latent variable discriminates from other latent variables. Discriminant validity means that a latent variable is able to account for more variance in the observed variables associated with it than a) measurement error or similar external, unmeasured influences; or b) other constructs within the conceptual framework (Taherdoost, 2018). Another method for testing discriminant validity can be done by looking at the AVE value. AVE is the main average value of the load squares of an indicator set (Hair et al., 2017). In short, the AVE suggests that the construct explains more than half the variance of the indicator. The recommended AVE value is 0.5(Ghozali and Latan, 2015) (The AVE value in this study is presented in Table 1.

Table 1: Discriminant Validity (AVE Test)

	AVE	Note
FA (Financial Attitude)	0.487149	Valid
FB (Financial Behaviour)	0.307136	Invalid
FL (Financial Literacy)	0.360569	Invalid
LOC (Locus of Control)	0.497719	Valid

Source: The result of data processing

In this study, the reliability test consisted of composite reliability and Cronbach alpha test. Composite reliability results will be satisfactory if the value is above 0.7 (Ghozali and Latan, 2015) The results of the composite reliability test, as shown in Table 2, reveals that the composite reliability value for all constructs is above 0.7 which determines that all constructs in the estimated model are reliable. And for the lowest composite reliability value is 0.74 for the FB construct. The recommended value of the Cronbach's alpha test is above 0.6 for reliable construction. In Table 2, the Cronbach's alpha values for all constructs are above 0.6 (Vinet and Zhedanov, 2011). The lowest value is 0.61 for the FB construct. The reliability test can also be strengthened by the results of the Cronbach's alpha test.

Table 2: Reliability Test (Composite Reliability dan Cronbach's Alpha)

Variable	Composite Reliability	Cronbach's Alpha	Note
FA (Financial Attitude)	0.774466	0.638588	Reliable
FB (Financial Behaviour)	0.746795	0.613964	Reliable
FL (Financial Literacy)	0.766727	0.651627	Reliable
LOC (Locus of Control)	0.794344	0.661750	Reliable

Source: The result of data processing

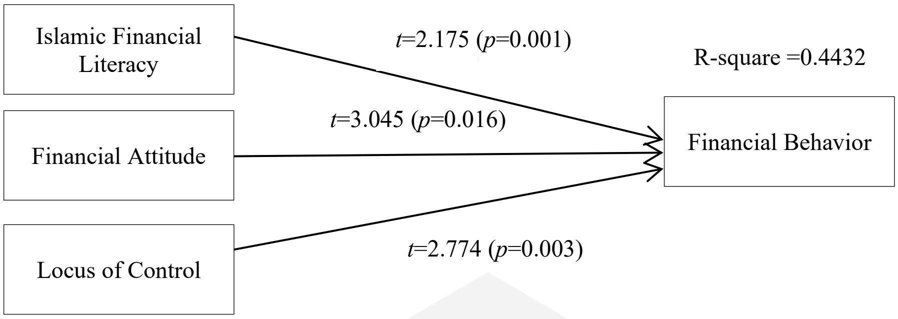
Based on the hypothesis test (*t*-statistics), the effect of the independent variable on the dependent variable (FB) is significant as stated in the result of the *t*-statistic which is greater than 1.96 (at the 5% significance level).

Table 3: Hypothesis Testing

Hypothesis	Beta-Coefficient (β)	*t*- Statistic	*p*- value	Note
FL → FB	0.226	2.175	0.001	Accepted
FA → FB	0.272	3.045	0.016	Accepted
LOC → FB	0.344	2.774	0.003	Accepted

Source: The result of data processing

Regarding the test on the coefficient of determination, this test examines the inner model to observe the relationship between variables, using the R-square as a parameter provided that the R-square value is 0.75 (very strong), 0.5 (strong), and 0.25 (weak) (Hair et al., 2017).



The result shows that the effect of financial literacy on financial behavior is significant, with a *t*-statistic value of 2.175 (greater than 1.96), and has positive direction with beta coefficient of 0.226. It also demonstrates the effect of financial attitude on financial behavior is significant, with a *t*-statistic value of 3.045 (greater than 1.96), and has positive direction with beta coefficient of 0.272. Lastly, the effect of locus of control on financial behavior is significant, with a *t*-statistic value of 2.774 (greater than 1.96), and has a positive direction with beta coefficient of 0.344. The coefficient of determination (R-square) shows that FA, FL and LOC can be used simultaneously to explain FB by 44.32%. It indicates that the research model is appropriate to be used in understanding factors determining financial behavior of low-income Muslim group in West Hadimulyo, Metro City.

The coefficient of determination (R-square) shows that FA, FL and LOC can be used simultaneously to explain FB. It indicates that the research model is appropriate to be used in understanding factors determining financial behavior of middle-low income segment. This study took the sample of 150 respondents who were categorized as middle-low income Muslim group who resided in the suburb area of Metro City, Sumatera, Indonesia. The test results show that all independent variables have a significant effect on the dependent variable (financial behavior). The effect of Islamic financial literacy on financial behavior indicates positive and significant relationship. It shows middle-low income Muslim group has a modest understanding of Islamic financial products and is expected to be more prudent in their financial management. Nevertheless, literacy sits at the lowest position, referring to the Beta-coefficient, in comparison to other variables (FA and LOC). Therefore, despite demonstrating a positive and significant influence on behavior, this middle-low income Muslim group suffers from debt and credit. This finding is in line with (Purwidianti and Tubastuvi, 2019; Allgood and Walstad, 2016) who reported financial literacy has a positive effect on financial behavior.

Financial attitude shows a positive and significant relationship with financial behavior. This study captures that attitude as the determinant affecting financial behavior. Studies by Yap et al. (2018) and Herdjiono et al. (2016) the finding of this study also unveils the positive and significant relationship of locus of control as the most affecting variables towards financial behavior. Financial attitude is a state of mind, opinion, and someone's assessment of personal finances where behavior is generally influenced by the environment and social interactions (Budiono, 2020). His/her thoughts, opinions, and judgments about personal financial situation determine what action he/she could take or attempt. Considering that this study is underwent during a pandemic and economic recession, it can be understood that self-opinion/judgment on personal financial situation is what matter most.

The finding of this study also unveils the positive and significant relationship of locus of control on financial behavior, in line with the study of Dwiastanti (2017). External locus of control affects financial behavior (Thi et al., 2015), for example, if the neighborhood did not exercise savings, thus it would make him/her do not prioritize savings. This finding implies that a member of the group will see his/her peer and neighbors as the reference before deciding upon financial matter.

Considering that this study is conducted during a pandemic and economic recession, it becomes more apparent that improving financial literacy for the middle-low income group is not sufficient. Pandemic and economic recession impair the efficacy of knowledge on one's decision on financial strategies. The logic is that a rational individual would decide upon their knowledge, and not by the locus of control. However, by demonstrating that locus of control is the most dominant driver and literacy is the least determinant for behavior, the result of this study confirms that people from this group tend to be less rationale in managing and making strategies.

The effect of the "less rationality" on financial behavior is often underrated. At the moment of crisis, less rationality tends to force this group into a vicious debt cycle that might jeopardize this group economic position once economic is restarted. The middle-low income Muslim group who are now forced to take loans from moneylenders in order to survive, must serve the interest payment to capital owners afterwards. In another words, an outflow of cash from this group consumption in the form of interest payment is expected. This situation would give a sluggish recovery, if government and policy makers did not take any actions now on correcting the capital accumulation problems.

4. Conclusion

The finding of this study demonstrates that locus of control, financial attitude, and Islamic financial literacy, have positive and significant effect to financial behavior, in that sequenced-order. It shows that during a crisis, middle-income Muslim group demonstrates a distinct characteristic that locus of control matters most in terms of his/her financial decision, followed by self-opinion, and knowledge on Islamic financial instruments

The fact that this community understands financial products, the attitude and locus of control play significant and positive role in shaping financial behavior. It explains the debt trap phenomena that this segment still looks upon subjective personal judgment and behavior of others before deciding to take a loan either from the financial institution or money lenders. In particular, during a difficult situation or crisis, this group of people is prone to accept loan. This fact could justify the reason as to why the group is indebted and thus is vulnerable prey of loan sharks. It suggests that improving financial knowledge is the key to shape a better and more responsible financial behavior of middle-low income Muslim group.

This study suggests at least one policy recommendation. That is, for government and policy makers to examine and to set up a mechanism based on Islamic financial structures that are potential to absorb/ameliorate the risks of middle-low income Muslim group, while also undertaking a series of financial literacy programs to enhance and to enforce people's knowledge on financial instruments and its social implications. Islamic financial structures, such as *zakat*, *infaq*/*sadaqah*, and *waqf*, among others, are instruments of redistribution that are trusted to improve the current capital accumulation problem.

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Appendix 1. Pilot Study

	FA	FB	FL	LOC	Note
FL.1			0.6234		Valid
FL.2			0.4958		Invalid
FL.3			0.4955		Invalid
FL.4			0.6931		Valid
FL.5			0.6469		Valid
FL.6			0.6760		Valid
FA.1	0.8203				Valid
FA.2	0.7217				Valid
FA.3	0.8171				Valid
FA.4	0.4948				Invalid
LOC.1				0.6160	Valid
LOC.2				0.5774	Valid
LOC.3				0.7242	Valid
LOC.4				0.8679	Valid
FB.1		0.5875			Valid
FB.2		0.6652			Valid
FB.3		0.6213			Valid
FB.4		0.5459			Valid
FB.5		0.5571			Valid
FB.6		0.5247			Valid
FB.7		0.5801			Valid

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Conceptual Framework for the Adoption of General Takaful Among MSME Owner-Managers in North-West Nigeria: The Role of MSME Owner-Manager Characteristics

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Abstract

The ability to manage risk is especially important to Micro, Small and Medium-sized enterprises (MSMEs) which constitute more than 90% of all businesses in Nigeria. One of the mitigating techniques in minimizing risk is through insurance and Nigeria being a Muslim-majority country, takaful is the alternative to conventional insurance. Despite their fragile nature and their exposure to various threats, MSMEs are the least segment utilizing insurance cover. Based on the reports from the country's financial regulators it shows that majority of these businesses do not participate in any insurance scheme. Furthermore, there are less studies that examined takaful adoption by MSMEs, especially in Nigeria. These past studies are also inconclusive on the significant factors influencing adoption especially from the behavioral perspective. This paper aims to propose a conceptual framework to study the factors that influence general takaful adoption among MSMEs owner-managers' in North-West Nigeria. An integrated framework based on the Diffusion of Innovation Theory (DOI) and the Unified Theory of Acceptance and the Use of Technology (UTAUT) was developed to examine what motivates MSMEs owner-managers to adopt general takaful. Furthermore, the proposed model incorporates MSME owner-manager's personal and demographic characteristics (age, gender, education, prior loss experience and religiosity) as potential moderators in the study to enhance the predictive power of the model. Validating the conceptual framework of this research will be useful to takaful operators, financial regulators and policy makers in Nigeria to devise appropriate strategies that will increase the adoption rate of general takaful scheme among MSMEs.

Keywords: *adoption; general takaful; MSMEs; Diffusion of Innovation Theory; Unified Theory of Acceptance and Use of Technology*

1. Introduction

We live in a risk pervasive world where individuals and businesses are constantly exposed to various perils that if left unchecked will result in a chain of negative reactions affecting the quality of life, business continuity and socio-economic stability. Takaful (Islamic insurance) is a means of mitigating such risk factors by reducing the impact of such mishaps through financial compensation. The need for insurance coverage is even more pertinent to Micro, Small and Medium enterprises (MSMEs) due to their fragile nature compared to large enterprises. However, most MSMEs operate their businesses without insurance coverage. This trend is even more evident in the least developed economies. Furthermore, the insurance density and penetration level are very low in the Muslim-majority, emerging market economies (EMEs) (Hoffman, 2015). Conventional insurance, albeit its noble goals, has faced stiff resistance and apathy in Muslim-majority countries because it conflicts with the beliefs and laws (Shariah) of the Muslims (COMCEC, 2019; Akhter et al., 2017). Conventional insurance was deemed invalid because it entails the elements of *gharar* (excessive uncertainty), *maysir* (gambling) and *riba* (usury) which are prohibited in the Islamic economic and financial system (Salman and Hassan, 2020). Thus, the need for an alternative insurance mechanism, achieving the same noble objectives, that is Shariah-compliant and in harmony with the Islamic finance worldview was justified (COMCEC, 2019;

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Akhter et al., 2017).

Present-day takaful was developed four decades ago as an alternative to conventional insurance (COMCEC, 2019; Swartz and Coetzer, 2010). In contrast with conventional insurance that is a risk transfer mechanism, takaful is a risk-sharing tool that pools financial resources together to compensate participants in the event of the occurrence of identified risks. Takaful is a means by which participants mutually agree to contribute money into a pool of funds based on the principles of *tabarru* (donation) that will be used in mutually indemnifying members against pre-defined loss (Billah, 2001). Takaful is an Arabic term derived from the Arabic root word "*kafala*" which means to guarantee. It is also derived from the Arabic verb "*takafala*" which implies mutually guaranteeing and safeguarding each other (Husin et al., 2016). It is fundamentally based on the spirit of cooperation, brotherhood, and solidarity among members of a group (Nasir et al., 2021). The Islamic Financial Services Board (IFSB) defines Takaful as "a mutual guarantee in return for the commitment to donate an amount in the form of a specified contribution to the participants' risk fund, whereby a group of participants agree among themselves to support one another jointly for the losses arising from specified risks" (Islamic Financial Services Board [IFSB], 2018).

As in conventional insurance, takaful consists of two main product categories: family (life) takaful and general (non-life) takaful. Family takaful is usually a long-term contract that includes savings, investment and protection for members and their dependents in the event of death, incapacity, or survival difficulties. While general takaful is traditionally a short-term contract, usually a year, to provide insurance cover for properties and liabilities against unanticipated hazards. Typical insurance covers in general takaful include protection against fire, theft, natural calamities, accidents, among others (Husin and Haron, 2020a; Aziz et al., 2019). This present study is limited to general takaful because it is more relevant to the needs of the MSMEs.

Recently, there has been a renewed interest in the takaful subsector in Muslim-majority countries. The takaful subsector has attracted the attention of academicians, practitioners as well as policymakers as a veritable tool in enhancing societal welfare, business resilience and long-term sustainability. The takaful segment has maintained a steady, albeit slow growth rate in terms of gross contributions from USD 5 billion in 2006 to USD 27.07 billion in 2018 (IFSB, 2020, 2015). However, unlike the banking and capital market segments, takaful is the least contributor to the total Islamic finance assets, having a meagre percentage share of less than 2% (IFSB, 2020, 2019). Likewise, the takaful sector is heavily concentrated in few countries which represented 91% of the global total contributions in 2018. Five countries were identified as the major contributors to the takaful sector namely Iran, Saudi Arabia, Malaysia, the United Arab Emirate (UAE) and Indonesia (IFSB, 2020). These countries are in three subregions of the world, namely the Middle East, Gulf Cooperation Council (GCC) and Southeast Asia.

Sub-Saharan Africa is the least contributor to the takaful segment, contributing only 2% of the total market share for global takaful (IFSB, 2020, 2019). Empirical data has shown that, on a global scale, nearly 70% of valuable properties subjected to financial and physical losses are not insured. Africa, excluding South Africa, accounts for the bulk of this percentage due to the low insurance penetration rate across the region (Faber Consulting, 2020). Nigeria stands out in the continent as one of the countries with the lowest insurance penetration rate ranging between 0.2 to 0.3% (Faber Consulting, 2020; Oxford Business Group, 2019; Dias et al., 2013). Surprisingly, despite Nigeria having nearly all the positive indicators for the insurance sector to flourish, the insurance industry is still stagnant (Ardo and Saiti, 2017). Nigeria has the largest population, economy, and market in Africa. It also has a rising affluent middle class, coupled with a significant number of youths in the population. All these factors make Nigeria an ideal market for insurance (Ismail, 2015). Regrettably, the insurance industry is the least developed sector of the Nigerian financial ecosystem (Yusuf, 2012). According to a survey report by the Enhancing Financial Inclusion and Access (EFInA, 2020), only 2% of the total adult population (estimated at 106 million in 2020) participate in insurance schemes in Nigeria. Reports further revealed that women, youths, the less educated, MSMEs, and the northern region of the country are the least consumers of financial services in the country (EFInA, 2020; Central Bank of Nigeria [CBN], 2018). Also, the reports showed that within the northern zone, the North-West region has the highest percentage of financial exclusion and the lowest insurance penetration rate compared to other regions in the country (EFInA, 2020). Hence, the present study will be limited to the North-West region of the country.

Additionally, most MSMEs in Nigeria operate their businesses bereft of insurance cover. A recent survey by the Small and Medium Enterprises Development Agency of Nigeria [SMEDAN] and the National Bureau of Statistics [NBS] (2017) revealed that 96.61% of micro enterprises and 63.9% of SMEs are uninsured. In the event of the occurrence of any calamity, these businesses are left vulnerable to closure and collapse. They are left to the mercy of external assistance in the form of government relief support, donor agencies and philanthropists which may never materialize (Dandago et al., 2020). For instance, a fire incident in the central market of Kano (Sabon Gari Market) destroyed more than 75% of the market, burnt down 3,800 shops, injured 15 persons, and destroyed assets worth more than USD 5 billion (Campbell, 2016). The negative effect of all these losses could have been mitigated if the MSMEs had insurance coverage (Dandago et al., 2020).

Three prominent adoption/ behavioral intention theories have been applied in studying the adoption of takaful. These theories include the Theory of Reasoned Action (TRA) (Siala 2013; Rahim and Amin, 2011), the Theory of Planned Behaviour (TPB) (Kazaure, 2019; Mas'ud, 2017; Husin and Rahman 2016a; Husin et al., 2016), and the Diffusion of Innovation (DOI) theory (Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Ayinde and Echchabi, 2012). Associated factors investigated by researchers include attitude, subjective norm, perceived behavioral control, awareness, religiosity, uncertainty, trust, relative advantage, and compatibility. However, despite the above studies, the literature is still limited in explaining takaful adoption, especially from the behavioral perspective. A recent review on takaful literature revealed that notwithstanding the importance of takaful in the Islamic financial system, it is the least investigated area in the Islamic finance literature (Khan et al., 2020). Moreover, the review highlighted that there are few studies applying behavioral theories to investigate the adoption of general takaful (Khan et al., 2020; Husin et al., 2016). Furthermore, the MSME segment have received little attention in research related to factors influencing demand and acceptance of takaful (Husin and Haron, 2020b). Additionally, little is known of the influence of noneconomic variables on general takaful adoption (Zerriaa and Noubbigh, 2016; Husin et al., 2016). For instance, the literature on takaful adoption suggests that government support can be a significant determinant of adoption intention (Kazaure, 2019; Sherif and Hussnain 2017; Sherif and Shaairi, 2013), yet no empirical study on takaful adoption has examined this factor.

Moreover, the literature shows inconsistent findings on the influence of awareness, social influence, and religiosity on takaful adoption. Husin and Rahman (2016b) found that awareness, social influence and religiosity are not significant in predicting takaful adoption. While other studies found significant effects (Kazaure, 2019; Ali et al., 2019). Furthermore, research has shown that an MSME owner-manager's characteristics plays a significant role in influencing the adoption of financial products (Al Balushi et al., 2019). Financial product adoption has been found to vary based on an MSME owner-manager characteristics (Al Balushi et al., 2019). Examining the effect of MSME owner-managers characteristics especially demographics on adoption intention can support takaful operators (TOs) in devising effective marketing and segmentation strategies (Husin and Rahman, 2013). The Owner-manager characteristics to be investigated in this study are his/her personal (i.e., religiosity) and demographic characteristics (i.e., age, gender, education and loss experience) which have been shown in past studies to influence adoption intention in various contexts (Al Balushi et al., 2019; Patwary et al., 2018; Ltifi et al., 2016; Venkatesh et al., 2003). It is anticipated in this study that the differences in these personal and demographic characteristics may moderate the relationship between the predictor variables and general takaful adoption.

Hence, this study presents a conceptual framework derived from existing adoption theories, specifically DOI and the Unified Theory of Acceptance and Use of Technology [UTAUT]), uncertainty and awareness to examine the adoption behaviour of MSMEs owner-managers towards general takaful. Also, MSME owner-manager personal and demographic characteristics were incorporated in the framework as potential moderators to enhance the predictive power of the model.

2. Literature Review

Several studies have employed different behavioral/adoption theories to study Islamic finance adoption by individuals and organizations across different geographical locations and socio-economic structures with varying sample constituents and sizes. These theoretical models have been adapted (Yahaya et al., 2016b; Thambiah et al., 2013; Amin et al., 2011), extended (Haider et al., 2018; Mahdzan et al., 2017) and integrated (Jamshidi and Hussin, 2016; Bodibe et al., 2016) to explain Islamic finance adoption. Most of these studies have confirmed the validity and usefulness of these theories, particularly TRA, TPB and DOI constructs in predicting behavioral intention and use of Islamic finance. Furthermore, researchers have applied various behavioral factors and marketing concepts to study takaful adoption across a variety of settings. Prominent theories applied in this stream include TRA (Siala 2013; Rahim and Amin, 2011), TPB (Kazaure, 2019;

Mas'ud, 2017; Husin and Rahman 2016a; Husin et al., 2016) and DOI (Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Ayinde and Echchabi 2012). Significant factors influencing takaful adoption include attitude, subjective norm, perceived behavioral control, awareness, religiosity, uncertainty, trust, relative advantage, and compatibility.

The body of literature on takaful adoption using behavioral and marketing theories increased rapidly in the past five years. South Asia and Southeast Asia have the highest number of publications in takaful adoption. Precisely, nearly half of the total takaful adoption literature came from Malaysia and Pakistan. Most of the studies were on takaful in general, studies on specific takaful products are few (i.e., family takaful, general takaful, micro takaful, Islamic health insurance). Notable theories and factors employed by researchers include TPB, DTPB, DOI, TRA, religiosity, awareness, uncertainty, demographics, image, and promotion. Various methodologies have been employed to investigate takaful adoption, however, quantitative method was the most used. Furthermore, various data analysis techniques have been employed from descriptive statistics to more sophisticated second-generation analytical tools like SEM. Most studies concentrated on direct effects and mediating effects, only a few empirical studies investigated moderating effects (Salleh et al., 2021; Shaikh et al., 2019; Kazaure, 2019; Mas'ud, 2017). Furthermore, non-probability sampling technique was the dominant sampling technique used in this research stream.

In the African continent few articles were published on takaful. Most of the studies were conducted in Nigeria. Furthermore, most of the empirical studies used TPB as theoretical framework (Dandago et al., 2020; Kirfi et al., 2019; Kazaure, 2019; Mas'ud, 2017). Moreover, only two studies (Kazaure, 2019; Masud, 2017) tested moderation effect, the other studies investigated only direct effects. Additionally, except for one study (Kazaure, 2019), the remaining studies focused on individual customers. Likewise, MSMEs, general takaful, and micro takaful were less explored in the overall takaful adoption literature.

3. Theoretical Framework

Several theories have been employed by researchers in the field of consumer behavior and innovation adoption to examine the rationale informing the acceptance or rejection of numerous innovations by different categories of consumers in various settings. Among such theories which have gained wide applicability in the innovation adoption literature are the Diffusion of Innovation [DOI] and the Unified Theory of Acceptance and Use of Technology [UTAUT].

DOI was first proposed by Rogers in 1962. DOI theory has been extensively used in several research settings and had proven to be a robust model in predicting the adoption of several innovations (Ali et al., 2019; Shaikh et al., 2019; Mahdzan et al., 2017; Thambiah et al., 2013). The theory advocates that it is the characteristics of an innovation which influences its adoption rate. Rogers (2003) proposed 5 key features of an innovation as follows: relative advantage, compatibility, complexity, observability and trialability. The first three main features are generic and apply to a variety of innovations both tangible and intangible ones (Rogers, 2003; Tornatzky and Klein, 1982). However, the last two attributes mostly apply to tangible and observable innovations (Rogers, 2003).

DOI has been used by researchers to study innovation adoption both at the individual (Mahdzan et al., 2017; Jamshidi and 2015; Thambiah et al., 2013) and organizational level (Hsu et al., 2006; Zhu et al., 2006). The original DOI theory has rarely been applied by researchers without some form of modification, extension (Mahdzan et al., 2017; Jamshidi and Hussin, 2015; Thambiah et al., 2013), or integration with other behavioural/adoption theories (Jamshidi and Hussin, 2016, 2018; Zhu et al., 2006). Generally, most studies have shown that the DOI constructs, particularly relative advantage, compatibility, and complexity are consistently linked to innovation adoption decisions (Jamshidi and Hussin, 2016; Tornatzky and Klein, 1982). Although the DOI model has been used extensively to explain innovation adoption behaviour, it has been criticized for considering only the attributes of innovation and its perception by potential adopters. Other personal characteristics such as gender and age are excluded. Additionally, external influences such as social pressure and governmental support that have a significant influence on potential adopters are not considered in the model (Al-Zoubi, 2013).

Another competing and widely used theory of innovation adoption behaviour particularly in the Information Technology (IT) adoption research is the Unified Theory of Acceptance and Use of Technology (UTAUT). Developed by Venkatesh et al. (2003), UTAUT was proposed to address the limitations of other competing behavioural/adoption models. Venkatesh et al. synthesized different constructs deemed to be similar from 8 behavioural/intention theories to form 4 consolidated constructs that will diminish the weakness found in previous models. To further strengthen the model's predictive capacity, Venkatesh et al. incorporated 4 moderators (Dwivedi et al., 2019). Venkatesh et al. argued that by unifying similar behavioural theory constructs the dilemma of choosing one behavioural theory in preference to another is resolved. Additionally, UTAUT explanatory power surpassed previous behavioural models in explaining 70% of behavioural intention and actual usage variance (Venkatesh et al., 2012).

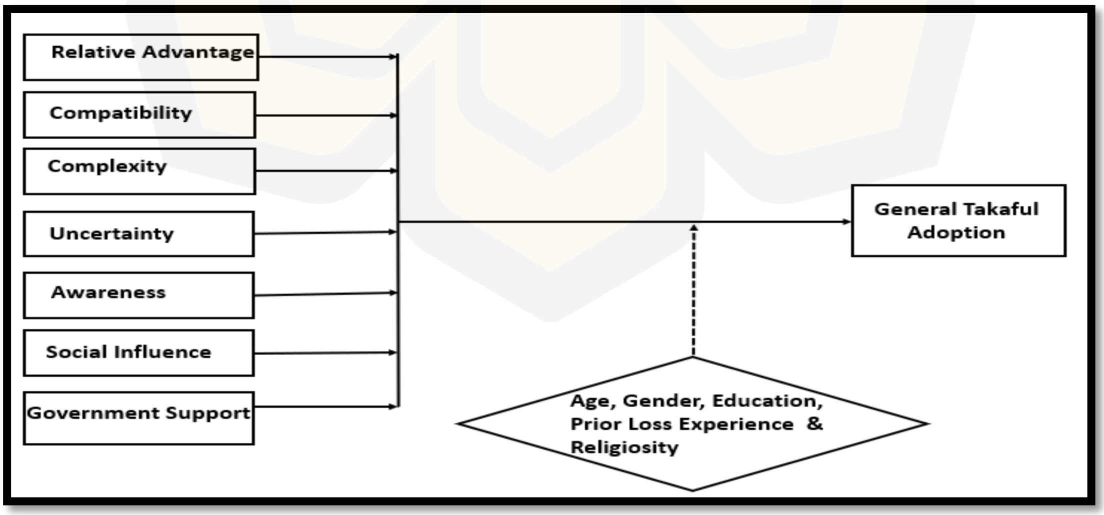
The UTAUT has four key constructs derived from the synthesis of previous competing models, namely (1) performance expectancy (PE) which is comparable to relative advantage in DOI and perceived usefulness in TAM,(2) effort expectancy (EE) which is like complexity in DOI and perceived ease of use (PEOU) in TAM, (3) social influence (SI) which is comparable to subjective norm in TRA, TPB/DTPB and (4)facilitating conditions (FC) which is partly derived from PBC in TPB/DTPB. Three out of the four core constructs were theorized as direct determinants of behavioural intention while the fourth construct (i.e., facilitating conditions) was hypothesized to be a direct determinant of actual usage. Furthermore, the theory postulates that the effect of these main constructs will be moderated by gender, age, experience, and voluntariness of use (Venkatesh et al., 2003).

UTAUT has been extensively utilized by researchers, particularly in the Information Technology adoption field in diverse contexts. Studies have applied the full model (Bühler and Bick, 2013), others have studied only the main effects (Odeh, 2019; Seid and Lessa, 2012), some have modified and extended it (Ebrahim and Naicker, 2019; Raza et al., 2019; Martins et al., 2014), while another group have integrated UTAUT constructs with other behavioural/adoption theories (Ikumoro and Jawad, 2019; Abbas et al., 2018). In the Islamic finance adoption field, researchers have employed UTAUT to examine Information Technology adoption (Raza et al., 2019; Kholid, 2019; Thaker et al., 2019) as well as innovations in other Islamic finance settings (Bouteraa et al., 2020).

4. Conceptual Framework

The conceptual research framework was developed based on the review of research constructs and underpinning theories of previous studies in the innovation adoption literature, especially studies related to takaful and Islamic finance adoption. The constructs of the conceptual framework for this study were in part adapted from Roger's (2003) Diffusion of Innovation theory (DOI) and the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). The conceptual framework for the proposed study is presented below.

Figure 1: Conceptual Framework



4.1 Relative advantage

Relative advantage, as defined by Rogers (2003), is the extent to which an innovation is perceived to be better than its substitutes. Relative advantage is perceived by potential adopters in terms of economic benefits, social prestige, convenience, and satisfaction (Rogers, 2003). Perceived relative advantage had been tested in many research studies in the field of adoption of innovation and was found to be one of the major determinants of adoption of new innovations (Mahdzan et al., 2017; Yahaya et al., 2016a). This construct was consistently shown to be positively related to the adoption and use of innovation in different contexts, environments, and cultures (Mahdzan et al., 2017; Yahaya et al., 2016b).

In the literature on takaful adoption several researchers have investigated the influence of relative advantage. Some studies found relative advantage to be significant (Salman and Hassan, 2020; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et.al., 2019), while others found insignificant effects (Kirfi et al., 2019; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi, 2012). For instance, a study by Kirfi et al. (2019) investigating takaful adoption in Gombe state, Nigeria, found an insignificant relationship between relative advantage (perceived usefulness) and takaful adoption. Similarly, studies by Echchabi and Ayedh (2015), Echchabi et al. (2014), Ayinde and Echchabi (2012) in Yemen, Tunisia, and Malaysia, respectively, found relative advantage to be insignificant in explaining takaful adoption.

Conversely, Salman and Hassan (2020), Hassan and Abbas (2019), Raza et al. (2019), Ali et al. (2019) and Shaikh et al. (2019) in India and Pakistan, respectively, confirmed the significance of relative advantage in predicting takaful adoption. Additionally, Mokhtar et al. (2017) investigated corporate demand for general takaful in Malaysia using a quantitative survey method. Findings from the study revealed that relative advantage (perceived advantage) is one of the key determinants influencing corporate organizations to purchase insurance (both conventional and Islamic insurance). Similarly, Aziz et al. (2019) using a modified version of TPB confirmed the significance of perceived usefulness (relative advantage) on family takaful adoption in Pakistan. Additionally, Coolen-Maturi (2013) found that competitive pricing (i.e., cost factor) influences the choice of insurance by Muslims in the UK. Therefore, due to the inconsistency of findings, there is a need to further investigate the effect of relative advantage in other less explored contexts and groups. The more general takaful is perceived by MSMEs to be useful and better than its substitutes, the more will be the adoption rate. Therefore, the following hypothesis is proposed:

H1: Relative advantage positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.2 Compatibility

Compatibility is the degree to which an innovation is perceived to agree with the values, beliefs, experience and needs of potential adopters (Rogers, 2003). The more an innovation conforms to the values, experiences, and needs of the target market, the higher will be the adoption rate. The significance of compatibility in terms of adoption of an innovation was validated in past studies (Mahdzan et al., 2017; Amin et al., 2013). A study carried out by Amin et al. (2013), confirmed the positive influence of compatibility on the adoption of Islamic home finance products in Malaysia.

In studies on takaful adoption, several studies have confirmed the influence of compatibility on takaful adoption (Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi, 2012). For instance, a study by Echchabi and Ayedh (2015) using an extended DOI model revealed that only compatibility was significant in predicting customers intention to adopt takaful in Yemen. Equally, another study by Echchabi et al. (2014) found out that only compatibility was significant in explaining takaful adoption in Tunisia. Likewise, Shaikh et al. (2019), Ali et al. (2019) using an extended DOI model validated the significance of compatibility in predicting takaful adoption in Pakistan.

In the context of general takaful, MSMEs owner-managers will be more inclined to adopt insurance products and services that are in consonance with their ethical values, beliefs, and experiences. The more takaful operators and agents can demonstrate the compatibility of takaful products to MSME owner-managers beliefs, needs and ethical values, the more the adoption rate of takaful by MSMEs. Hence, the following hypothesis will be tested:

H2: Compatibility positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.3 Complexity

According to Rogers (2003), complexity is the degree to which an innovation is perceived as difficult to understand and use. Perceived complexity is closely related to perceived ease of use espoused by Davis (1989) in the Technology Acceptance Model (TAM). Innovations that are easy to understand and use tend to be adopted easily than those perceived to be complex and difficult to comprehend. Previous studies have tested this construct and it was found to have an inverse relationship with adoption of innovation (Jamshidi and Hussin, 2018; Thambiah et al., 2013). Takaful is a recent innovation and therefore if it is perceived by MSMEs owner-managers as complex and difficult to understand and access, then the likelihood of adoption will be low.

Previous studies have validated the negative influence of complexity on Islamic financial services (Ali et al., 2019; Jamshidi et al., 2014). For example, Ali et al. (2019) applying an extended DOI model confirmed the negative influence of complexity on takaful adoption among individual customers in Pakistan. Likewise, Mokhtar et al. (2017) found complexity to be significant in determining general takaful consumption by corporate organizations. On the contrary, a related study on family takaful adoption found complexity to be insignificant in influencing takaful adoption (Shaikh et al., 2019). Therefore, complexity needs to be further investigated in other regions and groups to confirm its significance or otherwise on takaful adoption. Takaful is a recent innovation and therefore if it is perceived by MSMEs owner-managers as complex and difficult to understand and access, then the probability of adoption will be low. Therefore, to validate this claim, the following hypothesis will be tested:

H3: Complexity negatively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.4 Uncertainty

Uncertainty is the degree to which several possibilities are perceived, with respect to the occurrence of an event and the relative probabilities of these possibilities (Rogers, 2003). Rogers identified uncertainty as a common feature of any innovation. Perceived risk and uncertainty have been used synonymously by some researchers to investigate innovation adoption (Yahaya et al., 2016a; Echchabi and Ayedh, 2015; Thambiah et al., 2013). Bauer (1960) defined perceived risk as the degree of uncertainty and negative consequences associated with the purchase or use of a service or product. Risk, trust, and reliability of an innovation are some aspects of uncertainty (Rogers, 2003).

A negative relationship between uncertainty and the rate of adoption have been established by some studies (Yahaya et al., 2016a; Teo and Pok, 2003). The more the uncertainty about an innovation in terms of its performance, reliability, and trustworthiness; the lower would be the adoption rate. However, a contrary finding was reported by Echchabi and Ayedh (2015), Echchabi et al., (2014), Ayinde and Echchabi (2012). These studies found that uncertainty was not a significant factor in predicting takaful adoption. Therefore, further investigations are required to determine the influence of uncertainty on takaful adoption.

Takaful as a recent innovation inherently creates uncertainty in the minds of potential adopters. Due to its newness, its reliability, genuineness as truly Shariah-compliant, and relative riskiness would be called into question by potential adopters. Furthermore, intangible products (i.e., services) are perceived to be riskier than tangible products (Laroche et al., 2003). Furthermore, the insurance business is shrouded with issues of reliability and uncertainty of outcomes. Though takaful is based on Islamic principles which diminishes such reliability and uncertainty issues; the perception of low reliability and uncertainty may still be attached to it by potential adopters (Echchabi and Ayedh, 2015). MSME owner-managers may be hesitant in adopting general takaful if they perceive it to be unreliable, ambiguous, and doubtful in terms of Shariah compliance and service delivery. Thus, the higher the perceived uncertainty by MSMEs owner-managers towards general takaful, the lower will be the rate of adoption. Therefore, the following hypothesis will be tested:

H4: Uncertainty negatively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.5 Awareness

Awareness is one of the major determinants of innovation adoption. Naturally, people are more likely to patronize such products and services that they are aware of and of which they have a certain level of understanding. Many studies have been done examining the relationship between awareness and adoption of an innovation (Mahdzan et al., 2017; Islam and Rahman, 2017; Bodibe et al., 2016; Yahaya et al., 2016b; Thambiah et al., 2013). These studies have confirmed that a positive relationship exists between awareness level and adoption rate. Furthermore, Al Balushi et al. (2018) confirmed the positive influence of awareness on MSMEs owner-managers intention to adopt Islamic financing alternative. Rogers (2003) have emphasized that awareness is the first step towards the adoption of an innovation.

In the literature of takaful adoption, several studies have investigated the relationship between awareness and takaful adoption (Dandago et al., 2020; Husin and Haron, 2020a; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et al., 2019; Kazaure, 2019; Mokhtar et al., 2017; Husin and Rahman, 2016a, 2016b; Echchabi and Ayedh, 2015; Echchabi et al., 2014; Coolen-Maturi, 2013; Ayinde and Echchabi, 2012). Some of these studies have reported a positive significant relationship between awareness and takaful adoption (Dandago et.al., 2020; Husin and Haron, 2020a; Hassan and Abbas, 2019; Raza et al., 2019; Ali et al., 2019; Shaikh et al., 2019; Aziz et al., 2019; Adamu, 2018; Mokhtar et al., 2017; Coolen-Maturi, 2013; Ayinde and Echchabi, 2012), while others have found insignificant influence of awareness on takaful adoption (Kazaure, 2019; Husin and Rahman, 2016a, 2016b; Echchabi and Ayedh, 2015; Echchabi et al., 2014). Consequently, the following hypothesis is proposed:

H5: Awareness positively impacts the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.6 Social influence

Teo and Pok (2000) defined social influence as the degree of influence that reference groups have on an individual's decision towards the adoption and use of an innovation. Furthermore, Venkatesh et al. (2003) explains social influence as the influence others have on an individual's behaviour towards adopting or using an innovation. A colossal number of studies have verified the importance of social influence in determining adoption of innovations (Al Balushi et al., 2018; Abdulkadir et al., 2013).

Social influence has also been a subject of investigation in the takaful adoption literature. Several researchers have established that social influence influences takaful adoption (Aziz et al., 2020; Salman and Hassan, 2020; Hassan and Abbas 2019; Bhatti and Husin, 2019; Kirfi et al., 2019; Kazaure, 2019; Husin et al., 2016). However, a contrary finding was reported by other researchers which revealed that social influence is not significant in predicting takaful adoption (Husin and Rahman, 2016a, 2016b; Echchabi, and Ayedh, 2015; Echchabi et al., 2014; Ayinde and Echchabi 2012). Hence, the impact of social influence on takaful adoption is still debatable and requires additional validation in other less explored groups like MSMEs. People live in a social system and their attitudes, habits, principles are shaped by the system and group in which they are part. A positive view and suggestion by these groups will have a favourable impact on the adoption of general takaful. Consequently, to validate this claim, the following hypothesis is proposed:

H6: Social influence positively influences the adoption of general takaful among MSMEs owner-managers in North-West Nigeria.

4.7 Government Support

Government Support refers to government actions, regulations, policies, and political support that favourably influences the decisions of individuals and business firms (Amin et al., 2011). The provision of a favourable macroeconomic environment, sound policies, necessary infrastructures, legal framework, and political backing is vital for the survival, development, and growth of Islamic finance (Abubakar, 2018; Lajuni et al., 2017). A very good example of the positive influence of government support can be seen in Malaysia; where Islamic banking and finance has advanced much due to such support (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011).

Government Support in this context reflects an aspect of facilitating conditions advanced in prior studies of innovation adoption and behavioural intention studies (Venkatesh et al., 2003; Taylor and Todd, 1995). Facilitating conditions as explained by previous empirical studies (Venkatesh et al., 2003; Thompson et al., 1991) refers to the degree to which an individual believes that the necessary environmental and technical support exists to facilitate the adoption of an innovation. Government Support is a fundamental factor in influencing the financing decisions of MSMEs. By providing the necessary policies, regulations, incentives and infrastructures, government can facilitate the adoption of general takaful among MSMEs.

Prior studies in innovation adoption field have examined the relationship between Government Support and adoption (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011; Teo and Pok, 2003). Most of the studies found a positive relationship between Government Support and adoption of an innovation (Lajuni et al., 2017; Nawi et al., 2013). Also, behavioural/adoption studies have shown the active role of government in influencing the adoption or rejection of an innovation (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011; Teo and Pok, 2003). Strong governmental support makes an innovation to be widely accepted and used in a country (Lajuni et al., 2017; Nawi et al., 2013; Amin et al., 2011). Equally, the lack of Government Support or commitment can inhibit the diffusion and acceptance of an innovation (Amin et al., 2011).

In the takaful demand and adoption literature, Government Support has received less attention. Little is known empirically on the influence of Government Support on takaful adoption (Sherif and Shaairi, 2013). Although some studies have highlighted the importance of Government Support in takaful adoption, no empirical study has validated this claim (Kazaure, 2019; Sherif and Hussnain 2017; Sherif and Shaairi, 2013). Even though Husin and Rahman (2013) have identified facilitating condition (of which Government Support is linked) as a potential determinant of family takaful adoption, this assertion has not been empirically tested. However, a few studies using qualitative approach have revealed the importance of Government Support in boosting takaful penetration and acceptance (Husin and Haron, 2020a; Yusuf and Babalola, 2015). In the context of MSMEs, the government's favourable disposition towards takaful can have a positive influence on the decision to adopt general takaful by MSMEs owner-managers. Consequently, this study will investigate the influence of Government Support on takaful adoption among MSMEs in North-West Nigeria. To substantiate this assertion, it is hypothesized that:

H7: Government Support positively influences the adoption of general takaful among MSMEs owner-managers in North-West northern Nigeria.

4.8 Moderating role of religiosity

Religion plays a very fundamental role in the human society. Religion influences every aspect of the society. It also plays significant role in shaping attitudes and behaviours of its adherents. Additionally, religion also dictates and informs the attitudes and behaviours of people towards financial and non-financial products (Nawawi et al., 2018). For instance, Islam is such a religion that guides and directs the consumption behaviour of the Muslims. This has profound implication for those that want to tap into the lucrative *halal* and *halal* related market. Although, religion which implies one's beliefs about the complete credibility and integral truth of a religious teachings and scriptures (Moschis and Ong, 2011) is key in determining behavior; it is the intensity and devotion to the dictates of the religion (i.e., religiosity) that has significant impact on individual behavioral intention and actual behavior (Mukhtar and Butt, 2012).

Religiosity is the extent to which a person is devoted to his religion and expresses such through his attitude and behaviour (Johnson, 2001). The intensity of an individual's religiosity influences his consumption and financial behaviour (Mukhtar and Butt, 2012). Likewise, individuals may vary in their consumption and buying behavior based on their level of religiosity (Ibrahim and Ismail, 2015). Moreover, Muslims with high religiosity would be more likely to adopt or purchase *halal* and *halal* related products than Muslims with low level of religiosity (Nawawi et al., 2018). Consequently, based on the previous arguments, it is proposed that the intensity of one's religiosity can affect his behaviour towards adopting a religious labelled product.

Several studies in the Islamic finance adoption literature have investigated the moderating role of religiosity on adoption behaviour (Ku Amir et al., 2021; Masnita et al., 2019; Nawawi et al., 2018; Patwary et al., 2018; Ajetunmobi et al., 2018; Husin and Rahman, 2013; Thambiah et al., 2013). For instance, Husin and Rahman (2013) proposed a conceptual model for family takaful adoption based on the review of literature. The study identified religiosity as a potential moderator in family takaful adoption studies. Furthermore, Ajetunmobi et al. (2018) applied DTPB to investigate the moderating role of religion on the adoption of Islamic home financing in Nigeria. Findings revealed that religion has a moderating effect on the adoption of Islamic home financing. Equally, Patwary et al. (2018) investigated the factors influencing consumers to purchase Islamic hotel service. The study findings showed that religiosity has a moderating effect on the relationship between the independent variables and purchase of Islamic hotel service. However, the moderating effect of religiosity on MSMEs general takaful adoption behaviour has not been tested in previous research. The more the religiosity of an MSME owner-manager, the higher will be the rate of adoption of general takaful among MSMEs. To validate this assertion, the following hypothesis will be tested:

H8: Religiosity of an MSME owner-manager moderates the relationship between the predictor variables in the study and general takaful adoption.

4.9 *Moderating role of MSME owner-manager demographic characteristics*

Moderator variables have been shown to play a significant role in explaining and understanding consumer adoption decisions, especially in the field of marketing and technology adoption research (Venkatesh et al., 2003). A moderator is a qualitative (e.g., sex, education, religion, age) or quantitative (e.g., level of reward) variable that influences the relationship between the independent and dependent variables, either by increasing or decreasing the strength of the relationship, or reversing its direction (Namazi et al., 2016; Baron and Kenny, 1986).

In the field of technology adoption, numerous researchers have utilized several demographic characteristics such as age, gender, income level, education, and experience as moderator variables (Farooqi and Ansari, 2017; Venkatesh et al., 2003). Additionally, in marketing research, the use of moderator variables, particularly demographic factors, is prevalent (Ltifi et al., 2016; Berens et al., 2005). Moreover, studies have indicated that an MSME owner-manager's characteristics plays a substantial role in influencing the adoption of financial products (Al Balushi et al., 2019). Financial product adoption has been shown to differ based on an MSME owner-manager characteristics (Al Balushi et al., 2019). Investigating the impact of MSME owner-managers characteristics on adoption behaviour can support takaful operators (TOs) in developing successful marketing and segmentation strategies (Husin and Rahman, 2013).

Important demographic variables employed as moderators in behavioral intention and innovation adoption studies include age, gender, education, and experience (Husin and Rahman, 2013; Worthington, 2006; Venkatesh et al., 2003). However, in the Islamic finance adoption literature, particularly studies on MSMEs, there is a shortage of research investigating the role of moderators. Hence, this study seeks to investigate the moderating role of four demographic characteristics (age, gender, education, and prior loss experience) of MSME owner-managers on the adoption of general takaful. To substantiate this assertion, the following hypotheses will be tested:

H9: Demographic characteristics (age, gender, education and prior loss experience) of an MSME owner-manager moderate the relationship between the predictor variables in the study and general takaful adoption.

5. Conclusion

The present study proposed a conceptual framework based on DOI and UTAUT to specifically examine general takaful adoption among MSMEs owner-managers in North-West Nigeria. Upon validation, this framework could be used as an underlying model for evaluating MSMEs owner-managers intention to adopt general takaful as a risk mitigation tool. It is imperative to understand the influential factors affecting MSMEs owner-managers decisions regarding general takaful adoption as the success of any marketing and promotion strategy depends on it. Additionally, the proposed model can assist takaful operators and agents to identify the relevant features that specifically appeal to MSMEs owner-managers intention to adopt general takaful schemes. Furthermore, the framework identified specific factors that could be used by future researchers to investigate general takaful adoption. It is hoped that the validation of the framework will be of significance to takaful operators, takaful agents and researchers in the field of general takaful adoption.

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The External Environment Driving Internal Organizational Change: Empirical Evidence from Commercial Banks' Adoption of Islamic Financial Transactions in Libya

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Abstract

This paper examines the Libyan commercial banks' adoption of Islamic financial transactions to achieve a real value for stakeholders related to internal environmental adaptation. Accordingly, a questionnaire was designed and distributed to 14 commercial banks in Libya. Structural Equation Modelling (SEM) has been employed for testing the hypotheses. In the context of hypothesized modelling, the conceptual framework portrayed the constructs of the variables employed in the study to be Libyan commercial banks' adoption of financial transactions as the dependent variable and the external environment as factors driving organizational change as the independent variable. The adaptation of the commercial banks' internal environment acts as a mediating variable. The Confirmatory Factor Analysis (CFA) is applied to the relationship between measures of constructs and indicators. The results showed that the estimations of maximum likelihood (ML) were satisfactory. The results of SEM showed that commercial banks' adoption of Islamic financial transactions is more related to their capability of adapting their internal environment than achieving an economic and social value of stakeholders. Finally, the article provides future research directions on commercial banks' ability to adapt to their internal environment to drive change and commercial banks' adoption of Islamic financial transactions.

Keywords: adoption, adaptation, change, stakeholder, neo-institutional theory, Islamic banking

1. Introduction

Commercial banks broadly act as financial intermediaries between savers who deposit money in a bank and borrowers who receive a loan from that bank in return for the imposed interest (Diamond and Rajan, 2000). They offer various financial services, such as keeping and investing deposits (Werner, 2016). According to these services, Sealey deemed commercial banks as companies that provide different loan products for persons who wish to borrow (Sealey and Lindley, 1977). This view supports an argument that commercial banks can adopt Islamic financial transactions as a financial innovation that can achieve financial intermediation between savers and investors and balance economic and social returns (Alharbi, 2015; Iqbal and Mirakhor, 2011).

Thus, the banks can diversify their activity, meet their clients' needs, and attract new clients who have religious beliefs about the prohibition of usury and desire to deal according to the *Shariah* as Islamic dealings can provide commercial banks with various financing methods (Alharbi, 2015; Dinc, 2020; Gait and Worthington, 2008).

In this regard, many scholars discussed the necessity of commercial banks to comply with *Shariah* in their financial transactions to promote customers' trust (Bukair and Abdul Rahman, 2015; Nomran and Haron, 2020; Nomran et al., 2018). Dusuki (2008a) stated that the primary motivation of stakeholders for adopting Islamic financial transactions in commercial banks is to promote Islamic values and norms. Thus, commercial banks have to adopt Islamic financial transactions to achieve the actual value of stakeholders (Siddiqi et al., 2019).

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Along the same lines, the Islamic financial literature (Ali et al., 2018; Al Balushi et al., 2019; Bananuka et al., 2019; Juma et al., 2020) employed a framework to analyse consumer behaviour to explain the determinants of users' acceptance of Islamic financial transactions as financial innovations. However, theoretically, the available studies did not provide a conceptual framework that justifies the external environment driving commercial banks to organisational change and adopt Islamic financial transactions. In this context, in the scope of neo-institutional theory, the authors argue that the external environment may drive change and Libyan commercial banks' adoption of Islamic financial transactions. However, these banks' adoption will be related to their capability to adapt to their internal environments. Lastly, in managerial literature, this study highlights the adoption of internal environments to adopt Islamic financial transactions.

This is the first study conducted on the Libyan commercial banks to the best of our knowledge. It has been organised to identify the issue of the study, then identify the conceptual framework in the context of organisational and Islamic banking literature, and employ a methodology to examine the hypotheses and analyse the hypothesised modelling. Finally, the study outlines the implications of the study.

1.1 Identifying the issue of the study

Globally, in the context of religious beliefs and ethics, in many countries, commercial banks and financial institutions have adopted Islamic financial transactions. Some countries have changed their financial sector to be compatible with Islamic law, such as Malaysia and the Arab Gulf States. In contrast, others have completely changed their financial sectors, such as Iran and Sudan. The aim of such adoption is to reinforce an Islamic identity and a radical change from an interest-based economy to a profit and loss sharing-based economy (Khan, 2010). In the same vein, religious beliefs were the motivation to change in Libya. Accordingly, the Libyan General National Conference issued Law No 1 in 2013 prohibiting interest-based public and commercial financial transactions in the Libyan economy on 1 January 2015. However, this law was issued without making strategic plans to support the capability of Libyan banks to apply Islamic financial transactions. After that, the Libyan Parliament issued Law No 7 of the year 2015, modifying Law No 1, and it will be implemented on the legal persons by the year 2020. Nevertheless, 2021year came, and no changes have been observed to transform its banking sector to deal with Islamic financial transactions.

1.2 An overview of studies and research investigating the adoption of Islamic financial transactions in Libyan commercial banks

Studies have investigated the mechanisms of the Libyan commercial banks' transformation from the conventional to the Islamic system. Several factors, however, hinder the transformation. Some focused on the internal hindrances of transforming Libyan banks by examining perceptions, attitudes, and behavioural responses of bank employees about the conversion of transactions of Libyan commercial banks to be *Shariah*-compliant. The researchers collected the perceptions of the attitudinal responses of the Libyan bank employees to form a general idea of employees' perceptions about the possibility of changing and the banks' employees' resistance to this change (Abdalla et al., 2015; Shafii et al., 2016). Others examined the disclosure compliance with AAOIFI guidelines by the Fashlowm Islamic branch at Gumhouria Bank. They stated that compliance was minimal. The main reason was that the Islamic Fashlowm branch is a subsidiary of a conventional bank. Furthermore, staff lacked training in AAOIFI standards (Ahmad and Daw, 2015).

Recent studies revealed Libyan commercial banks' challenges and problems. (Al-Qasim and Shaala, 2021; Elkrghli 2020; Mahjoub et al., 2020; Massoud and Mohammed, 2020) revealed challenges and problems currently facing Libyan commercial banks. It is rather striking that these studies confirmed the results of the studies above. In summary, the available literature presents a research gap that opens up new horizons to examine the adaptation of Libyan commercial banks' internal environment as a critical determinant of adopting Islamic financial transactions to achieve stakeholders' economic and social value.

2. Critical Review of Identifying Conceptual Framework

In the context of neo-institutional theory, the organisations' external environment openly determines their organisational behaviour through their organisational fields. The organisational field delineates organisational entities with commensal and symbiotic ties with organisations (Scott and Davis, 2016). These ties lead to institutionalisation, which involves social processes, obligations, or actualities in taking on a rule-like status in social thought and action (Meyer and Rowan, 1977). Organisations have adopted these as “myths and function as institutional constraints for giving these organisations legitimacy, resources, stability, and enhanced survival prospects” (Meyer and Rowan, 1977). In this respect, Tolbert and Zucker (1996) argued that in the context of institutional change, organisations will adopt professions, policies, and programmes created along with the products and services that are understood to produce rationalised institutional rules. Hence, institutionalisation is evident and effective when changing and adopting organisational innovations accompanying adaptation (Tolbert and Zucker, 1996). From this point of view, in the following parts, we identify the adoption term as an organisation’s adoption of managerial innovations accompanying structural changes as the response to changes in their external environment that require reshaping their internal environments.

2.1 The adoption of managerial innovation for organizational change

In organisational literature, the term ‘adoption’ is comprehensively related to innovation. It means “adopting innovations generated elsewhere, and they have implemented by organisations as new programmes to use by its members or clients” (Damanpour et al., 2018). In return, this boosts the spread of adopted innovation across organisations in their organisational field (Tolbert and Zucker, 1996). More minutely, the goal of the adoption of managerial innovations is to improve the organisation’s performance in terms of its efficiency and effectiveness by adopting new programmes and practices to change its administrative systems and managerial procedures (Camisón and Villar-López, 2014; Damanpour and Aravind, 2011; Evangelista and Vezzani, 2010; Exposito and Sanchis-Llopis, 2018). Along the same lines, others argued that organisations’ change decisions are related to their capacity to adapt and transform (Gorddard et al., 2016). Hence, adopting innovations can be deemed the philosophy of positive organisational change that explains how organisations can improve (Cantore 2017:275–76). This view complies with the view of Damanpour et al. (2008), who deemed that organisations seek to change by adopting innovations to respond to changes in their environment (Damanpour and Schneider, 2006). While in the institutional literature, if organisations decide to adopt managerial innovations, this requires institutionalisation in the organisational field to acquire legitimacy (Tolbert and Zucker, 1996). Besides that, they will be obliged to incorporate many formal organisational structures such as creating professions, policies, and programmes that emerge as reflections of rationalised institutional rules, side by side, with adopting the new products and services (Meyer and Rowan, 1977). Thus, the above opinions highlighted that adopting innovations accompanying adaptation requires structural changes to reshape the organisation’s internal environment as the response of changes in their external environment to acquire legitimacy. In this vein, in the following parts, the authors have discussed the external environment as a driver for organisational change and adopting Islamic financial transactions as one of the organisational innovations accompanying adaptation.

2.2 The external environment as a driver of organizational change

In management, the entities surrounding an organisation impact decision making. Overall, these entities represent the external environment, namely customers, employees, shareholders, government, the media, public opinion, etc. (Freeman et al., 2010). Accordingly, researchers have examined the influence of the environment on organisations. Hiriyappa (2008) and Ferguson (1993) examined the effect of the environment on organisations. Apart from the terminology that has been used, they classified the organisation’s external environment from closest to farthest from its internal environment into operating, industry, and remote environments. Thus, the range of an organisation’s goals will be identified according to changes in its external environment, and its effects will be more apparent when closer to the organisation. In this regard, we discuss the short-term impact of the external operating environment on an organisation. Daft (2010) sees that organisations should create value for stakeholders, either their owners, customers, or employees, through their activities.

On the other hand, Freeman deems that the external environment provides social support for the organisation. Thus, stakeholders are original pressure sources on an organisation’s decisions and a key determinant of its strategies (Freeman et al., 2010). Consequently, the pressure of the external environment will motivate organisations to change purposefully (Ram and Swatman, 2008). This view corresponds with Alharbi, who deemed that the philosophy of adopting Islamic financial transactions means that financial dealings are according to a *Shariah* framework to achieve a balance between economic and social return (Alharbi, 2015).

Thus, the commercial banks’ decision to adopt Islamic financial transactions represents adopting new innovative products and services in the market. This view has been confirmed by the literature of Islamic finance such as (Dusuki, 2008a; Amin et al., 2011; Anouze et al., 2018; Zubaidah and Mudrifah, 2019), who reviewed the perspective of various stakeholders about the philosophy and objectives of Islamic banking. In general, the authors argued that adopting Islamic financial transactions in financial institutions and commercial banks is a new financial innovation that banks must adopt to create real value in society and seek to fulfil all stakeholders' well-being.

As Dusuki (2008b) confirmed, stakeholders' (individual and societal) primary motivation to adopt Islamic financial transactions in commercial banks is promoting Islamic values and norms. Thus, commercial banks must adopt Islamic financial transactions to achieve real value for stakeholders. This is through achieving social and financial gains of the individuals of society (Siddiqi et al., 2019), namely achieving an economic and social value represented in promoting Islamic values and norms, achieving economic gains, and achieving social gains (Dusuki, 2008b). This includes standardising procedures and standards, namely *Shariah* standards, to evaluate the integrity of Islamic financial transactions, precisely the AAOIFI *Shariah* standard. It has led to institutionalisation in the banks and financial institutions that have adopted Islamic financial transactions. This innovation has introduced an alternative system of conventional system interest-based, which has gained them legitimacy across regional and international borders (Sandal, 2019). The discussions above reflect that the adoption of Islamic financial transactions is related to achieving stakeholders' economic and social value.

2.3 The adaptation of commercial banks' internal environment

Technically, Islamic financial transactions are defined as binding sale contracts to carrying out an agreement between two or more parties. Accordingly, Islamic financial transactions specify a contractual obligation that balances individuals' rights (Iqbal and Mirakhor, 2011) by trading intangible assets (Soualhi, 2015). Broadly, there is agreement among *Shariah* scholars that all commerce or business transactions are legitimate as long as they do not transgress the bounds of the *Shariah*. In this regard, all Islamic financial transactions are governed by general conditions to determine their permissibility, as follows (Gait and Worthington, 2008; Khan, 2010):

- Prohibition of *Gharar*: It means that a business transaction will be legitimately prohibited if its contract involves uncertainty.
- Prohibition of *Maysir*: It means that a business transaction will be legitimately prohibited if its contract involves gambling, namely, the transaction is mere chance or speculation.
- Prohibition of *Riba*: it means that a business transaction will be legitimately prohibited if its contract involves an increase that will be paid on an original amount as interest. Any project's profits must derive from commercial risk.

In this regard, the authors argue that in the context of *Shariah* requirements, the self-peculiarities of Islamic financial transactions will govern commercial banks' capability to adapt their internal environment when adopting them as a funding method. This involves identifying and adapting means that an organisation adapts its possibilities by redesigning its formal structure according to explicit goals and policies specifying its activities (Meyer and Rowan, 1977). Accordingly, redesigning organisational structure depends on the prevailing circumstances of an organisation considering its goals, strategies, workforce, technology, and environment. Successful structural change is designing a structure to respond to changes in goals, technology, and environment (Bolman and Deal, 2008). In other words, the change relies on the organisations' capability to adapt to its internal environment either by developing production processes or adopting innovation.

Practically, Sanjeepan (2016) stated that commercial banks seeking to offer or adopt new product innovations engaged in creating new knowledge. They should translate this knowledge into new outputs, products, and processes. These conditions correspond precisely with the requirements of the adoption of Islamic financial transactions in commercial banks. The adoption of Islamic financial transactions requires radical changes in commercial banks' accounting processes and governance structures (Maali and Napier, 2010). According to AAOIFI *Shariah* standard number (6), the adoption of Islamic financial transactions will be accompanied by structural changes in commercial banks internal environment. Namely, the organisation restructures by establishing Islamic banking management because to examine transactions and procedures in addition to reformatting financial contracts to comply with *Shariah* standards.

Moreover, a *Shariah* supervisory board consist of scholars in *Shariah* and everyday financial transactions. They are qualified to issue *fatawa (Shariah* rulings*)*, and their decisions have to be binding on the bank's management. They open investment accounts in the central bank to avoid dealing with interest while also opening new *Shariah*-compliant individual, institutional, local, and international banking accounts. In return, commercial banks have to prepare their technical capabilities by rehabilitating all their employees concerning Islamic banking principles and rules, further establishing training programmes specialising in Islamic financial accounting and risk management. In summary, the adaptation of the commercial banks' internal environments is a crucial determinant of adopting Islamic financial transactions.

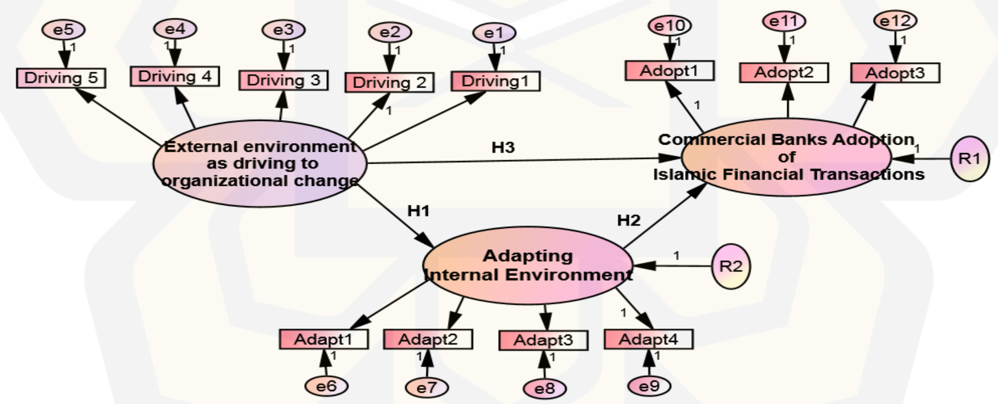
3. Conceptual Framework

In the context of the discussion above, the authors have designed a model that embodies the external environment as a driver for organisational change and adopting Islamic financial transactions in commercial banks according to the following hypothesis, as shown in Figure 1 below:

Hypothesis H1: The changes of commercial banks' internal environment are related to their external environment as driving organisational changes.
Hypothesis H2: Libyan commercial banks' adoption of Islamic financial transactions is related to adapting their internal environment.
Hypothesis H3: Libyan commercial banks' adoption of Islamic financial transactions is related to their external environment for achieving an economic and social value of stakeholders.

Figure 1 reflects that if the commercial banks decide to adopt Islamic financial transactions as the response to their external environment to achieve stakeholders' fundamental value to acquire legitimacy, they will adapt their internal environment to prepare for the adoption process.

Figure 1: Conceptual Framework



4. Research Methodology

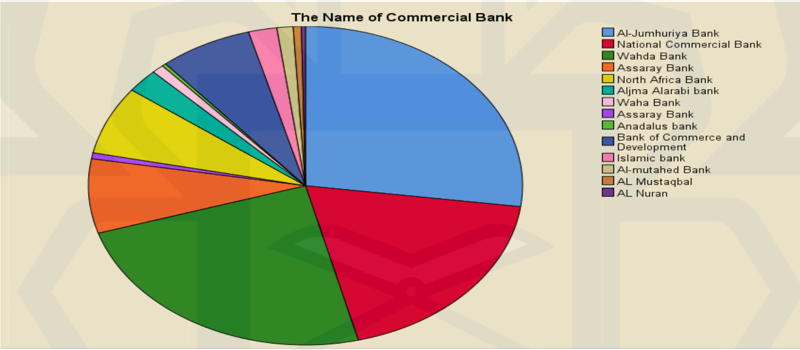
Broadly, the research methodology represents the different ways in which knowledge can be created to answer study questions and underpin its results (Adams et al., 2007). According to Creswell (2012), there are three research methods, often classified as qualitative, quantitative, and mixed methods, which are widely used in various scientific fields. In this study, the authors have adopted the quantitative method (Creswell, 2012). Accordingly, in line with the conceptual study framework, for testing the hypotheses, Structural Equation Modelling (SEM) has been employed to depict and test the hypothesised relationships among observed variables quantitatively. It is worth noting that there were limitations when identifying the research sample and collecting data because of the crisis COVID-19. For overcoming those difficulties, the research sample has been identified as a probability sample. Data was collected by distributing questionnaires and sending e-questionnaires via email to Libyan commercial banks.

4.1 Identifying population and sample size

Conceptually, the study population represents the group of people, events, or things of interest for which the researcher wants to make inferences. In contrast, "the sample represents a subset of the study population that comprises some members selected to conduct the study" (Sekaran and Bougie, 2016:263–237). From the practical side, according to the official statistics records of the Central Bank of Libya (2014), the total number of employees in the Libyan banking system is about 19,183 employees. For a study population of 20,000 employees, the sample was defined as 377 according to the table set up by Krejcie and Morgan to simplify the decision of determining sample size (Sekaran and Bougie, 2016). Hair suggested that the appropriate sample size is 200 to 400 respondents (Hair et al., 2010).

Since the authors decided to employ SEM, 504 questionnaires surveys were collected and processed using the SPSS software version 26. Invalid questionnaires were excluded to form a total of 332 completed and valid questionnaires from a sample size of 14 banks, as shown in Figure 2. The sample consisted of managers, directors of departments, and personnel who will answer the questionnaire in the Libyan commercial banks.

Figure 2: Libyan Banks Participating in the Study



4.2 Measuring instruments

In the context of hypothesised modelling, the conceptual framework has portrayed the concept constructs of employed variables of the study, with Libyan commercial banks' adoption of financial transactions as the dependent variable. The external environment as driving organisational change is the independent variable. The adaptation of the commercial banks' internal environment was the intermediate variable. In this regard, the conceptual and operational definitions of explanatory variables and a response variable have been identified to establish a measuring instrument to collect testing hypotheses in hypothesised modelling.

Five specialised academic faculty members in IIUM and two more experts in Islamic banking in Libya evaluated the validity of measurements. The experts agreed that the questionnaire covered all the variables identified in the study model. Consequently, we distributed 80 questionnaires to respondents from different commercial banks in Benghazi city. Sixty questionnaires were complete, and the other 20 were incomplete. The Cronbach's Alpha Test was carried out, and the result was equal to 0.979, which proves the measurements' reliability.

5. Analysis and Findings

5.1 Description of data and techniques used

In line with the research methodology, SEM is employed to test the study hypotheses. The measurement model (CFA) was applied to infer the relationship between constructs and indicators designed to measure elements or factors. In addition, carrying out the CFA (first-order) is deemed the first step to validate the measures underlying the structural model (SEM). While "the overall structural model identifies relations among latent variables and regressions of latent variables on observed variables" (Khine et al., 2013:6). We used SEM

AMOS software (version 23.0), along with SPSS software (23.0), to detect missing, normality, reliability data, and randomness of the sample to measure the conceptual construct of variables employed in the study, as shown in Table 1.

Table 1: The Measurements of the Conceptual Construct of Variables Employed in the Study

Construct of Variable	Coding	Measurement	Mean	Std	Skewness	Kurtosis	Cronbach'∞
The external environment as driving organisational changes.	Driver 1	-Religiously, Islamic financial transactions must be adopted in Libyan commercial banks.	4.33	.621	-.824	2.316	.73
	Driver 2	- Islamic financial transactions must be adopted to satisfy clients' desires.	4.15	.618	-.724	2.167	
	Driver 3	-Islamic financial transactions must be adopted to satisfy the desires of bank personnel.	4.02	.714	-.972	2.309	
	Driver 4	After imposing Law No. 1 of 2013, the prohibition of interest-based financial transactions, Islamic financial transactions must be adopted.	4.23	.550	.061	-.251	
	Driver 5	With the global spread of Islamic banking, Islamic financial transactions must be adopted in Libyan Commercial Banks.	4.30	.611	-.590	1.599	
The adaptation of their internal environment	Adapt 1	The availability of human resources is qualified to apply Islamic financial transactions.	3.17	1.054	-.600	-. 513	.88
	Adapt 2	The availability of human resources to evaluate financial transactions.	3.17	1.040	-.482	-.548	
	Adapt3	The training programmes qualify bank personnel as knowledgeable accountants.	3.21	1.147	-.547	-.580	
	Adapt4	Financial statements of the bank disclose its Islamic financial transactions.	3.15	1.058	-.566	-.630	
The commercial banks' adoption of Islamic financial transactions	Adopt1	By 2021, the bank can adopt Islamic financial transactions	2.43	1.118	.201	-.849	.70
	Adopt 2	The bank's technical and financial capabilities can enable it to fully transform into Islamic banking by 2021.	2.87	1.108	-.029	-.838	
	Adopt 3	Periodical financial reports disclose Islamic financial transactions on the bank's website.	2.58	1.122	-.195	-1.12	
	Adopt 4	Bank can adopt MURABAHAH formulas	.65	.477	-.649	-1.59	
	Adopt 5	Bank can adopt ISTISNA formulas	.27	.464	1.507	2.410	
	Adopt 6	Bank can adopt IJARA formulas	.24	.426	1.236	-.474	
	Adopt 7	Bank can adopt SALAM formulas	.21	.411	1.402	-.034	
	Adopt 8	Bank can adopt MUDARABAH formulas	.23	.517	4.854	45.69	
	Adopt 9	Bank can adopt MUSHARAHA formulas	.32	.466	.794	-1.38	
	Adopt 10	Bank can adopt QARD HASSAN formulas	.33	.470	.735	-1.47	
	Adopt 11	Bank can adopt *Shariah*-compliant services	.36	.670	6.699	82.28	
	Adopt 12	Bank cannot currently adopt Islamic financial formulas	.11	.311	2.530	4.428	
The demographic data	bank	Contributing banks in the search	3.49	2.96	1.61	1.80	.71
	position	Respondents' current position	3.21	.851	-.750	-.387	
	age	Respondents' age	1.99	.855	.332	.865	
	education	Respondents' educational level	2.64	.725	-.347	-.036	
	area	Respondents' specialisation area	4.86	2.14	-.217	-1.08	
	qualify	Respondents' Islamic professional qualification	1.37	.744	1.98	2.965	
	Expe-bank	Respondents' banking experience	.238	1.04	.114	-1.16	
	Expe-ISM	Respondents' Islamic banking experience	2.10	.441	.134	-.855	

The Cronbach's Alpha Test of the conceptual construct of variables employed in hypothesised modelling.	Cronb∞ = .81
Random test of the sample according to respondents' specialisation (z) = -.677, by mean	Sig = .499
Random test of the sample according to Respondents' current position (z) = - 1.752, by mean	Sig = .08

5.2 Results of SEM

5.2.1 Results of CFA Estimations

In Figure 2,and Tables 2 and 3, the results of the CFA model for the estimations of maximum likelihood (ML) were satisfactory compared with the threshold of fit indices that shown in Table 3, where the results of the CFA model were acceptable for the requirements of fitness indices of CFI = (0.95) and TLI = (0.93). While chi-square = (2.4) and RMSEA = (0.06) were below the threshold value. Likewise, in Table 2, the value of C.R shows that the correlation between observed and latent variables was significant and positive, where it was more than (1.96), and p-value was less than (0.01). Moreover, correlating (e2) with (e3) was significant and negative. Statistically, correlating this variance is essential. According to Collier (2020), the rationale of correlating error terms is that an unknown common source or standard constructor variance needs to be theoretically justified. In short, in the context of the study's conceptual framework, the question of (Driving 3) has been formulated to measure employees' desires as driving the banks to adopt Islamic financial transactions. Likewise, the question of (Driving 4) was formulated to examine Law No. 1 of 2013 as driving change and adoption. However, since this is a general law imposed forcedly onto Libyan commercial banks, there may be a strong and negative correlation between these two observed variables.

Finally, there is a statistically significant relationship between measures of constructs and indicators that have been designed to measure variables, where the coefficients of estimated parameters were significant (at p = .05); *namely, "the coefficient is significant (i.e., z ≥ 1.96 for p ≤ .05) at a given alpha level by dividing the unstandardised coefficient by the standard error"* (Khine et al., 2013). In this case, the estimated coefficients of value (F2>F3), (F2>F1), and (F1>F3) were significant with more than (0.05), namely (0.72), (0.07), and (0.07), respectively.

Table 2: Estimation of CFA Regression

			Estimate	S.E.	C.R.	P
Adapt3	<-	F2	.982	.064	15.366	***
Adapt2	<-	F2	1.000			
Driving 1	<-	F1	.867	.109	7.929	***
Driving 4	<-	F1	1.000			
Driving 5	<-	F1	1.056	.117	9.032	***
Driving 2	<-	F1	.890	.110	8.110	***
Adopt 1	<-	F3	1. 674	.199	8.411	***
Driving3	<-	F1	.997	.139	7.161	***
Adopt3	<-	F3	1.000			
Adapt4	<-	F2	.934	.058	16.059	***
Adopt 2	<-	F3	1.085	.158	8.411	***
Adapt1	<-	F2	1.005	.056	17.865	***

F1(External environment as driving to organisational change) F2(Adapting Internal Environment), F3(Commercial Banks' adoption of Islamic Financial Transactions)

Table 3: Fit Indicators Evaluating CFA Estimates

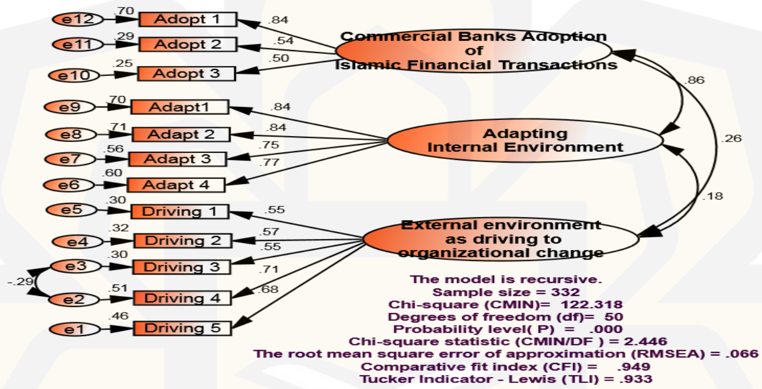
Measure	Estimated Indices	Threshold of fit indices / Interpreting
CMIN/DFchi-square	2.44	Acceptable (5 ≤ value ≤ 3) Excellent
CFI	.95	Acceptable (.90 ≤ value ≤ 1) Excellent
TLI	.93	Acceptable (.90 ≤ value ≤ 1) Excellent
RMR	.041	Acceptable (0.08≤ value ≥. 1) Excellent
SRMR	.000	Acceptable (.10≤ value ≥0) Excellent
RMSEA	.06	Acceptable (0.08≤ value ≥. 1) Excellent
P Close	.000	Acceptable (0.05> p ≥ .000) Excellent
References	(Collier, 2020; Hu and Bentler, 1999; Hair et al., 2010)	

Table 4: Estimation of CFA Covariance

			Estimate	S.E.	C.R.	P	Label
F2	>	F3	.418	.061	6.904	***	H1 supported
F2	>	F1	.062	.023	2.668	.008	H2 supported
F1	>	F3	.056	.017	3.254	.001	H3 supported
e2	>	e3	-.066	.018	-3.62	***	

F1(Adapting Internal Environment), F2(Commercial Banks' adoption of Islamic Financial Transactions) F3(External environment as driving to organisational change)

Figure 3: The Measurement Model CFA



5.2.2 Results of SEM estimations

In line with the results of the CFA estimates, the results were satisfactory compared with the threshold of fit indices, and the value of C.R of correlation between observed and latent variables was significantly and positively. However, there was a correlation between the constructs of the dependent variable (Libyan commercial banks' adoption of financial transactions) and the intermediate variable (the adaptation of the commercial banks' internal environment). The value of C.R between them was equal (0.86); according to Hair et al. (2010), there is maybe multicollinearity between them. The following step uses the overall structural model (SEM) to find a most parsimonious model that has portrayed interrelationships among observed variables and accurately reflected the associations between latent variables. It identifies regressions of latent variables onto observed variables (Khine et al., 2013) because the measurement model (CFA) treats all unobserved variables as exogenous or independent variables (Collier, 2020).

Overall, in Figure 4 and Tables 5 and 6, the results of the (SEM) model for the estimations of maximum likelihood (ML) were satisfactory compared with a threshold of fit indices that show in Tabel 6, where the results of (SEM) model were acceptable for the requirements of fitness indices of CFI = (0.95), TLI = (0.93), and RMSEA= (0.07), while chi-square= (2.6), which was below the threshold value. Likewise, the value of C.R shows that the correlation between latent variables was significant and positive, where it was more than (1.96), and p-value was less than (0.05). Moreover, the correlation between observed and latent variables was significant and positive, where it was more than (1.96), and p-value was less than (.001). Interestingly, the value correlating (e2) with (e3) was significant and negative. It is worth noting that there was a correlation between the observed variables (Adapt 4) and (Adopt 3), so they have dropped from the model. The value of the correlation between the dependent and the intermediate variable was the only one to become better (from 0.86 to 0.80), while the value of chi-square and RMSEA became lower (from 2.44 to 2.64) and (from 0.06 to 0.07). Consequently, the value (AVE) of all latent variables was more than 0.50, as shown in Table 6. Further, these constructs discriminated from one another, where the shared variance of Adapt and Driving with Adopt was (0.67) and (0.03), which was less than the value (AVE), namely (0.70) as shown in Table 7.

Figure 4: Overall Structural Equation Modelling (SEM)

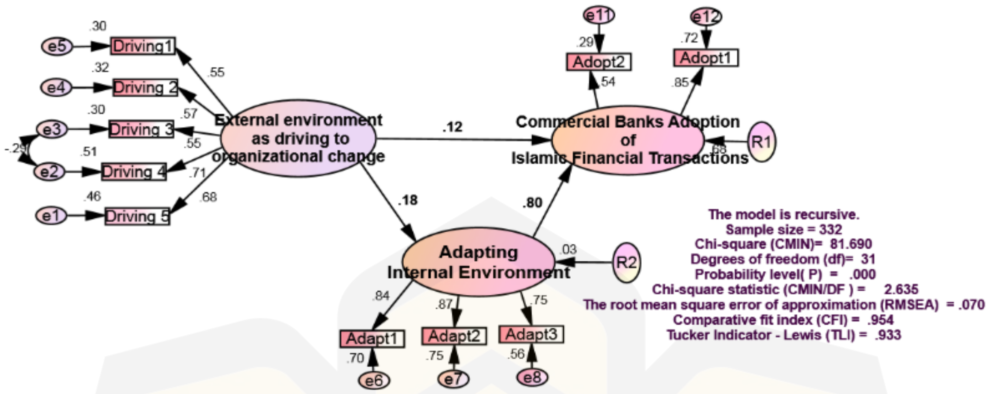


Table 5: Estimating Overall Structural Equation Modelling (SEM)

Conceptual Construct			Estimate	S.E.	C.R.	P	Label
F2	<-	F1	.459	.175	2.629	.009	H1 supported
F3	<-	F2	.832	.062	13.350	***	H2 supported
F3	<-	F1	.313	.150	2.083	.037	H3 supported
e2	<-	e3	-.066	.018	-3.584	***	
Driving 2	<-	F1	1.000				(AVE) = .61
Driving 3	<-	F1	1.117	.165	6.785	***	
Driving 4	<-	F1	1.123	.139	8.109	***	Cronbach'∞ = .73
Driving 5	<-	F1	1.189	.140	8.492	***	
Driving 1	<-	F1	.977	.131	7.452	***	
Adapt 2	<-	F2	1.000				(AVE) = .82
Adapt 1	<-	F2	.980	.056	17.449	***	Cronbach'∞
Adapt 3	<-	F2	.951	.063	15.171	***	= .85
Adopt 2	<-	F3	.643	.077	8.338		(AVE) = .70
Adopt1	<-	F3	1.000				Cronbach'∞ = .63

F1(Adapting Internal Environment), F2(Commercial Banks' adoption of Islamic Financial Transactions) F3(External environment as driving to organisational change)

Table 6: Fit Indicators Evaluating (SEM) Estimates

Measure	Estimated Indices	Threshold of fit indices / Interpreting
CMIN/DF chi- square	2.64	Acceptable (5 ≤ value ≤ 3) Excellent
CFI	.95	Acceptable (.90 ≤ value ≤ 1) Excellent
TLI	.93	Acceptable (.90 ≤ value ≤ 1) Excellent
RMR	.038	Acceptable (0.08≤ value ≥. 1) Excellent
SRMR	.000	Acceptable (.10≤ value ≥0) Excellent
RMSEA	.07	Acceptable (0.08≤ value ≥. 1) Excellent
P Close	.000	Acceptable (0.05> p ≥ .000) Excellent
References	(Collier, 2020; Hu and Bentler, 1999; Hair et al., 2010)	

Figure 2: Measurement Model CFA

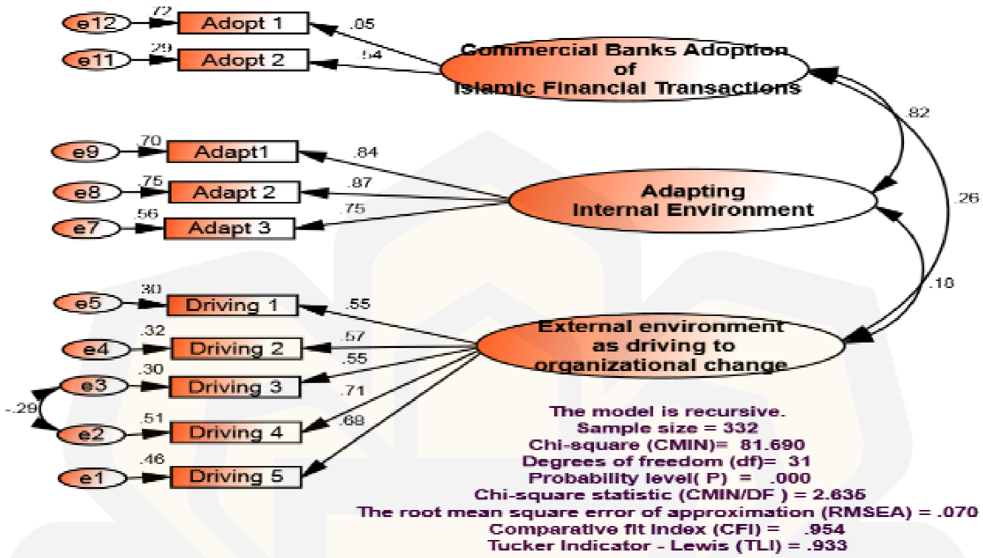


Table 7: Estimating Extracted Variance of CFA

Latent variables	Adopt	Adapt	Driving
Adopt	.70		
Adapt	0.67	.82	
Driving	0.03	0.07	.61

6. Discussion

This section discusses the results of SEM estimations to offer insights into the study. The authors argued that the external environment might drive change and Libyan commercial banks' adoption of Islamic financial transactions, but these banks' adoption will be related to their capability to adapt to their internal environments. In the context of hypothesised modelling, statistically, the results of SEM supported the hypotheses of the study, namely (H1), (H2), and (H3). The correlation between latent variables was significant and positive, as shown in Table 5. The value of C.R was more than (1.96), and p-value was = (0.009) H1, (***) H2, and (0.037) H3, which was less than (0.05). Thus, modelling reflects that the Libyan commercial banks' external environment as driving organisational changes explained 18% and 12%, while Libyan commercial banks' internal environments explained 80% from the change into their adoption of Islamic financial transactions. This reflects that the Libyan commercial banks' decision to change and adopt Islamic financial transactions to achieve an economic and social value of stakeholders (members of Libyan society) will be related to their adaptation to the internal environment.

Overall, the results were consistent with respondents' answers to the question that Libyan commercial banks can adopt Islamic financial formulas, and their overall agreement was *murabahah* =(65%), *istisna* =(25%), *ijara* =(23.8%), *salam* =(22%), *mudarabah* =(22%), *musharaka* =(32%), *qard hassan* = (33%), *Shariah*-compliant services=(33%). The current technical capability of Libyan commercial banks enables them to adopt the *murabahah* formula more than other formulas. The respondents answered that the Libyan commercial bank's technical and financial capabilities could enable them to transform fully into Islamic banking by 2021, while 225 respondents disagreed. These results reflect Libyan commercial banks' obstacles when adopting Islamic financial transactions and imposing Law No. 1 of 2013. These results correspond with the results of recent studies conducted on Libyan commercial banks, as shown in Table 8.

Table 8: Studies' that Examined Challenges and Problems Facing Libyan Commercial Banks

Author	Purpose	Finding
(Massoud and Mohammed, 2020)	Examining the practices of the *Shariah* supervisory body in the Libyan Islamic banks.	The results showed a need to develop a practical model for the *Shariah* supervisory body while developing the *Shariah* supervisory methodology consistent with the nature of Islamic banks in Libya.
(Elkrghli , 2020)	Examining the link between E-marketing and profitability of Wahda Bank as one of the Libyan banks in Benghazi City.	The weakness of technological and knowledge infrastructure.
(Al-Qasim and Shaala, 2021)	Investigating obstacles that prevent applying Islamic financing forms to achieve sustainable development in Libya.	The constraints that stand in the way of applying Islamic banking are the legal and administrative environment. The judiciary in which banks operate.
(Mahjoub et al., 2020)	Examining commitment of the Libyan commercial banks (Jomhouria, Sahara, National Commercial and Wahda) to the central bank of Libya circular number (3) 2005, regarding liberalising the prices of banking services.	After amending the 2005 law and issuing the 2013 law prohibiting interest-based financial transactions, Libyan commercial banks have raised the prices of banking services. There was also weakness in the quality of banking services, from a view of banks' clients under study.

7. Conclusion and Recommendation

The results revealed a causal effect of the independent variable (external environment as driving to organisational change) on a dependent variable (commercial banks' adoption of Islamic financial transactions) that is transmitted by a mediator variable (adapting their internal environments). Thus, this study addressed a research gap that opens new horizons to examine Libyan commercial banks' capability to adapt their internal environment as an obstacle to adopting Islamic financial transactions. Future research should not focus only on stakeholders' desire to drive commercial banks' change to adopt Islamic financial transactions but also examine commercial banks' capability to adapt their internal environment to do so.

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