



# An Analytical Framework to Examine Shari'ah-Compliant Mortgage Financing by Financial Cooperatives in Malaysia

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## Abstract

This paper utilises an analytical framework to explore and critically examine issues and challenges of offering Shari'ah-compliant mortgage financing by financial cooperatives in Malaysia. Concepts from five distinct theories (Theory of Credit Cooperative, Transaction Costs Theory, Agency Theory, Stakeholder Theory, and Theory of Credit Rationing) are modified and integrated to form a hybrid, layered framework. This is then used as a 'lens' to highlight the issues pertaining to business models and strategies, good governance, regulation and supervision, risk management, human resource management, which may influence the success of mortgage financing. This analytical framework is useful for relevant stakeholders on how to manage the issues, challenges, and harnessing the prospects of Shari'ah-compliant mortgage financing products.

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*Keywords:* Shari'ah-compliant mortgage financing, financial cooperatives (FC), analytical framework (AF)

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## 1. Introduction

Housing for many households around the world constitutes both the largest expense and probably the single-most important asset. For the majority in developed countries, and for some in emerging market economies, housing is adequate. However, in Malaysia, as in other third world countries, rapid urbanisation has increased the ranks of the urban poor and created a demand for housing and more importantly—its means of financing. Ebrahim (2009) argues that the formal housing finance system is onerous to the underprivileged. For instance, although some financial institutions, e.g., commercial banks and finance companies, are providing mortgage financing, the facilities tend to be extended to middle- and upper-income households rather than the poor (Benjamin, Rubin, and Zielenbach, 2004). Griffiths and Howells (1990) contends that this can be attributed to their “lack of collateral and high risk of defaulting”.

In North America for example, credit unions are a particular form of financial cooperative (hereinafter FC) that play an active role in tackling financial exclusion faced by low- to middle-income households. Essentially, not-for-profit FC consist of a group of people who share some association through be it through their profession, social interest, political inclination, and/or religious affiliation, which has led them to pool together their capital, usually on a regular basis. These savings, or commonly known as 'shares', are then used to provide financing to its members. Since their main purpose is to help other members (and themselves), it is normal for an FC to give out lower-than-market profit rate on financing for member-mortgagors, as well as gives higher-than-market returns for their member-savers. Unlike other types of financial institution, they primarily rely on voluntary effort to organise and administer the pooled fund. Although some of these credit unions have since hired professional managers, and received on-lending, the core, self-help principles still soldier on. Among the prime examples of Shari'ah-compliant mortgage financing providers in North America are American Finance House LARIBA, Guidance Residential, LLC (both in the U.S) and Ansar and Islamic Cooperative Housing Corporation Ltd. (Canada).

Even though FC\* in Malaysia that actively participate in Shari'ah-compliant finance constitute a part of the larger Islamic financial institutions, its lack of involvement in the Shari'ah-compliant mortgage market is rather puzzling. Shari'ah-compliant mortgage financing represents an important risk profile for many FC but it also include restrictions on how to raise finance (Cornforth and Thomas, 1990; Peterson and Kidwell, 1983). By venturing into the mortgage finance market however, these FC may be repeating some of the mistakes made by the savings and loan industry in the U.S by expanding their financing into areas where they have little or no expertise (Tripp and Smith, 1993). In honouring the self-help principles of a cooperative society by providing Shari'ah-compliant mortgage financing to their religiously conscious-members, they will encounter issues and challenges that will inhibit their Shari'ah-compliant mortgage finance intermediation capabilities.

To the best of the authors' knowledge, there is yet an existence of consolidated body of literature on 'Shari'ah-compliant mortgage financing by FC', rather, what currently exists is a set of scattered studies juxtaposed within various fields of study (e.g., economics, sociology, and politics). The primary purpose of this concept paper is to present an analytical framework (hereinafter AF) to critically examine the issues and challenges of offering Shari'ah-compliant mortgage financing within the complex organisational landscape in which they are situated. Using the AF as a 'lens', we deconstruct this landscape and identify various issues, which contribute to the context surrounding Shari'ah-compliant mortgage financing. The paper draws on the fields of FC, its mortgage finance intermediation activities, which offer insights into pertinent issues that might inhibit cooperative Shari'ah-compliant mortgage financing model. In addressing these objectives, this paper provides a brief overview of current issues in homeownership and Shari'ah-compliant mortgage financing, and critically discusses the challenges that FC might encounter in offering such product.

### 1.1 A Background of Financial Cooperatives in Malaysia

FC is essentially a cooperative society registered under Malaysian Cooperatives Commission or Suruhanjaya Koperasi Malaysia (SKM) and their core activity is to offer financing to its members. An FC finances its members from their capital fees contributed by its members on a monthly basis. It is obligatory for the FC members to pay membership fees besides accumulating the minimum required capital shares to be eligible for financing (i.e., personal financing, mortgage financing). Upon the approval of the Cooperative Board Member, processing fees and *takaful* (Islamic insurance) payment will be deducted from the total financing amount. The repayment will be managed through automated salary deduction administered by the Credit and Banking Services Division of ANGKASA<sup>†</sup> or more popularly known as Biro Perkhidmatan ANGKASA (BPA).

The FC movement started with the establishment of the first FC, Postal and Telecommunication Cooperative Thrift and Loan Society Limited (Kota Mas Berhad) in 21 July 1921, in the then Malaya. As the pioneering FC, Kota Mas Berhad paved the way for the rapid proliferation of cooperative societies in Malaysia.

Cooperative societies in Malaysia consist of mainly finance-based and various industries- and community-based cooperatives. Even though FC constitute a mere 5.4% (588) of all cooperative societies (10, 841), as of 31 December 2013, they generated up to a quarter (25.1%) of the total revenues generated by cooperative societies in Malaysia (Suruhanjaya Koperasi Malaysia, 2014b). The yearly directories of 'The Top 100 Cooperatives in Malaysia' by SKM also highlight the importance of FC to the cooperative

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\* The use of FC here denotes a combination of both financial cooperatives and cooperative banks in Malaysia. A cooperative bank is essentially a former FC that has been upgraded to a full-fledged bank once it fulfils the following two conditions: (a) has accumulated paid-up capitals of RM 500 million or more, and (b) passed a due diligence audit by SKM (Zazali Haron, personal communication, June 2, 2014). Unlike its FC counterparts governed by both Cooperative Act 1993 and SKM Act 2007, cooperative banks in Malaysia are also subjected to the Development Financial Institution Act 2002, under the purview of Bank Negara Malaysia.

<sup>†</sup> Angkatan Koperasi Kebangsaan Malaysia (ANGKASA) or loosely translated as 'National Cooperative Organisation of Malaysia' is the apex body of cooperative societies in Malaysia. Biro Perkhidmatan ANGKASA (BPA) is a division in ANGKASA that administer the automated salary deductions from the financing disbursed from FC.

movement in Malaysia, as a third of those cooperatives are from FC (Suruhanjaya Koperasi Malaysia, 2014a).

Unlike its counterparts in the U.S and the U.K whose credit unions are active in mortgage finance intermediation activities, FC in Malaysia are almost synonymously equated with personal financing - a core, and lucrative business of FC. This is exhibited by the fact that out of the 35 FC (2 cooperative banks and 33 FC) of the best cooperative societies in Malaysia, only a handful offer Shari'ah-compliant mortgage financing<sup>‡</sup>.

## **2. An Analytical Framework to Examine Shari'ah-Compliant Mortgage Finance Intermediation by Financial Cooperatives**

Each issue and challenge in Shari'ah-compliant mortgage financing is unique to an individual institution, and yet, repeated patterns of settings, characters, and plots are easily discerned, along with a limited variety of themes. To organise this study of Shari'ah-compliant mortgage financing by FC and to define the thematic patterns present therein, there is a need for a flexible and adequate AF. The authors propose a framework blending theory of credit cooperative with: (a) Theory of Credit Cooperative, (b) Transaction Cost Theory, (c) Agency Theory, (d) Stakeholder Theory, and (e) Theory of Credit Rationing.

This section provides a theoretical framework and, in so doing, critically review the rudimentary issues and challenges in FC's Shari'ah-compliant mortgage finance intermediation capabilities. These theoretical perspectives are linked to the topic of creating an efficient and sustainable Shari'ah-compliant mortgage market based on cooperation that best suits low- to middle-income families. Theoretical perspectives on cooperatives are usually being discussed within the political and economic literatures, but much of this is of questionable applicability to a more specific milieu of FC that offer Shari'ah-compliant instruments, which work in a mortgage marketplace along with the more established Shari'ah-compliant banking institutions. Therefore, it is important to note that the objective of this paper is not to focus on the theoretical perspectives of cooperation per se, but is an attempt toward integrating these theoretical perspectives from different fields of research.

### **2.1 Theory of Credit Cooperative**

In the most elementary case, all the money channelled to an FC is by its own members and all the money is then borrowed by its members. Therefore, at any single point in time, some members will be in credit with the FC while others will be in debt. The essential characteristic of any FC that offers Shari'ah-compliant mortgage financing is the ability to effectively and sustainably channel the funds saved by one set of individuals to finance the mortgages of the second set. In such a way, FC behaves as a financial intermediary and its activities are one of the most straightforward forms of financial intermediation (Merrett and Russell, 1994). Therefore, by entrusting the FC as a financial intermediary, member-savers help to economise the cost of monitoring its member-mortgagors (Fama, 1985; Green and Lin, 2000). Apart from that, the FC will then be able to realise economies of scale by pooling funds from the member-savers and diversifying risk allocation among its member-mortgagors (Benston, 1972; Hellwig, 2000). An FC is playing a crucial role especially during the in the early stages of economic development where efficient monitors are crucial (Tompson, 2000).

Cargill (1977) has observed that although the majority of research to date on FC (i.e. credit cooperatives, cooperative banks, credit unions) has been empirical (Smith, Cargill, and Meyer 1981), there is a serious need to develop a theoretical framework of FC behaviour that integrates their unique 'twin identity'<sup>§</sup>. If we are to consider this unique characteristic along with the original goal of FC, the standard theoretical treatments of financial intermediaries, usually used to assess banking efficiencies, are less relevant for FC than for investor-owned firms. Indeed, whenever FC choose to let their members

<sup>‡</sup> FCs in Malaysia that offer Shari'ah-compliant mortgage financing, include, among others, Bank Rakyat and Koperasi Bank Persatuan, Koperasi Wawasan Malaysia Berhad (KOWAMAS), Koperasi Pembiayaan Syariah ANGKASA Berhad (KOPSYA), Koperasi Muslimin Malaysia Berhad, Koperasi Belia Muslim Malaysia, Koperasi Kospeta Malaysia Berhad, Koperasi AIM Berhad, and Koperasi Serbaguna MAS Berhad.

<sup>§</sup> The 'twin identity' refers to the state of an FC member, which is both an owner and a consumer of the cooperative's outputs as well as a supplier of its inputs. Specifically, an FC member can simultaneously be both a member-saver and a member-mortgagor.

simultaneously benefit from their core businesses as customers (i.e., charging below-market profit rate on Shari'ah-compliant mortgage financing and giving above market rates on deposits) and not as capital owners, they penalise the classical operational or financial performance indicators (Ory and Lemzeri, 2012). This heterogeneity is therefore an inherent source of conflict between members.

The existing literature suggests the wide variability of FC's objectives. Hempel and Yawitz (1977) simply ignore the 'twin identity' concern and contend that FC, like any other financial intermediaries, should maximise profit. Most studies, however, raise concerns of the incompatibility of standard relative efficiency treatment (profit-maximisation within the classical financial intermediary framework) with the objective of maximising member-savers and member-mortgagors' surplus (Birchall, 2013; Smith, Cargill, and Meyer, 1981). Murray and White (1980) opt for mortgage cost-minimisation contingent upon the mortgage financing constraint. Keating (1979) employs a managerial approach by maximising the FC manager's utility function subject to minimum members' benefit constraints. Taylor (1971) suggests that the FC should strive to minimise the difference between its average mortgage finance rate and return on deposits. Smith (1971) argued that the FC should increase its membership to accommodate the desire of both its mortgagors and savers. Walker and Chandler (1977) introduces the concept of market rate comparison, based on the notion that the provision of savings and mortgage finance services at a price more attractive than comparable alternatives to reflect the value of the FC. The mortgagor-versus-saver conflict has been considered by Taylor (1971) and Jr and McNiel (1991) by using simple models to show the different output decisions for four behavioural motivations: profit maximisation, member-mortgagor domination, member-saver domination, and neutral members.

The theoretic approach introduced in this paper attempts to integrate and formalise much of these previous studies, but in a more flexible structure than usually employed. The intention is to clarify some of the issues involved in the economic theory of an FC with a focus on highlighting the issues with business models, governance, regulatory and supervisory policies, risk management, and human resource management and their association with the prevailing Shari'ah-compliant mortgage financing models, particularly within a highly competitive banking milieu.

## 2.2 Transaction Costs Theory: Reducing the Intermediation Fees and Achieving Economies of Scale

Financial intermediation can be examined by looking at the role of transaction costs such as search costs, verification costs, risk assessment costs, and enforcement costs. Benston and Smith (1974) for example, argue that the essential feature of an FC that act as a financial intermediary is to reduce the transaction costs in order to affect the member's "inter- and intra-temporal decisions". Although the reason for intermediation varies from one intermediary to another (Santomero, 1984), transaction costs and information asymmetry offer some insights into why FC exist. Notwithstanding, its exclusive use to interpret FC's financial intermediary activities is no longer sufficient (Allen and Santomero, 1998, 2001). Sophistication in the technology fuels dramatic and rapid changes in the financial market and have dramatically reduce transaction costs and mitigate asymmetric information risks. Although these costs have decreased, in recent decades, intermediation activities have increased (Allen and Santomero, 2001). Consequently, some researchers have called for an emphasis of risk management activities as a key function in FC as a financial intermediary (e.g. Allen and Santomero, 1998, 2001).

Economies of scale are achieved as an FC's marginal cost of Shari'ah-compliant mortgage financing provision decreases at higher level of transactions as the fixed costs becomes a smaller component of total costs. As a result, the FC will then be able to pass the savings to member-mortgagors by charging lower-than-market profit rates on their Shari'ah-compliant mortgage financing portfolios (Farhi, Golosov, and Tsyvinski, 2009). However, diseconomies of scale may emerge at very large volumes when the marginal cost of Shari'ah-compliant mortgage financing provision increases. These diseconomies of scale would then be reflected in increasing intermediation fees for very large transactions. This may be ascribed to administrative inefficiencies and agency conflicts within the FC (Palazzo and Rethel, 2007).

## 2.3 Agency Theory

Most cooperative studies rely on the agency approach by Jensen and Meckling (1979), and answer in the negative, based on the inappropriate status and lack of governance arguments. According to them, these problems will cause stagnation or worse, disappearance of FC altogether. Agency theory defines an FC as a 'nexus of contracts', and to consider members, managements and transactions, institutionally, socially, legally, and culturally, as contingent constructs (Beccerra and Gupta, 1999; Heath, 2009; Ross,

1973). In this ‘nexus of contracts’ view, each community, including members, and financiers provide financing for some gain in return. According to agency theory, the efficiency of an institution depends on its ability to reduce transaction and agency costs. Contracts which have been bargained by these stakeholders include compensation terms, as well as legally-binding arrangements that will protect this compensation terms from post-contractual expropriation (El Kafrawy, 2012).

## 2.4 Stakeholder Theory

Stakeholder theory is also considered relevant to the analysis of FC. The stakeholder theory argues that all FC stakeholders have a right to participate in making decisions that affect them. It also reflects the view that FC continued existence requires support from all stakeholders. This view is widely known as the ‘stakeholder model’ of FC governance whereby FC ought to be managed for the benefit of all who possess some stake in the FC business activities. The FC management team have a fiduciary duty to serve the interest of all stakeholder groups (i.e., members, management teams, board members, financiers/investors, and policymakers), and the primary objective is the promotion of all interests, not only those of the FC members (Kaplan and Norton, 2001).

The stakeholder model is still evolving and it is yet to find a solid theoretical underpinning in FC literature. One of the most contentious issues is how to differentiate between a stakeholder and a non-stakeholder. A stakeholder entity’s existence and its subsequent rights are straightforward to recognise but questions arises as to who really qualifies as an actual stakeholder (El Kafrawy, 2012). The next issue deals with the stakeholders’ right to influence FC management decision-making or to participate in the FC governance processes. Issues arise as to why stakeholders should be given such a right and why managers should have a fiduciary duty to protect the non-FC members’ rights if such stakeholders have established their rights, which have been expressed in the contracts (El Kafrawy, 2012).

## 2.5 Theory of Credit Rationing

Credit rationing is defined as a situation in which an FC refuses to extend Shari’ah-compliant mortgage financing to a potential member-mortgagor at the price announced by the FC (Duca and Rosenthal, 1991; Kent, 1987; Stansell and Mitchell, 1985). Credit rationing however, is not a phenomenon whereby a potential member-mortgagor refuses to accept financing from the FC because he/she cannot afford to pay the instalments. The essential point is that the financing is denied at a price quoted by the FC. Even if the mortgagor accepts a higher profit rate than the quoted price, the FC still refuses to approve the application from such member-mortgagor.

In the Shari’ah-compliant mortgage finance market, credit rationing is rather a puzzling practice. When Shari’ah-compliant mortgage financing is rationed, there is an unsatisfied demand at the price declared by the FC. In other words, Shari’ah-compliant mortgage financing demand exceeds supply at that cost. Conventional economic theory suggests that the FC could increase its profits by increasing the price of Shari’ah-compliant mortgage financing (Stiglitz and Weiss, 1981). In addition, whenever the FC can supply more mortgage finance at a higher price, its profits should be greater. However, the authors postulate that the practice of credit rationing might be widespread among the smaller FC. Therefore, the size of the mortgage finance received by a smaller FC member is smaller, relative to those delivered within other types of financial institutions. Some FC for example, limit their member-mortgagor’s mortgage finance to three times of his/her share capital (Merrett and Russell, 1994).

## 3. Summary and Review: The Complete Hybrid Framework

Denzin (1978) introduces the concept of triangulation to four elements of research study: data, methodology, investigator, and theory. One of the least popular of these four is theoretical triangulation. It is a process whereby an analyst modifies and integrate multiple theories to build an interpretive account or a “lens” that produces deep insights and critical questions for further studies than a singular theory would otherwise provide. Although theories are useful to organise patterns as well as make sense of a phenomena in an empirical observation, but they are discerning in what they let us see as a direct result of its limitations. Combining few theoretical perspectives in a complementary and/or contrastive analyses may result in observing additional patterns or connections while introducing other dimensions into

perspective. An AF should be able to 'generate or construct' explanations (Stanley, 2012). This AF is therefore designed to explain the full complexity of the issues and challenges of Shari'ah-compliant mortgage financing by FC in Malaysia through combination of five distinct theories (Theory of Credit Cooperative, Transaction Cost Theory, Agency Theory, Stakeholder Theory, and Theory of Credit Rationing.).

Other than the seminal work of Ebrahim (2009) that partly introduces the concept of cooperative, Shari'ah-compliant mortgage financing by well-to-do Omani clan members for their poor brethren, there is only scattered literature exploring the problems and challenges of FC in offering mortgage credit or Shari'ah-compliant mortgage financings to its members. Through the AF, the authors have systematically reviewed related literature and identified some of the most relevant challenges that seem to be hampering Shari'ah-compliant mortgage financing by FC. It is worth mentioning that they might be additional factors that might affect the Shari'ah-compliant mortgage financing intermediation capabilities by FC, but the five outlined in the preceding sections are those that appear more frequently and are thus the most representative. These factors are interconnected and can be presented in varying degrees; however, together they are seen to inhibit or facilitate FC's Shari'ah-compliant mortgage intermediation capacities.

### 3.1 Business Model and Strategy

Some authors have deduced FC as cost-minimising enterprises (Taylor, 1977) in a way similar to government or government-linked enterprises. Nevertheless, this vision only take into account of FC's superficial features, as they are more than mere cosmetics. This in turn, results in consequential differences between FC and investor-owned firms, for example, Shari'ah-compliant commercial banks. They pursue different goals, possess different customer bases, and pursue different operational strategies. The most fundamental difference between Shari'ah-compliant commercial banks and FC lies in two aspects of ownership—common bond\*\* and mutuality. Common bond often results in FC members' knowledge of creditworthiness of other members and allow exercise of moral suasion on member-mortgagors as they may feel greater social pressure to repay outstanding instalments. Moreover, FC management usually has access to inside information about the financial position and job security of Shari'ah-compliant mortgage financing applicants, which is not generally available to other types of financial intermediaries. A consequence of this information advantage is that these FC may be more efficient, either because they hold fewer bad Shari'ah-compliant mortgages in their portfolio, or are able to spend less time and cost in processing applications and monitoring outstanding defaults.

The tight bond restriction however, comes at the cost of a less diversified Shari'ah-compliant mortgage financing portfolio, potentially negating the peer monitoring advantage (Esho, 2001). In the past, FC's common bond and mutuality organisational structure have addressed asymmetric information problems by requiring that these institutions to extend mortgage finances only to members. Member-mortgagors' personal financial information regarding size and share account balances is often supplemented by the personal knowledge of the member-mortgagor. Prior to the general availability of online credit reports, this common bond and mutuality arrangement reduced costs of extending and monitoring Shari'ah-compliant mortgage financing to member-mortgagor whose financial statements and financing records had been difficult to acquire (Srinivasan and King, 1998).

Today, on the other hand, apart from few institutions that still specialise in specific customer groups, FC have no restrictions with respect to their clients. They have since evolved into larger firms, which transact with many mortgagors who are not members and which are run by professional managers. In other words, members are usually customers, but not all customers are members (Gorton and Schmid, 1999). Additionally, in an economy where people change jobs and locations regularly, the inter-temporal and inter-personal commitment that defines the 'common bond' may be even harder to preserve (Al-Muharrami and Hardy, 2013). Currently, these firms resemble conventional investor-owned firms, yet their ownership structure is not able to adjust accordingly. One important institutional restriction is that FC shares can only be traded with the FC itself and then only at face value (Gorton and Schmid, 1999). As a result, there can be no hostile or reverse takeovers of FC. Another important restriction is that shares cannot be accumulated into blocks. Thus, irrespective of the amount of stock owned, each person receives

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\*\* Members of a cooperative society including that of FC, usually share a common association or bond, which is generally defined by common employer or workplace, residential geography, religious belief, ethnic origin or social organisations.

one vote and blockholders in FC are unable to exert their voting power. These distinctions are common to an FC. A second reason for this inflexibility is that the degree of separation between ownership and control is easily measured as it was indexed by the number of FC members. As a result, the degree of separation of ownership and control, which affects firms' performance in cross-section, can be analysed. The size of agency costs can be quantified as a function of free-riding. Because of the restrictions on ownership structure, as the number of FC members rise, the size of agency cost should increase. In other words, the more dispersed the equity ownership of an FC, the members will be more likely to free-ride on each other's efforts to monitor the FC management (Gorton and Schmid, 1999).

FC redistribute their profits through price subsidies—i.e., through lower profit rates on Shari'ah-compliant mortgage financing and higher profit rate on savings (Hart and Moore, 1998; Reichert and Rubens, 1994). Although this may be perceived as distorting the 'invisible hand' in the market by distorting prices, but conversely, it helps FC to realise their objective of maximising members' surplus. However, such objective may lead to potential conflicts among members. This is particularly so since member-depositors and member-mortgagors have not only different, but often conflicting objectives. Hence, individual utility may be at the cost of another's. Even though both types of members (savers and mortgagors) may gain from better profit rates compared to non-members, this might prompt potential internal conflict concerning the benefit distribution as the amount of resources to be redistributed is limited. The conflict resolution is based on the dominance of one type of member over the other (William R. Emmons and Schmid, 2002; Smith et al., 1981). When members are asked to vote in the annual general meeting (AGM), if the median voter shifts from member-savers to member-mortgagors, the consequential benefit reallocation choice could change accordingly, and vice versa. Thus, the choice between keeping low profit rate on the Shari'ah-compliant mortgage or raising rate of return on saving depends on the alignment of the voting members in the AGM (William R Emmons and Mueller, 1997).

In the National Cooperative Policy (NCP) 2010-2020, the ministry in charge of cooperatives, Minister of Domestic Trade, Cooperatives and Consumerism (KPDNKK) contends that the majority of the cooperatives are small in size and most importantly—capital. Most cooperatives are dependent on the internal resources of capital (i.e., share capital, member's fees, and retained earnings). Since FC's asset and liability holding defines its size; it should be positively related to its willingness to extend Shari'ah-compliant mortgage financing. One would expect small FC to be less willing to offer Shari'ah-compliant mortgage financing to its members. A small FC must either commit a relatively large portion of its portfolio to Shari'ah-compliant mortgage in order to spread the highly specialised overhead costs thinly, diversified into other types of banking activities or else, completely stay out of the Shari'ah-compliant mortgage market (Peterson and Kidwell, 1983). On the other hand, larger FC are in a position to spread overhead costs over a larger volume of financing and can obtain portfolio diversification more easily. Thus, they may be more willing to make Shari'ah-compliant mortgage financings.

### 3.2 Good Governance

Effective cooperative governance is important to promote accountability and transparency. However, former minister of KPDNKK, Dato' Sri Ismail Sabri Yaakob revealed that most of the internal audit committees appointed by members of FC in Malaysia have failed to discharge their fiduciary duties, functions and responsibilities (Jalil, Hamid, and Rohim, 2012). As argued by (Rasmusen, 1988), due to the flat ownership structure, it is impossible to impose any meaningful form of checks and balances when it comes to selecting board members and ensuring good governance.

Some FC tend to appoint board members from the community that lacks expertise as compared to their incumbent management team (Worth, 2013). FC members in Malaysia for example, are likely to appoint politicians and/or well-known figures that usually lack necessary experience to sit on FC board positions (Jalil et al., 2012). The purpose of governance is the preservation of the integrity of the FC along the lines of the purposes for which it was founded—upholding of cooperative principles (K. Davis, 2001). The purpose includes an efficient delivery of Shari'ah-compliant mortgage financing required by FC members in the context of contributing to the real economy (P. Davis, 2001).

FC's mutuality also impacts on its governance structure. The main difference between a shareholder in an investor-owned institution and an FC member lies in who control the FC, who takes in the profits, and which type of members will benefit the most from the capital and profit redistribution. A Shari'ah-compliant commercial bank for example, picks the management team, distributes its profits, and is free to



sell their privileges. FC's members, on the other hand, own a mutual association. Each member has the right to vote the FC board members.

Each member also has the right to vote for the managers. Some FC employ full-time managers to manage the business on a daily basis. These managers are their agents. What economists call agency problems refers to the difficulty that FC members have in making sure that their agents—that is, managers act in the FC members' best interest. Managers, who may or may not also be FC members, often have better information about the FC and possess different motivations from those of members. This agency problem can result in high management compensation, as the FC is inappropriately and inefficiently managed (Srinivasan and King, 1998). This may lead to FC funds' embezzlement by the management for its own use, or more importantly, a wide departure from the FC principles and members' needs and will. This may lead to an FC to consider its governance mechanisms and representation of membership to that of Board of Directors (BOD) in the investor-owned firms.

### 3.3 Regulation and Supervision

One of the strategic cores in the National Cooperative Policy (2002-2020) is to empower the FC through effective monitoring and enforcement activities (Suruhanjaya Koperasi Malaysia, 2010). Shari'ah-compliant mortgage financing, just like other types of Shari'ah-compliant financing products, is governed by the Malaysian Cooperative Societies Act (2007). However, there is a unique interplay between FC that offer Shari'ah-compliant financing and Shari'ah Advisory Council (SAC) of Bank Negara Malaysia (BNM) as they have to abide by the rulings issued by the SAC, BNM. Apart from that, BNM supervisory officers are seconded to SKM in order to help with the overall FC's supervisory activities (Zazali Haron, personal communication, 25 September 2014).

Apart from that, to ensure prudent Shari'ah-compliant financing practices by FC, SKM has issued a guideline "GP7: A guideline for Islamic financing by cooperative" on 16 November 2009 (Suruhanjaya Koperasi Malaysia, 2009). The guideline, among others, highlights various issues surrounding Shari'ah-compliant financing by the FC. Predominantly among them are the pervasive use of on-lending from commercial banks and various processing fees (e.g., FC's commission, agent's commission, contribution to sinking fund, bank charge, *takaful* charges, stamp duty, lawyer's fee, management and postal fees) that amounted up to 35% from total financing. Apart from that, due to large financing amount and excessive promotions by the FC, Shari'ah-compliant financing is hugely popular, especially among the civil servants. Commercial banks that provide on-lending to FC do not bear any risk associated from the financing as BPA guarantees the instalments from automated salary deductions.

Various acts, policies, and guidelines therefore need to be designed in such a way that they assist FC to harness their Shari'ah-compliant mortgage financing capabilities. Ideally, it should be 'tailored' to particular area of need, but not used to fund core activities or ideally, not be used as a substitute for self-reliance on sufficient revenue generated by FC themselves. Mckillop, Ward, and Wilson (2007) maintain that acts, policies, and guidelines that facilitate and promote FC's development based on a cross-section of the population, including middle- to high-income households, are able to offer a more sustainable model of FC development.

### 3.4 Risk Management

Prudence, responsiveness, empathy, and transparency are some of the imperative values strongly linked to risk management. FC on the other hand, tend to lean on the more conservative side of risk management as their business model flows from their underlying principles of maximising members' surplus (Goglio and Alexopoulos, 2014). By involving itself in the Shari'ah-compliant mortgage financing intermediation however, FC will be investing in the real economy and create spillover effects to all stakeholders. In the following sub-sections, we explore the types of risks faced by FC in offering Shari'ah-compliant mortgage financing. In particular, we examine default risk, profit rate risk, and liquidity risk.



### 3.4.1 Default Risk

Default risk is the most significant risk associated with FC. A mortgagor's ability to repay the instalments can be seriously affected by various factors, some of which are not directly under the mortgagor's control. Default risk is simply defined as the potential that a borrower will fail to pay their instalments in accordance with the stipulated terms. The goal of default risk management is to maximise the FC's risk-adjusted rate of return from the Shari'ah-compliant mortgage financing by maintaining its exposure within acceptable Shari'ah-compliant parameters. Additionally, FC needs to manage the default risk inherent in the entire financing portfolio as well as the risk in individual Shari'ah-compliant mortgage financing.

Higher mortgage finance-to-share ratio is negatively related to efficiency, suggesting that higher mortgage finance ratios are accompanied by substantially greater operating costs. It would not be a viable business model for a smaller FC to diversify its entire credit risk and hence, they will be unable to benefit from economies of scale (Ory and Lemzeri 2012). Further, FC's willingness to offer Shari'ah-compliant mortgage financings would likely be increased if the FC were better able to collect outstanding Shari'ah-compliant mortgage financing obligations either because of greater Shari'ah-compliant mortgage lending expertise or through automatic payroll deduction plans. In general, the automatic payroll deduction plans serve to simplify collection procedures and its associated costs (Peterson and Kidwell, 1983). FC in the U.S have therefore, devoted considerable attention to developing fee-based services to mitigate mortgage financing default risks (Reichert and Rubens, 1994). However, FC in Malaysia are able to mitigate default risk through the automatic payroll deduction plans, which is administered by BPA.

### 3.4.2 Profit Rate Risk

The general practice in FC seems to be to offer higher profit rate on savings and charge profit rate on financing products that sometimes below the comparable market rate. As a result, the supply of FC Shari'ah-compliant mortgage financing should be positively related to the profit rate that can be obtained on the product, and negatively related to the rate of return that can be earned on alternative investment opportunities (Peterson and Kidwell, 1983).

Due to their excess liquidity, larger and more efficient FC are able to offer: 1) higher finance-to-value ratio on finances, 2) report lower finance-to-share ratios, 3) obtain higher level of capital to finance new products and acquire modern technology, and 4) make greater use of more sophisticated mortgage finance services, such as adjustable rate mortgage (ARM), which carry a reduced level of profit rate risk (Reichert and Rubens, 1994). Larger FC would also make greater use of profit rate management techniques such as maturity and duration gap strategies (Reichert and Rubens, 1994). To offset the problem of capitalisation, FC needs greater reliance on Shari'ah-compliant fee-based income as it will enable them to more effectively hedge against profit rate risk and reduce their over-dependence on external financing as a major source of funds (Reichert and Rubens, 1994).

### 3.4.3 Liquidity Risk

FC are another organisational form that usually utilise local information and peer monitoring. Few FC receive external financings from Shari'ah-compliant commercial banks and/or from the government and then distribute the funds among their members as Shari'ah-compliant mortgage financing. This external form of financing complements internal fundraising from member deposits and fees, capital shares, and retained earnings (Besley, 1995; Cornforth and Thomas, 1990). The minimum down payment required on Shari'ah-compliant mortgage financing, if high enough, should mitigate the risk associated with making Shari'ah-compliant mortgage financing and, therefore, increases FC's willingness to supply Shari'ah-compliant mortgages.

Reichert and Rubens (1994) claims that size of FC have a large impact upon the way FC are managed. Larger FC for example, are less dependent upon Shari'ah-compliant mortgage financing products for generating income and markedly more sophisticated in the way in which they manage default, profit rate, and liquidity risks. Thus, an FC with small portfolios might need to ration the amount of Shari'ah-compliant mortgage financings to its members.

Longer maturity Shari'ah-compliant mortgage financings reduce FC liquidity and increases risk, and therefore may negatively influenced FC's willingness to supply Shari'ah-compliant mortgage financing. If an FC has a large stock of liquid assets, it may be more willing to commit a larger portion of its portfolio to Shari'ah-compliant mortgages because the relatively long maturity of Shari'ah-compliant mortgages is less likely to place FC in an illiquid position (Peterson and Kidwell, 1983). Net returns on a Shari'ah-compliant mortgage financing are higher when overhead costs of Shari'ah-compliant mortgage financing can be extended over a larger volume of instalments and a larger amount of Shari'ah-compliant mortgage financing charges. On the other hand, larger average size Shari'ah-compliant mortgage financings would concentrate risk in fewer obligations by reducing diversification for a given size portfolio. However, the aggregate effect on liquidity and overall portfolio risk would not be large unless a substantial amount of an FC's portfolio was committed to Shari'ah-compliant mortgages. Thus, the cumulative effects of changes in Shari'ah-compliant mortgage sizes and maturities on FC Shari'ah-compliant mortgage supplies probably vary widely among FC (Peterson and Kidwell, 1983).

### 3.5 Human Resource Management

The old pattern of running an FC, with straightforward management schemes through relatively simple administrative practices is no longer adequate. To ensure growth, FC need to hire sophisticated, professional management in order to deal with the increasingly complex, specialised and unique Shari'ah-compliant financial situations (Huppi, 1990). For example, there is a need for additional education and training regarding Shari'ah-compliant financing products, sound asset/liability, and various risks management techniques.

Management training, instilling cooperative values and the foundation of markets for cooperative managers are vital components that ensure the endurance and growth of cooperatives (Basterretxea and Albizu, 2011). In the case of FC, it is generally argued that lack of good managers makes it difficult for these types of businesses to survive (Basterretxea and Albizu, 2011). In general, FC are facing an uphill battle to attract and retain valuable managers as the salary limitations such as the material incentives or career structure is incomparable to the investor-owned firms' (Abell, 1990; Cornforth and Thomas, 1990; K. Davis, 2001).

Notwithstanding, managerial factors may also create incentives for FC to grow by adding new membership groups. An FC's board of directors trying to attract high calibre, professional managers may find it easier to do so if the FC large enough or has future growth potentials. Moreover, instead of the conventional compensation package based on profit or stock performance, FC management compensation often reflects an FC's size and product offerings. Managers may therefore have an incentive to increase the FC's memberships (Srinivasan and King, 1998). By doing so, it is relatively easier for the management to accommodate the desire of both its member-mortgagors and member-savers (Smith, 1971). As FC's size become larger or more adept at niche marketing of its Shari'ah-compliant mortgage financings products, sound financial management will become increasingly important. The rapid Malaysian banking industry consolidation that has characterised the industry in the recent past will undoubtedly continue as FC seek to acquire the financial resources, organisational flexibility, and sophisticated managerial skills needed to compete effectively in an increasingly competitive deregulated environment. The resulting trend will be the implementation of increasingly sophisticated financial information databases and reporting systems (Reichert and Rubens, 1994). Therefore, one would expect FC to extend more Shari'ah-compliant mortgage financings if they had the expertise necessary to offer such finances. Shari'ah-compliant mortgage lending expertise differs from that required to make conventional home loan because lenders must appraise the value of Shari'ah-compliant mortgage property, handle the legal problems associated with the Shari'ah-compliant mortgage and comply with the disclosure requirements inherent in Shari'ah-compliant mortgage financing (Peterson and Kidwell, 1983).

The effort to provide training and education to the cooperative movement in Malaysia is done by the one and only cooperative education institution in Malaysia—Cooperative College of Malaysia (CCM). The Cooperative Education Trust Fund Group provides a major component of the CCM administrative funding, which is pooled from the required 2% contribution of the cooperatives' total profit. Nevertheless, since knowledge regarding Shari'ah-compliant mortgage financing and Shari'ah-compliant finance in general is highly specialised, CCM might be able to harness synergistic relationships with Shari'ah-compliant specialised institutions such as IIUM Institute of Islamic Banking and Finance (IIiBF) and

International Centre for Education in Islamic Finance (INCEIF) in organising seminars, workshops, in-house trainings, and short-term courses related to Shari'ah-compliant finance.

#### 4. Conclusion

By way of final reflection, the review of literature allows the authors to identify these five issues, which seem to inhibit the ability of FC to take part in Shari'ah-compliant mortgage financing intermediation. These issues are by no means exhaustive. In addition, the issues are not seen as static but as dynamic and interconnected within and around FC, which may be present in differing ways and degrees. From the literature, there was little evidence on how these factors interact with each other, which this research sought to investigate in the future.

Within the current climate of lack of access to a more affordable, Shari'ah-compliant home financing, FC is seen as an alternative provider of Shari'ah-compliant mortgage financing, besides the traditional players of Shari'ah-compliant commercial banks. Through an AF, this paper has demonstrated that the supply side of Shari'ah-compliant mortgage financing by FC has various issues and challenges to address within the current Shari'ah-compliant mortgage financing intermediation frameworks. Claims of FC's ability to sustain such business models can be little more than rhetoric as there is a need for closer examination by asking a few critical questions, among others: how to increase the funds? To what end in sacrificing the basic cooperative's principles? It is through answering these questions that greater transparency and accountability of Shari'ah-compliant mortgage financing by FC in Malaysia can be achieved and this type of product can genuinely make a contribution toward helping low to middle-income Malaysians own a house.

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