

**ISLAMIC SOCIAL FINANCE SOLUTIONS TO
HOUSING UNAFFORDABILITY FOR MIDDLE
AND LOWER-INCOME HOUSEHOLDS IN CHINA**

MA YAXIN

UNIVERSITI SAINS MALAYSIA

2022

**ISLAMIC SOCIAL FINANCE SOLUTIONS TO
HOUSING UNAFFORDABILITY FOR MIDDLE
AND LOWER-INCOME HOUSEHOLDS IN CHINA**

by

MA YAXIN

**Thesis submitted in fulfilment of the requirements
for the degree of
Doctor of Philosophy**

October 2022

ACKNOWLEDGEMENT

First and foremost, I would like to thank Allah S.W.T al-Hamdulillah, for his kindness and blessings to complete my thesis after taking a journey in academia finally. It requires a lot of perseverance and sacrifice. May Allah's blessings and peace be upon our Prophet Muhammad S.A.W, our role model and teacher in all spheres of life, including economics and finance.

I wish to thank my supervisor, Professor Dr. Fauziah Md. Taib for her dedication, professionalism, and patience in guiding me through until the completion of my thesis. She is always willing to assist me and share her research skills and experience during meetings and discussions throughout this challenging journey. It is only Allah that can adequately reward her for these enormous contributions in this world and in the hereafter, Amin.

I am also indebted to my family, who gave their support in my academic pursuit. Foremost, they give me endless encouragement and infinite love. Finally, I would like to express my gratitude to everyone who has either directly or indirectly provided me with their support to complete this doctoral program. This limited space does not permit me to list their names individually. I pray to Allah to reward them for their kindness and to bless them for their efforts.

I sincerely hope that my research can make a meagre contribution to the development of Islamic finance in non-Muslim countries. I firmly believe that the Islamic financial mechanism can be widely accepted and applied on the road of economic development in the future, and it will continue to make more outstanding contributions to human well-being.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF APPENDICES	xi
ABSTRAK	xii
ABSTRACT	xiv
CHAPTER 1 INTRODUCTION	1
1.1 Background	1
1.2 Housing unaffordability in China	3
1.3 Why study in China	6
1.4 How does the world address the housing unaffordability issues?	7
1.5 Problem Statement	9
1.6 Research Objectives	11
1.7 Research Questions	13
1.8 Research Approach.....	13
1.9 Significance of the Study.....	14
1.10 Organization of Chapters.....	15
1.11 Definition of Key Terms	17
CHAPTER 2 HOUSING MARKET IN CHINA: HISTORY AND AFFORDABILITY CHALLENGES	18
2.1 Introduction	18
2.2 Development of real estate industry before and after reform and opening up18	
2.2.1 Pre-reform Socialist Welfare Housing system	18
2.2.2 The reformed market-oriented housing system.....	20

2.3	Housing problems and challenges after Chinese economic reform and opening up.....	21
2.3.1	Housing Difficulties Facing by Low-Income Households.....	24
2.3.2	Housing Issues in Middle-Income Families.....	26
2.3.3	Real Estate Developers.....	28
2.4	China's housing price regulation policies and its efficacy.....	29
2.4.1	Strict credit regulation for real estate.....	29
2.4.2	Prevent property speculation - Purchase Restriction Order.....	31
2.4.3	City-specific policies and Destocking.....	33
2.4.4	Summary.....	34
2.5	The root cause of rising house prices.....	35
2.5.1	Fiat Money and its Effect on The Housing Prices.....	36
2.5.2	Fractional Reserve Banking System rises the price up.....	37
2.5.3	Interest Rates and housing price.....	38
2.6	Theoretical framework of al-Ghazālī's Maqāṣid al-Sharī'ah.....	40
2.7	Conclusion.....	43
CHAPTER 3 METHODOLOGY.....		44
3.1	Introduction.....	44
3.2	Research Design.....	44
3.2.1	Documentation review.....	45
3.2.2	Mixed method.....	45
	3.2.2(a) Quantitative Research Design.....	46
	3.2.2(b) Qualitative Research.....	49
3.3	Conclusion.....	53
CHAPTER 4 COMPARISON AND ANALYSIS OF THE ADVANTAGES AND DISADVANTAGES OF THE WELFARE HOUSING SYSTEM BEFORE 1998 AND THE EXISTING HOUSING SYSTEM AFTER 1998.....		55
4.1	Introduction.....	55
4.2	Advantages and disadvantages of the Welfare Distribution Housing System.....	55

4.2.1	Background of Welfare Distribution Housing System.....	55
4.2.2	Land Policy in the Welfare Distribution Era.....	56
4.2.3	Advantages and disadvantages under people’s livelihood perspective.....	57
4.2.4	Advantages and disadvantages under economy perspective	49
4.3	Advantages and disadvantages of the Existing Housing System	59
4.3.1	Background of the Existing Housing System.....	59
4.3.2	Land Policy After 1998	60
4.3.3	Advantages and disadvantages under people’s livelihood perspective.....	61
4.3.4	Advantages and disadvantages under economy perspective	62
4.4	Conclusion.....	65
CHAPTER 5 ISLAMIC FINANCE & POTENTIAL SOLUTIONS TO HOUSING UNAFFORDABILITY IN CHINA		67
5.1	Islamic Finance in General.....	67
5.1.1	The Objectives of Islamic Finance	68
5.1.2	The concept of Equity & Fairness	69
5.2	An overview of the development of Islamic finance in China	70
5.2.1	The exploration of the local level.....	70
5.2.2	The driving role of the Belt and Road Initiative (BRI)	72
5.3	Islamic Home Finance	73
5.3.1	Operation of Islamic Home Financing	74
	5.3.1(a) Perspective of Homebuyers	75
	5.3.1(b) Perspective of Real Estate	76
5.3.1	Operation of Commercial housing loan	78
	5.3.2(a) Perspective of Homebuyers	79
	5.3.2(b) Perspective of Real Estate	81
5.3.2	Summary	82
5.3	Cooperative	84

5.4 Real Estate Crowdfunding.....	88
5.4.1 Commercial Real Estate Crowdfunding	88
5.4.2 Islamic Real Estate Crowdfunding	89
5.5 Potential Solutions to Housing Unaffordability in China.....	91
5.6 Conclusion.....	95
CHAPTER 6 MEASURING THE ACCEPTANCE OF THE PROPOSED HOUSING LOAN MODEL: THE PERSPECTIVES OF MIDDLE- AND LOWER- INCOME HOME BUYERS	97
6.1 Introduction.....	97
6.2 Kaiser-Meyer-Olkin test (KMO).....	97
6.3 Frequency analysis	98
6.3.1 Part A: Housing Loan Information.....	99
6.3.1(a) Finding.....	99
6.3.1 Demographic Information	100
6.3.2(a) Finding.....	101
6.4 Descriptive	102
6.4.1 Findings for Part C	105
6.4.1(a) General Perceptions about Present Housing Model.....	105
6.4.1(b) Interest Rate	106
6.4.1(c) Affordability	107
6.4.1(d) Justice and Equality	108
6.4.1(e) Sufficiency and availability	108
6.4.2 Findings for Part D.....	109
6.4.2(a) Interest-Free Mechanism	109
6.4.2(b) Justice and Equality	111
6.4.2(c) The proposed model.....	113
6.5 T-test with four representative components	115
6.5.1 Non-Muslim / Muslim.....	115

6.5.1(a)	Finding.....	119
6.5.2	Have housing experience / have no housing experience	120
6.5.2(a)	Finding.....	125
6.5.3	Employed vs. Unemployed	125
6.5.3(a)	Finding.....	129
6.5.4	Age<30 vs. Age>30.....	130
6.5.4(a)	Finding.....	134
6.6	Summary	134
CHAPTER 7 THE PERSPECTIVE OF STAKEHOLDERS IN ACCEPTING AND IMPLEMENTING THE PROPOSED HOUSING LOAN MODEL.....		
136		
7.1	Background	136
7.2	Profile of Interviewees	136
7.3	Data Collection and Analysis	138
7.4	Findings and analysis	139
7.4.1	Housing Issues in China	139
7.4.1(a)	High housing price.....	139
7.4.1(b)	Housing affordability.....	146
7.4.1(c)	Affordable housing	148
7.4.1(d)	Vacancy Rate	149
7.4.2	The present housing loan model.....	150
7.4.2(a)	Challenges and Problems.....	150
7.4.2(b)	Effectiveness and Efficiency	152
7.4.2(c)	Mutual Benefits	154
7.4.3	The Proposed Housing Model.....	155
7.4.3(a)	Concept of MM.....	155
7.4.3(b)	Cooperative.....	157
7.4.3(c)	Crowdfunding	158
7.4.3(d)	Proposed Model	159

7.5	Summary	161
CHAPTER 8 DISCUSSION AND CONCLUSION.....		165
8.1	Introduction	165
8.2	Recapitulation of Study	165
8.3	Summary of Findings	167
8.3.1	Advantages and disadvantages of socialist welfare housing system and reformed market-oriented housing system	167
8.3.2	Proposal for an Alternative Housing Loan Model.....	168
8.3.3	Readiness of Various Stakeholders in Accepting and Implementing the Proposed Model	169
8.3.3(a)	Quantitative Part	169
8.3.3(b)	Qualitative Part	171
8.4	Discussions and Recommendations	172
8.4.1	Implication to housing scheme Innovation.....	172
8.4.2	Implication on various stakeholders.....	173
8.4.3	Implication on implementation of the proposed model.....	176
8.4.4	Implementation recommendations	178
8.5	Contributions of Study	180
8.5.1	Contribution to Theory.....	180
8.5.2	Contribution to practice.....	181
8.6	Limitation and Suggestions for Future Research.....	182
8.7	Conclusion.....	185
REFERENCE		187

APPENDICES

LIST OF PUBLICATION

LIST OF TABLES

		Page
Table 1.1	Housing affordability index some major cities in China.....	5
Table 2.1	2019 ratio of monthly payments to gross wages in China’s major cities	22
Table 5.1	Ameen Housing Minimum Monthly Payment Calculation & its Components	87
Table 6.1	KMO and Bartlett’s Test of the present housing loan model.....	98
Table 6.2	KMO and Bartlett’s Test of the proposed housing loan model.....	98
Table 6.3.1	Frequency analysis of housing loan information	99
Table 6.3.2	Frequency analysis of demographic information	100
Table 6.4	Descriptive analysis of the present model and proposed model	102
Table 6.4.1(a)	General Perceptions about Present Housing Model	105
Table 6.4.1(b)	Interest rate	106
Table 6.4.1(c)	Affordability	107
Table 6.4.1(d)	Justice and Equality.....	108
Table 6.4.1(e)	Sufficiency and availability.....	108
Table 6.4.2(a)	Interest-free Mechanism.....	109
Table 6.4.2(b)	Justice and Equality.....	111
Table 6.4.2(c)	The proposed model	113
Table 6.5.1	T-test of Non-Muslim and Muslim	115
Table 6.5.2	T-test of have housing experience or have no housing experience	120
Table 6.5.3	T-test of employed or Unemployed	125
Table 6.5.4	T-test of age<30 and age>30.....	130

LIST OF FIGURES

	Page
Figure 1.1	House prices in representative cities in China (2008-2020)/m24
Figure 2.1	The increase trend between Chinese People’s Savings and Loans in the last decade27
Figure 2.2	Five principles of Maqasid Al-Shariah41
Figure 5.1	Musharakah Mutanaqisah home financing model.....75
Figure 5.2	A hypothetical calculation based on Bank of China website information (2021)80
Figure 5.3	Conventional property development progress.....81
Figure 5.4	Ameen Housing Co-operative Rent to Own Model86
Figure 5.5	EthisCrowd Housing Crowdfunding Model.....90
Figure 5.6	Proposed Housing Solution92

LIST OF APPENDICES

APPENDIX A	LETTER REQUESTING PERMISSION TO CONDUCT SURVEY QUESTIONNAIRES
APPENDIX B	SURVEY QUESTIONNAIRES
APPENDIX C	INTERVIEW QUESTIONS
APPENDIX D	SOURCE OF QUESTIONNAIRE QUESTIONS
APPENDIX E	PROFILES OF FIVE INTERVIEWEES

**PENYELESAIAN KEWANGAN SOSIAL ISLAM BAGI
KETIDAKMAMPUAN PEMILIKAN RUMAH DALAM KALANGAN
ISI RUMAH BERPENDAPATAN SEDERHANA DAN RENDAH DI
CHINA**

ABSTRAK

Sejak reformasi dan pembukaan ekonomi kepada dunia luar, pertumbuhan ekonomi China telah dipercepatkan dengan peralihan daripada pelan yang dikawal kepada proses yang diterajui pasaran. Kehidupan harian orang ramai telah bertambah baik. Walau bagaimanapun, harga rumah telah menyimpang daripada trajektori biasa disebabkan oleh lebih bekalan wang fiat dan isu bekalan dan permintaan perumahan (antara faktor lain), menyukarkan banyak isi rumah berpendapatan sederhana dan rendah untuk memiliki rumah sendiri dan melahirkan pelbagai masalah sosioekonomi berkaitan perumahan. Walaupun kerajaan China telah mencuba dasar kawalan harga rumah untuk jangka masa yang panjang, kesannya adalah sedikit. Keadaan ini bukan unik di China, tetapi kuantiti penduduk China yang banyak memburukkan lagi keadaan ini. Penyelidikan ini menggabungkan contoh kerja perumahan terbaik yang teruji dan terbukti dari bahagian dunia serantau (Musharakah Mutanaqisah, Ameen housing Cooperate, dan EthisCrowd) dan mencadangkan penyelesaian kolaboratif dengan kewangan Islam sebagai prinsip utama. Untuk memantau sama ada isi rumah Cina (minoriti Islam dan kebanyakan bukan Islam) menerima model yang dicadangkan, dan untuk mendapatkan penilaian kesesuaian model yang dicadangkan di dunia sebenar daripada pakar kewangan dan perniagaan hartanah, penulis menjalankan kaedah campuran pendekatan yang merangkumi kuantitatif dan kualitatif. Penulis akhirnya mengumpul 308 soal selidik dan temu bual yang sah daripada 5 orang pakar. Keputusan

menunjukkan bahawa orang Islam, mereka yang mempunyai pengalaman perumahan, responden yang bekerja, dan mereka yang berumur 30 tahun ke atas menyukai dan bersedia mencuba konsep yang dicadangkan. Pada masa yang sama, majoriti pakar (orang yang ditemu bual) mengiktiraf dan mengiktiraf idea kreatif dalam model yang dicadangkan, tetapi menyuarakan kebimbangan tentang ketiadaan budaya dan kepercayaan masyarakat di China, yang boleh menjadi ancaman besar kepada daya maju model. Sekiranya model yang dicadangkan itu harus memasuki China sebagai projek perintis yang diperkenalkan oleh kerajaan tempatan dan dilaksanakan dalam komuniti di mana budaya dan kepercayaan Islam lebih berleluasa, ia berkemungkinan akan menjejaskan kejayaan pelaksanaan model yang dicadangkan.

**ISLAMIC SOCIAL FINANCE SOLUTIONS TO HOUSING
UNAFFORDABILITY FOR MIDDLE AND LOWER-INCOME
HOUSEHOLDS IN CHINA**

ABSTRACT

Since reform and opening, China's economic growth has accelerated from a plan-controlled to a market-led process. People's living conditions have been greatly improved. However, home prices have deviated from their normal trajectory due to excess fiat money supply and housing supply and demand issues (among other factors), making it difficult for many middle- and low-income households to own their own homes and spawning an array of housing-related socioeconomic problems. Although the Chinese government has attempted house price control policies for an extended period, the impact has been little. This circumstance is not unique to China, but the sheer quantity of China's population exacerbates it. This research combines the best tested and proven housing work examples from the other parts of the world (Musharakah Mutanaqisah, Ameen housing Cooperate, and EthisCrowd) and proposes a collaborative solution with Islamic finance as the main principle. In order to observe whether Chinese households (minority Muslims and most non-Muslims) accept the proposed model, and to seek an assessment of the applicability of the proposed model in the real world from finance and real estate business experts, the author conducted mixed method approach which includes quantitative and qualitative. The author ultimately collected 308 valid questionnaires and interviews from 5 experts. The results indicated that Muslims, those with housing experience, employed respondents, and those over the age of 30 liked and were willing to attempt the proposed concept. Concurrently, most experts (interviewees) recognized and acknowledged the creative ideas in the proposed model, but voiced concern about the absence of community

culture and trust in China, which could constitute a significant threat to the model's viability. If the proposed model should enter China as a pilot project introduced by local governments and implemented in communities where Islamic culture and beliefs are more prevalent, it will likely affect the successful implementation of the proposed model.

CHAPTER 1

INTRODUCTION

1.1 Background

Since the abolition of the Breton Woods System in 1971, money is no longer backed by gold. Fiat money is fast becoming popular as it does not require underlying assets to issue more money. With fractional reserve banking in place, the banking system is capable of creating money through the process of deposit multiplier expansion. There are countless bank loans granted out of thin air by commercial banks (Werner, 2016). For this reason, the real economy and money supply follow different directions, which resulted in disparity that creates debt overhang and asset price bubbles. It mainly happens to credit growth in the real estate sector (Phillips and Shi, 2020). Looking back to history, in 1990, Japan experienced a 15-year depression due to the real estate bubble bursting (Koo, 2011). Followed by excessive speculation in Bangkok's real estate that triggered the Asian financial crisis in 1997 (Acharya and Mora, 2015). In 2008, the US subprime mortgage crisis struck (Zhu, 2016). Until 2021, Evergrande, the largest real estate company in China, caused severe cracks in the real estate industry due to debt default (Tan, 2021). It turns out a debt-based system that relies heavily on property expansion is making wealth for some and causing pain for many others. The mentioned crises that the world has seen show that debt-based financial activities and fiat money as monetary systems need to be reevaluated and alternatives to the existing financing system particularly on real estate have to be looked into further.

Since the removal of gold-backed money, every decade or so the world has witnessed series of economic, financial, or real estate crises; starting with the 1986 world's economic crisis, followed by the Asian financial crisis in 1997 and Sub-Prime

crisis in 2008 and the latest one is related to Covid-19 while the world is bracing for the worst crisis to happen. Every time when there was a crisis, the monetary value would take a hit and trillions of money worth would be lost in terms of purchasing power, monetary value, share prices etc. under the present monetary system, soon after the crisis, a new round of growth (bubbles) would again take place until another crisis set in. similarly for real estate, during the crisis, the price would plummet but the momentum for real estate bubbles would start again soon after the crisis is over. Housing prices start a new round of growth after each financial crisis in the past. It never stops rising. Housing in countries worldwide has been booming and becoming increasingly expensive. According to Ren and Xiong (2018), London's housing prices have risen 106 times in the past 50 years, exceeding the United Kingdom's 61 times overall. Paris housing prices have been increased by 32.5 times from 1965 to 2015, significantly surpassing France's overall 22.7 times. New York City's housing prices have increased by 8.1 times from 1975 to 2017, 5.6 times higher than in the US. Japan's land prices have risen 82 times in 36 years before the bubble burst in 1991. Obviously, high housing price has already become a phenomenon in the world.

Here, it is worth reflecting on the genuine reason for the unreasonable house prices. The answer partly lies in commercial banks constantly creating new money in the form of bank deposits. It caused a corresponding increase in the amount of currency in circulation to match an entry in accounting. The increased in money supply is not followed by the increase in assets, leading to a decline in purchasing power (Gross and Sieben Brunner, 2019). In order to prevent the bank's assets from shrinking due to excessive non-performing loans, banks must ensure that all borrowers can repay the total loan amount on time. Since the price of houses has gone up so much, the payment period of homebuyers has increased from the past 10 years to the current 30 years. Such

practices, homebuyers are caught in an endless repayment cycle. With housing prices soaring, homebuyers are just focusing to pay their monthly payments instead of trying to acquire real homeownership (Ismail, 2021). Aside from the fiat money that contributes to the loss of purchasing power and increased money supply, there are some other factors that contribute to the excessive real estate price around the world. Among the contributing factors are imbalance demand and supply (Elliott, 1981; Zhang, An, and Yu, 2012; Lin, Ma, Zhao, Hu, and Wei, 2018).

1.2 Housing unaffordability in China

With rising costs of living, the densely populated countries in the world, such as China, India, Indonesia, are urgently seeking a sustainable housing solution to help their citizens achieve their basic housing needs. In China, real estate began to enter marketization after abolishing the welfare distribution housing system in 1998. Since then, housing has not been welfare any longer but a commodity. The Chinese government has implemented a diversified housing system that includes commercial, economically affordable, and cheap rental housing. The real estate industry has become the main engine of the national economy that other sectors cannot replace. According to the China National Bureau of Statistics (2020), the proportion of China's real estate industry in GDP has increased yearly from 3.66% to 7.5% in the past two decades, which is more than two times improving. People's living conditions have developed from crowded and dilapidated to spacious, comfortable, high-rise residential buildings. This qualitative leap is due to the rapid development of real estate. Local governments are committed to realizing monetizing land. The rapid escalation of land values brings revenue for the government and widens the gap between the rich and the poor under the process of large-scale urbanization (Shatkin, 2016). There is a massive shortage of

affordable housing on one side and an overwhelming number of commercial residential on the other in many cities. This contradiction is intensifying (Liu, Li, and Greene, 2020; Chen and Wu, 2022). Thus, people are increasingly under pressure to buy houses, predominantly middle and lower-income households.



Figure 1.1 House prices in representative cities in China (2008-2020)/per m²

Source: Author’s calculation based on Anjuke Housing Price Assessment (2020).

The continuous growth curves in Figure 1.1 show the housing price increasing trends in three represent cities from China. It illustrates that in the past 20 years, with data in 2008 as the benchmark, China’s housing prices have been on an upward trend, and there seems to be no sign of a decline. The author takes Shanghai as an example. People can buy a house with an average of 13,498 yuan/m² in Shanghai in 2008. However, the same home was selling at an average of 51,208.3 yuan/m² in the same city in 2020 (nearly five times the amount required to make a loan) (Anjuke Housing Price Assessment, 2020). Meantime, the Global Property Guide (2019) concludes that

the average sales price of residential units mainly increased in big cities like Beijing, Shanghai, and Shenzhen, while expanding to second and third-tier cities continuously. Thus, housing affordability for middle and lower-income households is a big concern.

Table 1.1 Housing affordability index some major cities in China.

Division	Area	Price/m ² to Buy Apartment in City Centre (yuan)	Price/m ² to Buy Apartment Outside of Centre (yuan)	Average Monthly Net Salary (After Tax) (yuan)	Price to Income Ratio	Mortgage as a Percentage of Income	Loan Affordability Index
First tier	Beijing	104,629.63	49,884.62	9,261.15	41.71	336.83%	0.30
	Shanghai	98,600.00	47,779.54	10,064.60	36.36	288.52%	0.35
	Guangzhou	67,143.06	32,730.77	7,342.86	34.00	276.48%	0.36
Second tier	Hangzhou	51,272.73	27,090.91	7,069.00	25.75	203.03%	0.49
	Tianjin	56,250.55	17,750.00	5,500.00	33.64	268.62%	0.37
	Wuhan	29,306.25	13,125.00	4,842.21	21.91	171.71%	0.58
Third tier	Zhongshan	25,000.00	11,333.33	5,750.00	15.80	182.93%	0.55
	Kunming	20,160.00	11,800.00	5,187.20	15.40	132.69%	0.75
	Lanzhou	16,333.33	8,000.00	3,283.11	18.53	133.28%	0.75

Source: Author's summary based on Numbeo website information (2020).

Indicators covered by red in the above table mainly show housing affordability in China. Typically, the higher the hand of price-to-income is, the lower housing affordability is (OECD Affordable Housing Database, 2021). In Table 1.1, the price-to-income rates in six cities are all high. Even in the third-tier cities, Zhongshan and Lanzhou, their indicators of price-to-income rates surpassed New York (10.28) in the US and Tokyo (15.86) in Japan (Numbeo, 2020). According to the average monthly net salary (after tax), mortgage as a percentage of income in all above cities has exceeded 100%, which is quite worrying. The loan affordability index is an inverse of the mortgage as a percentage of revenue. Typically, the higher the number, the better. However, the loan affordability index is at a low level in each city. Therefore, these indicators fully expound that China's housing has become unaffordable over time.

1.3 Why study in China

The Chinese government's initiative pushed real estate to a free-market competition mechanism has dramatically improved the living conditions of residents and increased the proportion of urban household property income in total household income. The development of the real estate industry has also promoted urban functions, optimized urban industrial structure, and played an essential role in the national economy. Nevertheless, China fell into a development conundrum when the paradigm of the real estate industry shifted from communism to an open economy. Excessive credit expansion in China's real estate market, land finance, and the housing pre-sale system have led to real estate bubbles (Chang, 2010; Chen and Huang, 2017). The most noteworthy is the debt crisis of China Evergrande. Generally, commercial banks are willing to provide loans to such large enterprises to reduce risks and increase profits (Ismail, 2021). Such operations allowed Evergrande to expand rapidly and bear huge debts. Especially during the COVID-19 pandemic, Evergrande lacked liquidity and could not pay amount dues, triggering a severe debt crisis that continued to spread. It is further affecting the sustainable development of the entire Chinese economy. While in the whole process, thousands of ordinaries face very harmful effects.

It needs to be highlighted, although various kinds of debt-based financing offer the possibility for many households to fulfil their daily needs such as food, house, education, transport. The debt-based model of financing would work for people who have access to capital. Unfortunately, debt-based financing does more harm than good to the economic growth (Intartaglia, Antoniadis, and Bhattacharyya, 2018). Lower- and middle-income group of population would suffer the most as they are the most vulnerable people facing the crisis consequences when the loss of monetary value takes

a deeper hit to them than the high-income group. The government, therefore, should shoulder additional and heavy responsibility to prevent the problem from recurring or worsening, since housing is a necessity and represents the primary form of household debt, an effective way to solve the housing unaffordability problems must be found and examined.

1.4 How does the world address the housing unaffordability issues?

Every country in the world works tirelessly to tackle the housing concerns of its citizens. There are many ways in which the burden of owning a house has been looked at; from financing to coming up with innovative housing models with the ultimate objective of reducing the burden to the owners. Although a great majority of countries offered owning a house using the conventional financing method (debt-based), many more alternatives have been used to greater effect. The innovation includes arranging an Islamic based home financing (debt-based and partnership-based). Housing cooperative and real estate crowdfunding.

Islamic finance has made tremendous progress in the last four decades. Using Maqasid Al-Shariah as the underpinning philosophy, the Islamic finance products offer financial stability, equitable wealth distribution, and social responsibility (Hanif and Ayub, 2022). However, most of its operations are debt-based since banks are risk averse although the Islamic finance products avoid interest or *riba* (main concern to the Muslim and also proven to be supportive of sustainable financing). It is important to note that Islamic finance includes a housing financing scheme called *Musyarakah Mutanaqisah* (MM/Diminishing partnership) which is a debt-based partnership and is more concerned with determining the rental value of the property than with complying with banks' advance interest agreements (Shaikh, 2017; Billah, 2019). Unfortunately, it has

not been widely used by many financiers (banks) because MM expands their risk and increases their operational complexity (Bahari, 2009; Idris, 2018). As mentioned earlier, banks are risk averse and do not favour any arrangement that brings risk to the banks. Banks are only interested to do that has minimum risks but almost assured returns, hence explaining why they are in favour of debt-based financing and offer credits only to those who are deemed credit worthy. The existence of MM gives an alternative to housing financing while being regarded as means of preserving the social order of communities in the true ecosystem for Islamic finance (Maikabara, Maulida, and Aderemi, 2021). To change the present monetary system is a tall order although it is not impossible, but the more realistic solution is to use the existing proven models and refine it to suit countries or communities need.

Cooperative finance is an efficient institutional structure suited to economic growth (Oluyombo, 2018). Ameen Housing Cooperative is a California-based Islamic cooperative financial firm that provides Shariah-compliant home finance options and halal dividend prospects to its members (Suleiman, 2016). It transfers home ownership gradually through monthly rent payments and makes home ownership simple for homebuyers. However, its capital allocation is rather limited, preventing it from meeting the rising demand for housing (Paldi, 2020). It also needs expansion funds so that more people can benefit from rent-to-own partnership home financing.

Real estate crowdfunding is conducted online for commercial goals, including marketing, financing, and sales. It provides homebuyers with a personalized, informative, and individualized product (Jiang, Ho, Yan, and Tan, 2019). However, developers benefit the most from real estate crowdfunding, not middle- and lower-income families. Crowdfunding has substantially facilitated developers' debt financing and housing sales for this reason (Ferrigno, 2021). Its capacity to speed homebuyers'

purchase of homeownership is limited. The emergence of Islamic real estate crowdfunding has strengthened its focus on demand for the interests of homebuyers (Sabree and Munshi, 2019). Such as EthisCrowd, it provides Shariah-compliant and moral investment opportunities to construct affordable homes and assist middle-and low-income households in acquiring home ownership (Yuningsih and Muhammad, 2020). However, this new fintech paradigm is still on a debt-based loan, and the reducing costs from this arrangement may not be adequate to address disadvantaged populations' housing needs (Noor, Wulandari, Ahamat, Marzuki, and Junaidi, 2021). It must unify and collaborate with significant economic entities to meet the community's and citizens' massive housing needs instead of doing it individually (Riesman, Glazer, and Denney, 2020). These three models (Musyarakah Mutanakisah, housingcooperative and real estate crowdfunding) represent the proven models capable of offering alternative solutions to housing unaffordability issues faced by the world.

1.5 Problem Statement

The modern banking system creates an infinite amount of fiat money when granting loans. Fiat money is legal tender but has no intrinsic value as it is not backed by physical assets (Chapelow, 2019). Although it can be used to settle debts, it does not add to real economic activity because speculative investment reduces its value and drives up market prices (Werner, 2016). The evidence presented thus far demonstrates conclusively that fiat money is devalued to the level of real economic output during each economic crisis to adjust for excessive market liquidity. After the crisis, monetary expansion will resume in creating and stretching the bubbles again and the cycle will be repeating itself again and again (Mohsin et al., 2019). With every crisis and as money supply increases, the lower and middle-income group will be the hardest hit (Ismail,

2022) as the value of their money in savings or in bank worth much less than what it was before the crisis. Consequently, making the ends meet is very difficult for these groups, let alone purchasing a house with rising interest rate every time a crisis happens. With money worth less than what it was, housing prices keep rising to keep in tandem with the depreciated value of fiat money. In the end, only the wealthy and upper-class will be able to afford homes under the current monetary system.

Since the economic reform and opening, the Chinese government has been committed to constructing a diversified housing system, which includes economical conformable housing (ECH), cheap rental housing (CRH), and housing provident fund (HPF). However, these various housing policies do not match the housing needs of different classes to provide them with real welfare characteristics (Shi, Chen, and Wang, 2016; Liu, Li, and Greene, 2021). Considerable research demonstrates that under such a housing system, people's housing problems are deteriorating (refer to chapter 2). There is a dramatic contrast between the vast number of vacant houses in the city and the low affordability of housing for residents (Chen and Wills, 2020; Statista, 2020). Debt-based financing has been proven to impart misery on low- and middle-income groups as the increased in money supply has depreciated the value of money that have and or increased their costs of living, making payments for their housing loan to be more difficult – they need more money to pay off their loan every year (Werner, 2016; Mohsin et al., 2019; Ismail, 2022). To change the monetary system completely is difficult but China needs an urgent solution given the huge number of population and the economic and social implications out of not being able to own a house.

While the need to study and change the current monetary system is important to limit banks from issuing more money out of thin air (and thereby the lower and middle-

income group), the present research is more focus on how to find solutions to the housing unaffordability under the existing monetary system.

This research proposes the use of financing methods that have proven to be effective and combine it with other housing models that re proven to work in search of this solution for China. The proposed housing model would integrate the three effective housing working schemes which include Musharakah Mutanaqisah, Housing Cooperative, and real estate crowdfunding and anchors on Islamic finance as the major principle. The search for this alternative housing unaffordability solution has a major aim of reducing the burden of financing for both parties – consumers and developers and offer a chance for a win-win situation to all parties involved including the intermediaries, in this case – the cooperative and the financiers. By moving away from the debt-based financing, combining the crowdfunding and cooperative features, it is hopeful that the burden of owning a house would no longer be the case. The proposed model also seeks to balance the needs of homebuyers and developers while avoiding the difficulties of the debt-based finance model (rising interest rate, risks losing the house if payment lapsed, etc.).

1.6 Research Gap

As stated in the preceding section, this study would be one of the earliest attempts to examine the solution to housing affordability problems. It builds on the earlier work of some scholars (Werner 2016; Mohsin, Taib, and Alhajj, 2019; and Rothbard, 2008), who suggested that the housing prices escalate due to the decrease in fiat money value as more loans are issued in circulation (money created out of thin air). None of the earlier works look at the solution to the housing unaffordability issue specifically, while some focus on the types of low housing schemes available to the

middle- and lower-income groups (Baqutaya, Ariffin, and Raji, 2016; Zainon, Mohd-Rahim, Sulaiman, Abd-Karim, and Hamzah, 2017; Abdullah, Jamaluddin, Yakob, Marzukhi, and Zaki, 2021). While the argument in the thesis is that the additional money supply without any asset-based has caused the devaluation of the previously issued currency as more money is in circulation. As a result, housing has become prohibitively expensive and unaffordable. Given this circumstance, changing the current monetary system is difficult (though not impossible), but the more practical option is to find a solution within the same monetary system by integrating existing established models and refining them to meet the countries or community's needs.

1.7 Research Objectives

The main aim of this research is to look for an alternative solution (based on Islamic finance as its underlying principles) within the present monetary system (where money could be created out of thin air and brings significant devaluation and loss of purchasing power) that allows lower and middle-income group of people in China to own housing affordably. The following are specific objectives defining the major aim of the study.

- i. To compare and analyse the advantages and disadvantages of welfare housing system before 1998 and the existing housing system after 1998.
- ii. To propose an interest-free cooperative housing scheme (Musharakah Mutanaqisah, cooperative, and crowdfunding) to address housing unaffordability for middle- and lower-income households in China.
- iii. To examine the readiness of various stakeholders in accepting and implementing the proposed model of Musharakah Mutanaqisah, cooperative, and crowdfunding.

1.8 Research Questions

In corresponds to the above study's aim and objectives, the following are specific research questions to guide the study:

- i. What are the advantages and disadvantages of the welfare housing system before 1998 and the existing housing system after 1998 in China?
- ii. How does the interest-free cooperative housing scheme (Musharakah Mutanaqisah, cooperative, and crowdfunding) work?
- iii. Are various stakeholders ready to accept and implement the proposed model of Musharakah Mutanaqisah, cooperative, and crowdfunding?

1.9 Research Approach

First, the author explores the changes in China's housing system around 1998, as well as its benefits and drawbacks, through a review of the literature, thereby highlighting the challenges and impediments to the growth of China's housing market. Then, this study employs a mixed methodologies research technique (quantitative and qualitative) to address the aforementioned research issues. The researcher conducts convergent-parallel design (QUAL+QUAN), which analysis quantitative and qualitative parts separately and then interprets the results jointly (Creswell and Plano Clark, 2011; Creswell, 2003). The authors first utilised a questionnaire to compare the perspectives of Chinese households (minority Muslims and majority non-Muslims) on the present housing loan model and the proposed housing loan model. Then, the researcher examines personal interviews with professionals in finance, real estate, etc. to glean more insights from the experts regarding the proposed housing loan model. A research question can be comprehended better with a mixed approach than with either strategy alone. It has been employed in numerous research (Abdul Rasid, 2009, Abu

Bakar, 2007). This method permits researchers to achieve more systematic and comprehensive results.

1.10 Significance of the Study

Buying a house has always been a critical matter in every family. Most, if not all, homebuyers obtain related home loans from banks. The continuous expansion of household credit has led to excessive hot money flowing into real estate, thus forming a real estate bubble, and pushing up housing prices. It is not only detrimental to economic vitality but also inhibits the consumption side and triggers financial crises. While commercial banks restart money creation after each crisis to fill excess liquidity in the market (Mohsin et al., 2019). In fact, financial crises have been debt crises in essence. Evidence suggests that the current interest-based debt regime is becoming increasingly unsustainable, as is the process of global financialization over the past four decades (Mirakhor et al., 2012). Therefore, it is worth considering that we should avoid using debt-based instruments in housing matters and reduce housing prices by curbing money creation. This study proposes a new Islamic cooperative housing loan model as a solution to help people afford houses through learning from successful housing solutions globally. This would be among the first attempts to introduce an innovative solution to housing unaffordability issues by integrating the present housing and financing models that are proven to be working to land a win-win situation for all parties involved including customers, cooperatives, real estate developers and governments. The proposed model would enhance the applicability of Islamic finance as a means of preserving the social order of communities in the true spirit of ensuring justice and fairness.

This research further contributes to Islamic home finance's knowledge and theoretical system. It is a rare practice of a comprehensive housing scheme in the Chinese market. Transforming the traditional lender-borrower relationship between banks and customers into a partnership is an innovation. This new type of home loan based on musharakah mutanaqisah may help squeeze out the real estate bubble and offer a multi-dimensional investment channel to various stakeholders. The integration and functional optimization of the three concepts can create more development possibilities and effectively solve the respective difficulties of homebuyers and developers. Furthermore, the mixed-method research (questionnaire survey and interview) is more specific and in-depth than the previous single survey method of scholars. Its structure provides new evidence for the development of Islamic housing finance in non-Muslim countries. Especially the study identifies implications for governments and cultural demand for Islamic financing in China. It provides possible challenges for implementing the proposed model in reality and helps bridge the gap between theory and practice.

1.11 Organization of Chapters

This thesis consists of eight chapters. The first chapter opens with the study's context, problem description, research objectives, and questions. In addition, it describes research approach and significance of the study, followed by the chapter's organization and explanations of essential terminologies.

The second chapter is a literature review that focuses mostly on the history of China's real estate business and an outline of home affordability issues. This chapter presents an in-depth study of the difficulties and issues faced by middle- and lower-income households and developers as a result of implementation and regulatory

policies, based on a variety of evaluation criteria. It set the way for subsequent alternative model proposal.

The third chapter is methodology. It largely covers the plan for data collection and data analysis. This study first used a documentation review to examine the advantages and disadvantages of the welfare housing system before 1998 and the existing housing system after 1998 in China. Next, the author produced a mixed research method after providing a specific proposed housing scheme. The rest part expounded on sample selection and data analysis of two different research phases (quantitative and qualitative).

The fourth chapter is documentation review chapter. This chapter makes an in-depth comparison and analysis of the advantages and disadvantages of the welfare housing system before 1998 and the current housing system after 1998, in order to achieve the first research objective of this study. And this

The fifth chapter is about explaining Islamic finance and the underlying theory - Maqasid Al-Shari'ah. Based on it, the author proposes an alternative proposed housing scheme and gives a detailed explanation. This is a response to the second objective of this study.

The sixth chapter focuses on the opinions of respondents regarding existing and proposed models. By gathering and analyzing quantitative data, the author obtains the respondent's preliminary approval for the proposed model.

Chapter seven focuses mostly on qualitative data analysis to evaluate the opinions of stakeholders with respect to the adoption and execution of the proposed home loan model. They are China Islamic finance practitioners, business experts, and real estate specialists.

The eighth chapter provides an overview of the entire study. In addition to a summary of the seven preceding chapters, the authors present research limitations and recommendations based on the study's findings.

1.12 Definition of Key Terms

Maqasid Al-Shariah:

is the higher ethical of the rules of Sharia law. It aims to achieve whole social fairness as well as enable community welfare by avoiding any possible danger. It includes five crucial elements for human life: religion, life, intellect, ancestry, and property / wealth (Auda, 2008).

Profit and risk sharing:

It is a method adopted in Islamic banking to execute with the prohibition of interest. The Islamic solution commonly referred to as Profit & Loss Sharing (PLS), suggests a fair sharing of risks and profits between the parties involved in a financial transaction (Iqbal and Llewellyn, 2002).

Musharakah Mutanaqisah:

It is a form of partnership in which partner "A" promises to buy the ownership of housing from partner "B" gradually until the ownership of the house is wholly transferred to the partner "A" (Firmansyah and Gunardi, 2018).

CHAPTER 2

HOUSING MARKET IN CHINA: HISTORY AND AFFORDABILITY CHALLENGES

2.1 Introduction

This chapter begins by reviewing the development history of China's real estate business and underlines that, against this historical backdrop, China's housing difficulties have evolved and grown more severe. The section then examines contemporary housing solutions in China and their usefulness. Then, a comprehensive examination of the fundamental causes of housing unaffordability. It sets the way for the subsequent alternative proposed model.

2.2 Development of real estate industry before and after reform and opening up

China's 1978 economic reform policy rejuvenated existing land wealth, saving the Chinese economy, and igniting the longest period of economic growth (Evergrande Research Institute, 2019). During the past forty years of development, China achieved significant economic prosperity via a range of property rights from the state to individuals. Under the direction of this political system, the economic reforms are managing the entire nation's economic growth, particularly the development of real estate (Li and Alon, 2019). Since then, China has successfully transformed from a planned economy to a market economy (Liu, Li, and Yang, 2018). The housing market has also moved towards marketization and commercialization.

2.2.1 Pre-reform Socialist Welfare Housing system

China entered the planned economy period in 1949, an economic operating system that regulated economic operations in accordance with government goals,

following the liberation of New China (McMillan and Naughton,1992). In other words, the government allotted all production, resources, and product consumption, including the dwelling. However, many peasants had no true social position at the start of “new China” as landlords and bureaucracies owned land. Less than 7% of the population consisted of landlords and wealthy peasants, who held more than 50 % of the entire arable land. In contrast, poor peasants, and farm laborer’s, who make up more than 57% of the entire population, account for barely 14 % of the total arable land (Wang, 2018). Given this circumstance, the Communist Party of China launched the land reform campaign in 1950 to remove the land ownership of landlords and bureaucrats, unleash rural productivity, and stimulate the growth of agricultural production (Moise, 2017). Subsequently, house ownership ceased to be a privilege reserved to landowners and bureaucracy and shifted to peasant land ownership. The Chinese landlord class has dissolved totally. The peasant rose from his former low social rank to become the landowner.

As mentioned above, China had a planned economy in which the government assigned all production, resources, and product consumption, including housing (McMillan and Naughton,1992). Communist China adopted socialist welfare housing during that period. The government was responsible for the construction and administration of all new homes. They allocated housing based on position, length of service, age, number of dependents, and number of family members. Under the implementation of the Chinese Communist Party’s goals and objectives, the property of the house was relatively simple, just for living (Zhang, 1997). Nonetheless, because of the country’s economic development and population growth, the welfare-style public housing distribution system simply supplied individuals with a place to live and did not enhance their living standards (Fang, 2006). Many inhabitants were forced to share

rooms across generations as it started to get crowded. Due to a severe scarcity of state-invested house-building funds and unsatisfactory housing of the same quality, the housing supply was significantly lower than the increase in housing demand. It was the worst shortcoming of the traditional social home distribution method that everyone had to do so (Wu, 2004). Moreover, disparities in regional resource allocation and public service facilities in urban and rural areas reflected existing social conditions and wealth distribution (Gao, 2010). During the period of planned economy, the real estate sector was inactive, hence it lacked market characteristics.

2.2.2 The reformed market-oriented housing system

Prior to the opening of the Chinese economy, a backward economic structure, poor productivity, rapid population growth, and an inequitable welfare housing distribution system led to numerous social problems (Lindert, 2004). China has been on the verge of hunger for a very long period as a result, never mind having decent living circumstances. In this situation, the government has accelerated the promotion of the urbanization wave and the reform of the rural economic system (Gibson, 2020). China began adopting economic reform and opening up in 1979, officially shifting to a market economy. Real estate enters the commercial market and plays an increasingly major role in the expansion of the national economy as a result of this development potential.

In order to monetize housing, expand domestic demand, and stimulate economic growth, the Chinese government enacted the housing reform, which recommended the establishment of a multi-level housing supply system comprised of commercial housing, affordable housing, and cheap rental housing (Hu and Qian, 2017). Following the abolition of the welfare-oriented public housing distribution system, the rapid commercialization of China's real estate business became official. In the 1990s, cities rapidly embraced housing privatization and commercialization (Wang, 1995; Wang and

Murie, 1999), allowing developers to build and sell new residences. China has since implemented new marketization and monetary reforms (Tao and Lu, 2018). The housing reform eliminated the inequities of the previous social housing system and all sorts of harmful practices in the distribution of dwellings, such as unequal allocation and a hefty government housing subsidy load (Gu, 2005). At the same time, it effectively worked with the urban economic system and the socialist market by constructing commercial housing to enhance the development of the financial system and the living conditions of the people.

In response to the rapid growth of the housing market, the Chinese government began to address the housing issues of low-income households and bolstered home security. After 2007 the Chinese government provided low-rent housing and subsequently expanded to include public rental homes (Office of the State Council, 2007). Nonetheless, this type of market-based benefit system is consistent with the decline of the social housing sector in welfare states where neoliberalism is prevalent (Ma, 2016). With the ongoing urbanization process, there has been a significant gap in housing space between urban and rural areas. Consequently, many city immigrants and middle- and lower-income citizens are not increasingly afforded a house, and there is also no access to comprehensive housing security from the local government (Tao and Xu, 2007).

2.3 Housing problems and challenges after Chinese economic reform and opening up

Since China's reform and opening up, housing prices have been an indication of the country's thriving economy (Chen and Wen, 2017), while people's capacity to purchase homes has declined continuously (Yang and Chen, 2014). Due to China's

enormous housing demand over the past two decades, the rise in housing prices has long-suppressed family spending. It forces most households to reduce expenditures on other goods and services (Chivakul, Lam, Liu, Maliszewski, and Schipke, 2015).

Table 2.1 2019 ratio of monthly payments to gross wages in China's major cities.

City	Average annual income (Yuan)	Monthly Income (Yuan)	Average house price (Yuan/per square)	100m ² housing total price (Yuan)	Down payment (30%)	Loan amount	Monthly mortgage (Yuan)	Monthly mortgage payments as a percentage of monthly average wages
Shenzhen	100173	8347.75	48622	4862200	1458660	3403540	14812	177.44%
Xiamen	75452	6287.67	28053	2805300	841590	1963710	8546	135.92%
Beijing	131700	10975	34117	3411700	1023510	2388190	10394	94.71%
Hangzhou	96670	8055.83	21225	2122500	636750	1485750	6466	80.26%
Shanghai	129795	10816.25	24866	2486600	745980	1740620	7575	70.03%
Haikou	68037	5669.75	11694	1169400	350820	818580	3563	62.84%
Tianjin	94534	7877.83	15139	1513900	454170	1059730	4612	58.54%
Wuhan	79684	6640.33	11453	1145300	3435300	801710	3489	52.54%
Qingdao	83539	6961.58	10052	1005200	301560	703640	3062	43.98%
Chengdu	79292	6607.67	8595	859500	257850	601650	2618	39.62%
Xi'an	77774	6481.17	8166	816600	244980	571620	2488	38.39%
Lanzhou	75709	6309.08	7137	713700	214110	499590	2174	34.46%

Source: National Bureau of Statistics of China (2019); Bank of China, (2019); Standard Chartered China (2019).

Been (2018) underlined that housing is deemed unaffordable when mortgage payments account for more than 30% of household income. Table 2.1 demonstrates that the monthly repayments as a proportion of the monthly average wage in China's major cities nearly exceed 30% of total compensation in 2019, such as in Shenzhen, where monthly repayments account for 177.44% of the monthly average salary. According to Song (2018), the Chinese deposit balance in 2018 was 72.44 trillion yuan, or more than 50,000 yuan per individual. The majority had an "average" income. Excluding the wealthiest 70 million persons (about 5%), their per capita deposits surpass 470,000 yuan, whereas the rest 1.3 billion people (95%) have only 24,000 yuan per capita. Consequently, roughly 40% of individuals have no bank deposits. Those with monthly wages between 3,000 and 4,000 yuan difficult to afford housing costs in the hundreds of thousands.

2.3.1 Housing Difficulties Facing by Low-Income Households

The poverty threshold is set at \$5.50 per day by the World Bank in 2020 to reflect economic conditions. According to this statistic, nearly one-fourth of China's population is poor. Premier Li Keqiang of China stated that 600 million Chinese earn less than 1,000 RMB per month, which is insufficient to rent a room in a midsize Chinese city (Yang, 2020). Since the onset of reform and economic liberalization, a social divide has developed between the wealthy and the poor. Some families have gotten poorer as a result of economic development, while some others have benefited from the reforms. In addition, there was a group of laid-off employees. After 1990, China's industrial structure transitioned from heavy industry and textiles to manufacturing, electronics, information technology, and the financial sector, resulting in the closure of the majority of traditional agrarian sectors (Chen et al., 2011). Many workers lacked the new knowledge and skills required for new employment, resulting