An Integrated Islamic Co-operative as A Housing Solution for China’s Housing Affordability Issues

Yaxin Ma¹ and Fauziah Md Taib²

ABSTRACT

China has witnessed long-term economic growth since 1979, which has caused an increase in the cost of living while improving people’s living conditions. The vast amount of fiat money created by commercial banks has driven up housing prices, making it difficult for many middle- and low-income households to own their own homes and producing an array of housing-related socioeconomic problems. Even though the Chinese government has implemented house price control policies for a long time, the outcomes have not been very outstanding. This paper combines best tested and proven examples of housing work elsewhere in the world and proposes a collaborative solution with Islamic finance as the main principle. In order to observe whether Chinese households (minority Muslims and majority non-Muslims) are influenced by their religious beliefs or their perception of the proposed model's fairness and attractiveness, the author conducted a questionnaire. The result shows that most respondents agreed with the model's creative concepts and are prepared to try it. In particular, Muslims, employed, and over 30 years of respondents are more interested. This paper suggests that the model may be piloted in areas where Islamic culture and religion are more prevalent, which may be more successful.

ملخص

شهدت الصين نموً اقتصاديًا طويل الأجل منذ عام 1979، مما تسبب في زيادة تكلفة المعيشة مع تحسين الظروف المعيشية للناس. أدى الكم الهائل من الأموال الورقية التي أنشأتها البنوك التجارية إلى ارتفاع أسعار المنازل، مما جعل من الصعب على العديد من الأسر الامتياز ذات الدخل المتوسط والمنخفض امتلاك منازلهم كما أن ذلك أدى إلى ظهور مجموعة من المشاكل الاجتماعية والاقتصادية المتعلقة بالإسكان. وعلى الرغم من أن الحكومة الصينية نفذت سياسات مراقبة أسعار

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ABSTRACT

Depuis 1979, la Chine connaît une croissance économique à long terme qui a entraîné une augmentation du coût de la vie tout en améliorant les conditions de vie de la population. L’énorme quantité de monnaie fiduciaire créée par les banques commerciales a fait grimper les prix de l’immobilier, ce qui a rendu difficile l’accès à la propriété pour de nombreux ménages à revenus moyens et faibles et a engendré toute une série de problèmes socio-économiques liés au logement. Bien que le gouvernement chinois ait mis en œuvre des politiques de contrôle des prix de l’immobilier depuis longtemps, les résultats n’ont pas été très remarquables. Ce document combine les meilleurs exemples testés et prouvés de travail sur le logement ailleurs dans le monde et propose une solution collaborative avec la finance islamique comme principe principal. Afin d’observer si les ménages chinois (minorité musulmane et majorité non musulmane) sont influencés par leurs croyances religieuses ou par leur perception de l’équité et de l’attractivité du modèle proposé, l’auteur a réalisé un questionnaire. Les résultats montrent que la plupart des personnes interrogées sont d’accord avec les concepts créatifs du modèle et sont prêtes à l’essayer. En particulier, les musulmans, les employés et les personnes âgées de plus de 30 ans sont plus intéressés. Cet article suggère que le modèle soit testé dans des régions où la culture et la religion islamiques sont plus répandues, ce qui pourrait être plus fructueux.

Keywords: Fiat money, Housing affordability, Musharakah Mutanaqisah, Cooperative, Crowdfunding

JEL Classification: E40, E51, R21, R31
I. INTRODUCTION

Looking back at the past four decades, China’s economy has been developing rapidly and achieved dazzling achievements. China has experienced a transformation from a state-dominated planned socialist economy to a more open or mixed economy. So is her housing policy. During the closed-door policy, China had significant housing space shortages, declining housing conditions, and crowds due to its population density. While since the open-door policy in 1979, China has increased its investment in real estate building and undergone earth-shaking transformations. The development of real estate marketization has greatly improved people’s living conditions, and more importantly, it has mobilized local enthusiasm and promoted urban construction and economic growth (Yang, Zeng, and Xu, 2020).

Nonetheless, the large scale of urbanization stimulates the development of land wealth, and its capital-seeking nature further widens the gap between the rich and the poor (Huang and Du, 2017). With the end of social welfare and a huge population to serve, an imbalance in housing supply and demand could become a contentious problem and an increasing source of discontent with people’s standard of living. The main reason is that people are unable to keep up with escalating housing expenses, particularly those who relocated to large cities in search of better work opportunities have struggled to keep pace with rising housing expenses (Long, Tu, Ge, Li & Liu, 2016; Wang, 2017).

The Chinese government has adopted a series of housing price control policies after realizing the social harm caused by soaring housing prices. For instance, the Chinese government strictly controlled real estate credit in 2003 to curb investment fever and began to focus on cracking down on speculation in 2009. It has prioritized city-specific measures and quick destocking since 2016. Until 2021, the central government and local governments implement thorough and cooperative control of policy loopholes and the supply side (Xie, 2021). It turns out that these measures are still unable to control housing prices in a real sense. This has been demonstrated by numerous academics (Hui and Wang, 2014; Cao and Keivani, 2014; Yin, Su, and Tao, 2020; Tan, Tang, and Meng, 2022). With rising living expenses, housing affordability is a greater concern than ever before. Diverse factors contribute to rising and unaffordability.
For instance, Korkmaz (2019) believes that inflation has a significant impact on real estate values, particularly in densely populated areas. Jacobsen and Naug (2005) highlight the relationship between the interest rate and the increase in house prices, as well as the occurrence of housing expenditure and income inequality (Dustmann, Fitzenberger, and Zimmermann, 2022). All of these are plausible reasons, but the underlying cause lies in the debt-based nature of the current monetary system. Under the prevalence of contemporary fiat money systems, fractional-reserve banks' capacity to create money out of thin air has been challenged as fundamentally hazardous (Lietaer and Dunne, 2013; Murison, 2020). This action causes inflation and a decline in buying power through increasing currency circulation and bank lending (Mohsein, Md Taib, and Saidu, 2019). As a result, middle- and low-income households find homeownership to be a more unattainable goal.

Clearly, the housing affordability issue requires immediate attention. This paper combines three impactful housing schemes in the world and comes up with a cooperative housing solution that anchors on Islamic finance. The remaining section shall discuss the existing solutions around the world including Islamic finance, followed by a discussion of alternative solutions. On its basis, the authors distributed a questionnaire to prospective Chinese home buyers (mainly postgraduate students) to see their opinion of the proposed model.

II. THE SUCCESSFUL HOUSING WORKING SCHEMES AROUND THE WORLD

ISLAMIC HOME FINANCE

Maqasid Shariah – Objective of Islamic Law

Islamic Finance is money management that complies with the Islamic moral standards or Shariah law prohibiting riba (usury) and gharar (ambiguity or deception). The ideology of Maqasid As-Shariah places the utmost focus on preserving the social order of communities and guaranteeing their well-being. The ultimate goal of Shariah (Islamic law) is to eradicate all forms of human corruption. Therefore, it is not unexpected that Islamic Finance has gained popularity as a viable alternative to traditional financing since the 1970s. Despite the global pandemic, S&P Worldwide (2021) forecasts that the global Islamic
banking industry will rise by 10 to 12% in 2022. Islamic finance is popular due to its fair, just, transparent, and highly ethical financial processes, which effectively avoid speculative, unhealthy, and damaging transactions at their source (Laldin and Furqani, 2013). While Islamic banking recognises the necessity of profit for corporate survival, no one should be treated unfairly or made a victim of circumstance. The pursuit of profit should not come at the price of borrowers or customers. Profit maximisation is expressly prohibited in favour of the social order and well-being of the community.

Islamic home finance
Murabahah and Bay Bithamad Ajil is the most common household financing models employed by Islamic banks (BBA). However, they all utilise the basic lending rate as their interest rate benchmark, which is quite comparable to that of traditional banks, and this has prompted numerous issues and criticisms from academic circles (Ismail, Azmi, and Thurasamy, 2014; Ghauri, 2015; Zabri and Mohammed, 2018). Due to the controversies surrounding the usage of interest rates, Islamic banks began to implement alternative methods such as Musharakah Mutanaqisah (MM), Ijarah Muntaziyya Bit Tamlik (IMBT), and Istisna (Yustiardhi, Aulia, and Permatasari, 2019). In the IMBT contract, the lessor and lessee can negotiate the benchmark for the property rental rate with a fixed or a variable rate (AAOIFI, 2015). While the application of the IMBT contract may encounter credit risk, market risk, and operational risk at various phases of its transaction (Yustiardhi et al., 2019). As for the Istista contract, the cost of housing is predetermined which eliminates the uncertainty that could lead to disputes (AAOIFI, 2015). Importantly, they are all debt-based finance (Hasmad & Alosman, 2022). It must be emphasized that debt-based financing is the main procedure of conventional banks based on an unjust enrichment of estate through interest compounding on housing loans, which is cause financial instability and crisis (Hassan, 2011).

Musyarakah Mutanaqisah
Musharakah Mutanakisah (Diminishing Partnership) is one of the financing concepts in Islamic home financing. Homebuyers can buy through monthly rental payments. In MM contracts, homebuyers, banks, or intermediaries practice profit-and-loss sharing until homebuyers own
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100%. (Eam, Yusof, and Khan, 2019). MM replaces interest rates with rental income to prevent interest (usury) while keeping each party's agreement rights. Conventional finance always benefits the bank or lender more than the borrower, and the borrower (homebuyer) loses more in default. Conventional financing is debt-based, while MM focuses on partnership or profit-and-loss sharing. MM balances moral and material requirements and lets homebuyers’ own homes sooner than conventional finance. It shows socio-economic justice (Platonova, 2013). Figure 1 provides a hypothetical illustration of the specifics.

**Figure 1:** Comparison between Conventional and Musharakah Mutanaqisah housing loan

![Figure 1: Comparison between Conventional and Musharakah Mutanaqisah housing loan](source)

Source: A hypothetical calculation based on the Bank of China website (2021) and Rosly (2005).

Figure 1 demonstrates that the MM financing cost is less than that of the traditional or debt-based loan since the MM contract focuses on the rental value of the property rather than the predetermined interest rate or profit rate (Billah, 2019). However, MM is not favoured by financiers (banks) because it diminishes their profits, increases their risk exposure, and adds complexity to their operations. The current banking business model
prohibits banks from taking on additional risks by becoming partners in home-financing projects, even though MM is marketed as a tool for protecting social order in communities.

AMEEEN HOUSING COOPERATIVE
Housing cooperative is the concept of owning a home through a cooperative by becoming the cooperative's shareholders. The cooperative's shareholders gain access to cash for a home purchase or receive a return on their investments. Shareholder funds are invested to earn a return or utilised to assist members in purchasing homes. Ameen Housing Cooperative (AHC) from California uses the MM concept to offer a rent-to-own housing partnership. AHC completely implements profit-sharing and strives for equity in income distribution and wealth-building (Abdul-Rahman and Gholami, 2020). Figure 2 depicts the AHC home purchase procedure.

Figure 2: Ameen Housing Co-operative Rent-to-Own Model

Ameen housing implements a rent-to-own partnership. The Cooperative pools funds from investors and homebuyers to jointly purchase a house. A third professional party independently determines the rental for the house, and the home buyer would pay the instalment equivalent to his or her percentage of ownership. The homeownership is gradually transferred
from the Cooperative to homebuyers through installment payments. If any party must terminate the contract before the complete transfer of ownership, both partners retain their percentage of ownership, and proceeds from the dissolution (profits or losses) will be shared accordingly. Compared with the traditional financing approaches, The Ameen Housing cooperative meets the principles that underlie Maqasid As-Shariah in terms of preserving order, achieving benefit, preventing harm or corruption, and establishing equality among people that would ensure community well-being. Even if both parties interrupt the contract halfway, the proportion of ownership owned by homebuyers will be refunded after the evaluation of the third-party evaluation department. It is the best embodiment of fairness and justice.

Table 1: Ameen Housing Minimum Monthly Payment Calculation & Its Components

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Third-party property</td>
<td>$2000</td>
<td></td>
</tr>
<tr>
<td>professional rent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>appraisal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7% rent discount</td>
<td>$140</td>
<td>$1860</td>
</tr>
<tr>
<td>Minimum Monthly</td>
<td>$1860+$100+$75</td>
<td>$2035</td>
</tr>
<tr>
<td>Payment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Monthly</td>
<td>($1860*0.2) +$75</td>
<td>$472</td>
</tr>
<tr>
<td>Payment (Member)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum Monthly</td>
<td>($1860*0.8) +$75</td>
<td>$1563</td>
</tr>
<tr>
<td>Payment (Cooperative)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: A hypothetical calculation based on the Ameen Housing Co-operative website information

# Represents members’ housing insurance or rent discount
* Denotes the percentage of ownership

Table 1 shows a typical calculation of the minimum monthly payment. Every potential home buyer signs up as a member of Ameen Housing Co-operative and sets up the minimum account (typically, 10% of the house price). Members and cooperatives start the home loan with a 20:80 ratio of ownership. The monthly payment contains the prevailing market house rent, cooperative member’s share, processing fee, and rent discount. A case in point, according to the calculation formula of Ameen housing, in a house valued at $1 million, the member would have to make a minimum monthly payment of $472, and the Ameen Housing Cooperative would pay $1,563. The gradual ownership change will be reflected accordingly in the minimum monthly payment contribution as the period of loan continues.

Although members of Ameen Housing could have opportunities to earn halal dividends, it is still quite limited. The rent-to-own partnership
requires a lot of pooled funds for it to be fully working. In contrast, the Ameen Housing Cooperative has a capital rationing problem whereby the demand exceeds the supply due to the small size of the pooled funds. Therefore, the Ameen Housing Cooperative needs a more extensive fund base to enjoy the privilege. Until then, the scalability of the model is an issue. More people need to join in with more investment to allow more home buyers to enjoy rent-to-own partnership home financing.

ETHISCROWD

Real estate crowdfunding connects investors and fundraisers. This alternative house finance is more convenient and efficient than bank loans, saving middlemen money (Yingcan Consulting Company, 2017). For homebuyers, real estate crowdfunding is like locking in a house's price years in advance. Even if house prices continue to grow, buyers should live in or sell. On the crowdfunding platform, homebuyers can remotely participate in the full process, from construction to sale (Borrero-Dominguez, Cordón-Lagares, and Hernández-Garrido, 2020). For developers, crowdfunding reduces developers' cash return pressure (Tiberius and Hauptmeijer, 2021). It helps developers lock in clients for cash flow after land-use rights. It opens financing channels and lowers prices.

**Figure 3: EthisCrowd Housing Crowdfunding Model**
EthisCrowd is an Indonesian Islamic housing crowdfunding enterprise that offers public/social/decent housing to low-income households (Yuningsih and Muhammad, 2020). It brings together investors, housing developers, the government, and Islamic banks to promote a paradigm for affordable housing that is developed collaboratively. The agreement satisfies all parties’ finance needs and has demonstrated success in achieving financial and social goals (Sabree and Munshi, 2019). The provision of subsidies in the form of preferential land prices to help reduce expenses is one of the venture’s most significant success elements (Ararawi, 2020). This model’s weakness is its continued reliance on debt-based financing. As a result, the cost of financing could increase if it takes longer to repay the loan. Under the programme, many low-income households are discouraged from purchasing homes.

III. THE PROPOSED HOUSING LOAN SOLUTION

As mentioned, debt drives the market. Banks must increase trade and fee revenue. If the payment system fails, the economy will undoubtedly be in a disaster. The physical superiority of banks signifies their importance. Consequently, the current debt-based monetary system keeps getting dented by the operation of banks and falling into financial crises (Holmstrom, 2015). Humanity must consider the payment structure underlying the rising house prices. Only in this way may it be able to solve the housing issue of middle- and low-income households substantially. While in the Islamic economic system, fairness and attractiveness of interest-free Maqasid Syariah is the most convincing evidence.

The author proposes a new house scheme that combines the aforementioned three components. It aims to implement Islamic housing financing to lower the housing purchase threshold and simplify home ownership so that achieves the lease of the house's actual value. The proposed model would involve the government granting land subsidies, cooperatives as the major actors, real estate developers to build the properties, and crowdsourcing as the main source of finance in addition to co-op cash.
Figure 4 is the working procedure of the proposed model. The details are as follows:

1. Homebuyers become members of the cooperative. Once an agreed-upon threshold is reached, members can begin purchasing properties utilizing processes similar to those of Ameen Housing Cooperatives. Alternately, members could continue as investors, providing capital for the numerous investments the cooperative makes and earning halal dividends in the process.

2. Together with crowdfunding organisations, local governments, and potential developers, the cooperative identifies possible real estate development projects. Crowdfunding agencies will raise the necessary funds and coordinate the arrangements among the participating entities, the local government will provide suitable land at a discounted price, developers will prepare the necessary development plan, and the cooperative will identify interested homebuyers and monitor the project's progress. Between the participating entities, contracts would be created outlining the allocation of profits and losses as well as risks. Once the property is ready to be occupied
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and the sale has been finalised, investors who contributed funds through crowdfunding will receive the dividends or returns on their investments.

3. With the injection of funds, real estate developers are relieved of the pressure of having financial constraints. To decrease the burden on low-income households and housing costs, developers acquire land at a subsidised rate. By making the agreed-upon down payment and signing contracts, prospective homeowners solidify their commitment to buy. Once the property is ready, the subsequent phase of acquisition would commence.

4. At this stage, Islamic mortgage loans commence. As members, homebuyers initiate monthly instalment payments. The monthly payment is based on rental yield as a benchmark to reflect the actual value of the home. Cooperatives and investors will get their share of investment returns (losses) as part of the monthly instalment payments.

5. The proportion of homebuyers to co-ops/investors is beginning to shift gradually. Once total ownership of the home has been handed to the member, home delivery is complete. The remainder of the profit and loss will be allocated to the co-op/investor.

The proposed solution for low- and middle-income households addresses the parties’ investment demands by capitalising on their individual strengths and compensating for their deficiencies. Importantly, the solution is a community-based business model without the involvement of financial intermediaries, which drastically reduces the cost of financing with the assistance of subsidised land prices from local governments. Additionally, it effectively avoids the principal repercussions of financial instability and probable financial crises produced by commercial banks' excessive money creation. The proposed solution promotes justice and fairness by ensuring that each party receives what it desires without putting another party at greater risk; it also provides better protection for homebuyers in the event that they decide to terminate the contract, as they would still be considered owners to the extent of their ownership ratio. It is a system that avoids riba, which satisfies a vital part of life, namely carrying out God's will and avoiding the evident consequences of excessive credit creation. The disadvantage of the proposed approach is the business's complexity, as it involves multiple partners and a two-tier financial structure (cooperatives and crowdfunding). If any of the parties draw out, the schedule will be severely impacted.
IV. METHODOLOGY

This study defines the questionnaire as pre-and post-questionnaire. First, the author constructs a pre-survey questionnaire about existing China’s home loan system. Based on this, the author gives a video lecture, which aims to explain the three basic concepts and proposed model advocated in this paper. Subsequently, the author distributes a post-questionnaire to determine the opinions of the suggested model among survey respondents. The whole process was conducted online in the two target universities (Qinghai Normal University and Xi'an Eurasia University) (refer to Appendix C and D).

Given the necessity of interpreting essential concepts and the novelty of Islamic home finance in the Chinese market, the author performs a purposive sampling. This approach selects sample units based on their intended application (Singh and Masuku, 2014). Owusu-Ansah and O'Connor (2010) and Razak (2011) figure out that a person’s educational background will also be a factor in home demand. Hence, the main respondents in this study are postgraduate students, as their advanced educational attainment and are easier to grasp new concepts. What's more, millennials in China, where 70% of them own their own home, ranging in age from 19 to 36 (BBC, 2017). Based on the above conditions, young people are the biggest potential homebuyers. It is the main reason that the author carries out purposive sampling instead of distributing the questionnaire direct to anyone on the ground or public.

VI. DATA ANALYSIS

KMO and Bartlett’s Test

This study’s survey questionnaire contains thirteen statements from the current home loan model and eleven questions from the proposed housing loan model. Except for Q10 in the suggested model, the author builds the questionnaire based on an extensive literature review (see Appendix E (1) and (2)). Despite this, the author runs the Kaiser-Meyer-Olkin (KMO) test to determine sampling sufficiency for each model variable and for the entire model.

Table 2: KMO and Bartlett’s Test

<table>
<thead>
<tr>
<th></th>
<th>KMO and Bartlett’s Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.926</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>2266.784</td>
</tr>
<tr>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>
Yong and Pearce (2013) state that below 0.5 as a KMO value is unacceptable but also write that 0.6 is mediocre. It’s only once you get into 0.7 that is middling, certainly 0.8 as meritorious, and above 0.9 which is marvellous. The result demonstrates sampling sufficiency for each model variable and the current model as a whole under such a standard.

**Table 3: KMO and Bartlett’s Test**

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
<th>.933</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
<td>.933</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>1973.665</td>
</tr>
<tr>
<td>df</td>
<td>36</td>
</tr>
<tr>
<td>sig</td>
<td>.000</td>
</tr>
</tbody>
</table>

Using the same evaluative criteria, the KMO index of the proposed model achieves 0.935%, indicating that sampling is sufficient for all model variables and the proposed model.

**Frequency analysis**

Frequency analysis is utilised for background statistics, sample characteristics, and attitude analysis (Noruis, 2006). The author received 308 valid responses. Most responses are postgraduate students from Qinghai Normal University and Xi’an Eurasia University, a few in-service lecturers, and administrators of universities.

**Housing loan information**

**Table 4: Frequency analysis of housing loan information**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Categories</th>
<th>No.</th>
<th>Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: Have you ever taken a housing loan (current or past)</td>
<td>Yes</td>
<td>91</td>
<td>29.33</td>
<td>29.33</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>217</td>
<td>70.67</td>
<td>70.67</td>
</tr>
<tr>
<td>Q2: If your answer to Q1 is Yes, please indicated the type of your housing loan</td>
<td>Commercial housing loan</td>
<td>13</td>
<td>19.78</td>
<td>19.78</td>
</tr>
<tr>
<td></td>
<td>SHF</td>
<td>16</td>
<td>17.38</td>
<td>17.38</td>
</tr>
<tr>
<td></td>
<td>CMH</td>
<td>6</td>
<td>6.50</td>
<td>6.50</td>
</tr>
<tr>
<td></td>
<td>HRF</td>
<td>31</td>
<td>56.50</td>
<td>56.50</td>
</tr>
<tr>
<td>Q2: If your answer to Q1 is No, do you have a plan to buy a house in the future?</td>
<td>Yes</td>
<td>190</td>
<td>62.00</td>
<td>62.00</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>118</td>
<td>37.00</td>
<td>37.00</td>
</tr>
<tr>
<td>Q4: Your current/housing status, are you?</td>
<td>Own</td>
<td>118</td>
<td>62.00</td>
<td>62.00</td>
</tr>
<tr>
<td></td>
<td>With parents</td>
<td>31</td>
<td>16.18</td>
<td>6.18</td>
</tr>
<tr>
<td></td>
<td>Own</td>
<td>31</td>
<td>16.18</td>
<td>16.18</td>
</tr>
<tr>
<td>Total</td>
<td>308</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 illustrates loan distribution. 70.45% of respondents had no housing experience; 87.56% aim to buy a house in the future, therefore
majority are potential homeowners. Most Chinese homebuyers are young, per CBNData (2020). Post-1995 generations have a higher purchasing ratio. Niu (2017) says Chinese millennials have the world’s highest homeownership rate at 70%. And 56.05% of respondents with housing experience have Housing Provident Fund loans (HPF). Enterprises set up long-term housing savings accounts for employees through the HPF (Chen, Wu, Liu, and Wang, 2020). Many self-employed or unemployed people can’t join the HPF or get special treatment. When they need homes, they are forced to the commercial market, widening the income gap between rich and poor (Chen et al., 2020). Moreover, only 6.59% of respondents applied for cheap rental housing (CRH), illustrating the low rate of affordable housing in metropolitan China. Tan (2017) says urban immigrants can’t solve the housing problem independently through the market due to urbanisation. The existing affordable housing supply is insufficient. Only 10.06% of respondents rent residences by themselves, indicating China’s rental sector is underdeveloped (Zheng, Chen, and Ju, 2019).

Demographic Information

Table 5: Frequency analysis of demographic information

<table>
<thead>
<tr>
<th>Items</th>
<th>Categories</th>
<th>No.</th>
<th>Percent (%)</th>
<th>CumulativePercent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>142</td>
<td>46.1</td>
<td>46.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>166</td>
<td>53.9</td>
<td>53.9</td>
</tr>
<tr>
<td>Marital status</td>
<td>Single</td>
<td>221</td>
<td>72.75</td>
<td>72.75</td>
</tr>
<tr>
<td></td>
<td>Married</td>
<td>87</td>
<td>27.25</td>
<td>27.25</td>
</tr>
<tr>
<td>Age</td>
<td>&lt;25</td>
<td>177</td>
<td>57.47</td>
<td>57.47</td>
</tr>
<tr>
<td></td>
<td>25-29</td>
<td>67</td>
<td>21.75</td>
<td>21.75</td>
</tr>
<tr>
<td></td>
<td>30-34</td>
<td>60</td>
<td>19.48</td>
<td>19.48</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>3</td>
<td>0.97</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>&gt;45</td>
<td>1</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>Religion</td>
<td>Atheist</td>
<td>231</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Buddhist</td>
<td>32</td>
<td>10.39</td>
<td>10.39</td>
</tr>
<tr>
<td></td>
<td>Islam</td>
<td>32</td>
<td>10.39</td>
<td>10.39</td>
</tr>
<tr>
<td></td>
<td>Christian</td>
<td>3</td>
<td>0.97</td>
<td>0.97</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>10</td>
<td>3.25</td>
<td>3.25</td>
</tr>
<tr>
<td>Job designation</td>
<td>Student</td>
<td>218</td>
<td>70.78</td>
<td>70.78</td>
</tr>
<tr>
<td></td>
<td>Lecturer</td>
<td>48</td>
<td>15.58</td>
<td>15.58</td>
</tr>
<tr>
<td></td>
<td>Administrators</td>
<td>36</td>
<td>11.69</td>
<td>11.69</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6</td>
<td>1.95</td>
<td>1.95</td>
</tr>
<tr>
<td>Monthly Income (RMB)</td>
<td>Less than or equal to 3000</td>
<td>193</td>
<td>62.66</td>
<td>62.66</td>
</tr>
<tr>
<td></td>
<td>3001-5000</td>
<td>58</td>
<td>18.83</td>
<td>18.83</td>
</tr>
<tr>
<td></td>
<td>5001-10,000</td>
<td>55</td>
<td>17.86</td>
<td>17.86</td>
</tr>
<tr>
<td></td>
<td>10,001 above</td>
<td>2</td>
<td>0.65</td>
<td>0.65</td>
</tr>
</tbody>
</table>
An Integrated Islamic Co-operative as A Housing Solution for China’s Housing Affordability Issues

The demographic statistics indicate that the majority of survey respondents were unmarried youngsters under 30 years old. There were 75% atheists and 10.39% Muslims. 29.22% of the 308 respondents were employed at the present time. The study estimates their median income to be between 4,000 and 7,500 Yuan (Chinese currency). As for this standard, just 18.34% of respondents achieved middle-income status.

Descriptive analysis

Table 6: Descriptive analysis of the present model and proposed model

<table>
<thead>
<tr>
<th>Level of measurement</th>
<th>Percentage</th>
<th>Disagree (%)</th>
<th>Neutral (%)</th>
<th>Agree (%)</th>
<th>Mean</th>
<th>SD</th>
<th>Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1. Mortgage price is set in a balance with income.</td>
<td></td>
<td>4.04</td>
<td>37.14</td>
<td>58.82</td>
<td>4.15</td>
<td>0.97</td>
<td></td>
</tr>
<tr>
<td>G2. Housing price does not rise in tandem with income.</td>
<td>4.23</td>
<td>8.64</td>
<td>87.34</td>
<td>4.18</td>
<td>0.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3. Achievement increases in the long term.</td>
<td>5.97</td>
<td>13.06</td>
<td>81.75</td>
<td>5.15</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4. Land price drives up housing price, resulting in a strain between housing supply and demand.</td>
<td>5.81</td>
<td>11.36</td>
<td>84.75</td>
<td>5.24</td>
<td>0.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5. Interest payments for the cost of housing.</td>
<td>6.42</td>
<td>15.17</td>
<td>78.42</td>
<td>4.20</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G6. You believe it is unethical that the home ownership belongings to the bank during the period of housing loan.</td>
<td>6.81</td>
<td>27.92</td>
<td>65.27</td>
<td>3.64</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1. Government loans can easily solve our housing difficulties.</td>
<td>49.18</td>
<td>30.14</td>
<td>20.68</td>
<td>2.76</td>
<td>1.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2. It is necessary to stimulate housing from a commercial bank.</td>
<td>29.94</td>
<td>31.49</td>
<td>38.57</td>
<td>2.97</td>
<td>1.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G13. From your perspective, the IMF, CBN, and MFB housing savings fit all your housing needs.</td>
<td>14.85</td>
<td>20.59</td>
<td>64.56</td>
<td>3.17</td>
<td>1.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G15. From oriental affordable housing (IMF and MFB) is unevenly distributed and difficult to apply for.</td>
<td>8.3</td>
<td>20.23</td>
<td>71.57</td>
<td>3.99</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Descriptive analysis of the present model and proposed model

Parts C and D describe respondents' thoughts on the present and proposed home loan models. The author conducts 3-point Likert-scale surveys. It was separated into three categories: “disagree”, “neutral”, and “agree”.

Part C is the respondents’ general opinion on the current housing model. Nearly eighty percent of respondents had a strong reaction to the home expenses resulting from interest rates. The interest rate is an essential element of a conventional mortgage. Tripathi (2019) underlined that it influences home ownership purchasing to some extent. Most respondents concur that the majority of middle- and low-income households are unable to afford homes. Young people require intergenerational payments, and the mortgage burden has a dramatic effect on the family as
a whole (Chen, 2017). Given this circumstance, the majority of respondents acknowledge that traditional banks are insignificant in homeownership and loan support for low-income groups, or they remain neutral. According to Elahi (2004), conventional banks are biased towards the poor. Most affordable housing agrees that the affordable housing allocation system is inadequate and unavailable. Large urban floating populations are the result of unbalanced urbanization, whilst the high financial bar keeps the majority of urban immigrants out (Luo, Zhang, Wu, Shen, Shen, and Xing, 2018).

Part D is the general view of respondents on the proposed housing model. Most respondents agree with the statements related to the “Interest-free mechanism”. The reason is that renting is an alternative benchmark for interest rates advocated in the proposed model and can resist short-term economic fluctuations (Yusof, Kassim, Majid, and Hamid, 2011; Mohammed, El Amri, and Shabani 2021). However, the author also realizes that nearly 30% of them maintain their neutrality for interest-free mechanisms. A small group of respondents indicated that they were satisfied with the current housing system. Perhaps they do not quite understand the concept. Nevertheless, most respondents highly agree with the principles of profit and loss sharing in the practice of the proposed model. The justice and equality of the partnerships between financing institutions and buyers are different from the relationship between lenders and borrowers in traditional banks (Aleszczyk, De George, Ertan, and Vasvari, 2020). This risk-sharing operation model is popular among most respondents. Overall, most respondents are willing to try the proposed model, which shows that people are actively seeking better financing channels than the current ones.

**t-test with four representative components**

In addition to the above descriptive study, the author did a t-test to observe and provide additional evidence for the results. The author classifies 308 responses into four categories: Muslim/non-Muslim, experience with housing/no experience with housing, employed/unemployed, age 30/age >30. The detailed analysis is provided below.

*Non-Muslim / Muslim*
Table 7.1: Independent t-test for both models (non-Muslim vs. Muslim)

The t-test findings above show significant differences between the two groups (Muslim and non-Muslim). Muslim respondents had stronger views on property prices, interest rates, affordability, justice, and equality than non-Muslims do. The respondents are from cities in Northwest China (Xi'an, Xining). As Liu and Lu (2017) pointed out, Chinese ethnic minorities, including Muslims, are mainly located in underdeveloped areas, and their income levels have been lower than most Han Chinese. As a result, Muslim respondents were more aware of current home loan flaws. And we can see that there is no difference between Muslims and non-Muslims in terms of the difficulty of obtaining bank loans and the general housing system in place. The reason is that banks are profit-driven and do not have religious home loan criteria (Elahi, 2004). The same goes for the current housing system. Thus, there is no distinction between Muslims and non-Muslims in this instance.
Regarding the proposed model, there are considerable discrepancies between the two groups. The recognition of the interest-free mechanism, justice and equality, and the overall recommended paradigm are greater among Muslims than among non-Muslims. It is founded on their beliefs as Muslims are aware that the Quran prohibits interest rates. The proposed concept is asset-based financing with profit-and-loss sharing. It refers to any Sharia-approved economic activity, which prevents financial crises by limiting excessive fiat money creation. Therefore, Muslim respondents are more in favor of the proposed model.

Have housing loan experience / have no housing experience

Table 7.2: Independent t-test for both models (Have housing loan experience / have no housing experience)

The author compared two groups: those with housing experience and those without. The finding indicates that respondents with housing experience are more likely to agree with the unsatisfactory performance of the current housing model in terms of high house prices, interest
payments, low affordability, and a lack of fairness and justice. It demonstrates that respondents with housing experience are more dissatisfied with the current housing loan model and have higher expectations for the suggested alternative. Purchasing a home is a productive undertaking. Possible earnings and losses cannot be predicted in advance. Therefore, it is immoral to charge interest on housing loans for productive purposes. In contrast, the proposed model’s equal treatment of monetary capital and labor (borrowers and lenders) is radically different from the current housing paradigm (Akaaboune, Burnett, Skousen, and Al-Wreiket, 2020). It is the focal point of the suggested paradigm and is also essential to the practice of Islamic philosophy.

Employed vs. Unemployed

Table 7.3: Independent t-test for both models (Employed / Unemployed)
The author found that those with jobs responded more to the existing housing model and the proposed housing model than those without jobs. Except for the two viewpoints driven mainly by high housing prices and land prices, these two sets of data have significant differences in most of the remaining statements in the two models. Thus, employed respondents are more likely to agree with the unfavourable performance of the current housing model in terms of high house prices, interest payments, low affordability, and a lack of fairness. Most importantly, employed respondents have higher expectations of the proposed model.

Table 7.4: Independent t-test for both models (Age >30 / Age <30)

Numerous academics agree that the interest-based system only provides benefits for a small portion of the population, and that the majority of
people do not receive protection in economic transactions (OKTE, 2017; Aziz, 2019; Khalidin, 2021). While Islam has devised the interest-free system for an all-inclusive productive process in the pursuit of economic progress for all humankind (Hatta, Ma’in, Arifin, and Nasir, 2017). The proposed model aims to fulfill the housing demands of all people from different households of ideology to gain social harmony and unity. Consequently, regardless of whether respondents have jobs, they need extra channels and protections for their home purchase transactions.

Age > 30 vs. Age < 30

The author compared the t-tests of respondents over 30 and responders under 30. It turns out that older respondents had a larger sense of agreement with the opinions of high housing prices, interest payment systems, decreased affordability, lack of fairness, etc. Similarly, they have higher expectations for the proposed model’s core concept. It may suggest that they have a more mature perspective and understanding of the current housing model. In addition, they are interested in the interest-free method recommended by the suggested model. The rationale is that the proposed model is founded on the shariah principle prohibiting interest, and it meets the housing needs of the majority of people. Hatta et al. (2017) underlined that the basic values of Islamic household finance used in the suggested model are a system that is subject to the inspection of Qur’anic texts, a great deal of inference from the influential great man, and the wisdom of the interest rate ban system. Formally, we see that respondents view the suggested model favorably.

VII. EMPIRICAL RESULTS AND DISCUSSION

Based on the social problems and impacts caused by unaffordable housing, the author introduces a cooperative housing loan model by drawing on the concept of Islamic home finance (MM), a successful cooperative housing case (The Ameen housing cooperative) and crowdfunding. The alternative model is used to help solve the housing issues of middle- and lower-income households in China. The author conducted empirical data analysis with a questionnaire survey to explore the recognition and acceptance of the new model of stakeholders represented by potential homebuyers.
Summary of Findings

First, the author runs the Kaiser-Meyer-Olkin (KMO) test to determine sampling sufficiency for each model variable and for the entire model. This structure detection aims to test whether the construct of all statements in the questionnaire is consistent with the author’s understanding of the nature of the construct. The results show that all the dimensional statements in the questionnaire show sampling sufficiency, which further verifies the reliability and feasibility of this research questionnaire.

Second, the author conducted a frequency analysis to understand the basic information of all respondents. A total of 308 respondents were from two universities in China. Most of them are postgraduate students under 30 years old. Although they are less housing and work experience, the explanation of sample size selection in section IV fully shows that respondents in this study are the best research subjects with an easy understanding than others.

Thirdly, the author oversaw descriptive analysis for the current and suggested models. Regarding the present housing loan model, the author discovered that the majority of respondents concur with the negative assertions regarding interest rate payment difficulties, decreased affordability, a lack of fairness and equity, insufficiency, and lack of availability. However, the majority of respondents have accorded a high level of recognition to the proposed model's three characteristics of interest-free mechanism, fairness and justice, and overall perspectives. Specifically, Q10 reveals that over 67.54% of respondents would be eager to test out this alternative approach if it were adopted in China in the future.

Fourthly, the author ran a t-test to show the responses of respondents to the various characteristics of the two models. The results indicate that Muslim respondents are more open to the suggested paradigm than non-Muslim respondents due to the acknowledgment of religious notions. In addition, respondents with housing experience, who are actively employed, and who are over the age of 30 favored the proposed model, based on their familiarity with housing events and a deeper comprehension of the proposed model. Thus, they are more at ease with
the relationship between justice and equality indicated by the proposed paradigm. It indicates that the majority of this study’s respondents are bored with the current housing paradigm, and they are eager to find new housing financing channels that may suit their housing requirements.

**Discussions**

After the reform and opening up, China has implemented a diversified housing system to meet people’s different needs. We can see that under this new structure, housing conditions have greatly improved. This transition, however, has contributed to high housing expenses. The real estate market is expanding rapidly, resembling an out-of-control horse, and causing several social problems. The major urban regions of China have evolved into "huge construction bases." There are plenty of vacant properties that individuals cannot afford to purchase. In light of the discrepancy between supply and demand, the government has taken much effort to return housing to its essential qualities, but the results have not been adequate. The author proposes an alternative housing solution for middle- and low-income households by merging MM, Ameen Housing Cooperative, and EthicCrowd to create an Islamic cooperative housing model.

In this study, the majority of respondents agreed with the existing housing market’s perspectives on interest payment problems, unaffordable housing, justice and equality, and insufficient inventory, as revealed by the questionnaire results. The author discovered that discontent with the current system among respondents is concentrated in four areas:

i. Pressure from interest payments
   As a fundamental component of conventional mortgages, interest rates have a direct impact on monthly payments (Wonder, Wilhelm, and Fewings, 2008). Respondents believe they cannot simply terminate their mortgages since doing so would result in the loss of homeownership, fees, and foreclosure. Therefore, the house slave effect has become a distinctive aspect of Chinese culture.

ii. Challenge of intergenerational payment
   According to Ismail, Bujang, Jaafr, Jiram, and Wijayantingyias (2020), the ability to buy, pay, and income affordability need to be considered.
As a result of growing housing costs, the housing burden of young people (particularly young men) has transferred predominantly to the entire family (Li and Shin, 2013). Intergenerational payments weigh down numerous Chinese middle-class households (Lian, 2021).

iii. Prejudice against the poor by banks
As stated previously, banks will reclaim ownership if mortgage payments are discontinued. This unreasonable and unfair behaviour reveals the prejudice of banks against the poor (Elahi, 2004). When financial troubles arise, the majority of respondents, who are students with weaker economic footing, turn to their parents rather than a bank.

iv. Affordable housing is not working well
In the context of high urbanization and housing marketization, developers have undertaken numerous commercial housing projects because of high profits, while the supply of affordable housing is insufficient (Li, Guo, You, and Hui, 2016). The high threshold of affordable housing prevents most urban immigrants from accessing housing. This situation contradicts the government’s determination to solve the housing difficulties of low-income families.

The majority of respondents are eager for a simple answer. If China uses this new approach in the future, more than half of the people in the study are willing to try it. Specifically, Muslim responders and those with housing experience are employed and older than 30. Nevertheless, the author discovered that more than 30% of respondents were neutral regarding the questions of interest being a non-productive expense, the justice and equality of ownership transfer, the efficient operation of the proposed concept, and the willingness to use the alternative model. The author summarises two primary causes for this situation:

i. Insufficient understanding
The proposed model is not easy to understand. In particular, China does not currently have any relevant popularisation of the model. Additionally, during the COVID-19 pandemic, the author believes that even if an explanation video exists, the function of virtual dissemination is minimal. In particular, the theoretical framework of the proposed model is new knowledge for everyone. Respondents may have insufficient knowledge
of the proposed model and immature views, resulting in increased ambiguity regarding the right selections and a consequent neutral attitude.

ii. Lack of trust and community culture
The author concluded that the critical factor for the successful operation of the proposed model is trust. China's economic expansion has also weakened the original community culture, especially in urban areas (Su, Ye, and Wang, 2019). The high cost of living and the increasingly severe gap between the rich and the poor have caused many differences, contradictions, and conflicts in today’s era. There is a lack of mutual trust, assistance, and tolerance between people. All that remains is confrontation (Shangkun, 2018).

Despite this, it is clear from the empirical analysis of this study that Chinese society is not entirely devoid of trustworthy communities. Based on the results of the t-test, the author determined that Muslim respondents had a high level of acceptance of the suggested model, which proves conclusively that the Muslim community has the necessary conditions to create the notion of cooperation, namely trust. The author believes that effective cooperation between the community and the local government is possible. Likewise, local governments may submit requests to the central government for additional affordable housing construction projects in the region. It is carried out through the government’s ability to test the proposed concept of cooperation rather than a private entity. Muslim majority regions can collaborate with local governments. Local governments can closely connect with communities, observe community members’ housing demands, and implement pilot projects to practice the MM financing concept instead of referring to this as an Islamic concept. Doing so can avoid worries about lack of trust, community culture, laws, regulations, etc. After all, as a one-party country, the Chinese people fully follow all the government’s instructions.

VIII. CONCLUSION
Housing is a necessity for all households. Numerous social conflicts have resulted from the expensive housing induced by rising housing costs. It restricts people's jobs, studies, marriages, families, and other daily activities. By analysing the debt-based causes of rising house prices, the author proposes an alternative joint housing model that includes Islamic housing finance (Musharakah Mudanaqasa), housing cooperatives (Ameen housing cooperative), and crowdfunding (EthisCrowd) to solve
or alleviate the housing problems of middle- and lower-income households in China. The study used a questionnaire survey to assess the acceptability of the new model among prospective homebuyers. The result of this study shows us that the response of the Chinese households’ (majority are non-Muslim and minority Muslim) is shaped by their religious belief and the perceived fairness and attractiveness of the proposed model. This also confirms the possibility of the development of Islamic housing finance in China. The authors recommend establishing a pilot project of the proposed model in the Chinese Muslim community, in coordination and cooperation with the government, in order to address present housing issues. This research identifies implications for government and cultural demand for Islamic financing in China. Simultaneously, it provides a unique reference value for future inquiry and research on the notion of Islamic finance in China and other non-Muslim nations.
An Integrated Islamic Co-operative as A Housing Solution for China’s Housing Affordability Issues

REFERENCE


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