

CONCEPTUAL FRAMEWORK FOR MINIMIZING MISMATCH OF
DEVELOPER, BUYER AND GOVERNMENT INTERVENTION FOR MIDDLE-
INCOME HOUSING

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DEDICATION

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

This thesis is dedicated to my beloved father, Mustapa Abu Bakar, who taught me that the best kind of knowledge to have is that which is learned for its own sake and for have been a great source of motivation, inspiration and of course financial.

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ABSTRACT

The housing demand of the middle-income group cannot be ignored as they are the majority, or about 40 % of the population in Malaysia (Budget 2016). Previous research has given emphasis on the affordability issue which has been tackled by the government through several housing schemes. However, mismatches still exist and persist, particularly in terms of insufficient supply to meet demand and also the existing supply fails to meet the housing preferences of the middle-income group. Thus, the present study aims to fulfill three objectives: to determine the middle-income housing preferences, to investigate factors that can overcome the insufficient supply of the middle-income housing from the perspective of government intervention and developer behaviour, and to develop a conceptual framework for minimizing mismatch concerning the middle-income housing focusing on developers, buyers and government interventions. This study was conducted in Johor Bahru using mix method approach. For the quantitative approach, the data were collected from 402 middle-income group respondents with monthly earnings of RM2,500 – RM15,000. For the qualitative approach, data were gathered from semi-structured interviews with several developers and local authority. The data were analysed using descriptive analysis, conjoint analysis, and content analysis. Results reveal that the most preferred housing profiles for middle-income housing are houses in the price range of between RM100,000 to RM200,000, located near schools, terrace in type, with floor plan of between 1001 to 1500 square feet and with four bedrooms. The findings also show that factors that can overcome the insufficient supply include regulations, incentives for developers, expedition of purchaser selection process, and emphasis placed on demand and supply data in planning approval. These findings were then included in a conceptual framework that portrays ways to minimize the housing mismatch. The framework demonstrates that the mismatch caused by profit-oriented developers leading to insufficient supply could be reduced by emphasizing the aspect of housing supply and demand in planning approval, controlling the developer activities by law enforcement, and providing incentives. The mismatch could also be reduced by emphasizing the aspect of housing preferences before embarking on any housing project.

ABSTRAK

Permintaan perumahan bagi golongan berpendapatan sederhana tidak boleh diabaikan kerana mereka adalah golongan majoriti atau anggaran 40% penduduk di Malaysia (Bajet 2016). Kajian lepas lebih memfokuskan kepada isu kemampuan yang telah ditangani oleh kerajaan melalui beberapa skim perumahan. Walau bagaimanapun, masalah ketidapadanan masih berlaku dan berterusan terutama masalah ketidakcukupan penawaran untuk memenuhi permintaan dan juga penawaran sedia ada gagal memenuhi keutamaan perumahan golongan berpendapatan sederhana. Oleh itu, kajian ini bertujuan untuk memenuhi tiga objektif; untuk mengenal pasti keutamaan perumahan golongan berpendapatan sederhana, untuk mengkaji faktor-faktor yang dapat mengatasi ketidakcukupan penawaran perumahan golongan berpendapatan sederhana dari perspektif kerajaan dan tingkah laku pemaju, dan membangunkan konsep rangka kerja bagi mengurangkan ketidakpadanan mengenai perumahan golongan berpendapatan sederhana yang memberi tumpuan kepada pemaju, pembeli dan campur tangan kerajaan. Kajian ini dijalankan di Johor Bahru menggunakan kaedah gabungan. Bagi pendekatan kuantitatif, data dikumpulkan daripada 402 responden terdiri daripada golongan berpendapatan sederhana dengan pendapatan bulanan sebanyak RM2,500-RM15,000. Bagi pendekatan kualitatif, data telah dikumpulkan dari wawancara separa berstruktur dengan beberapa pemaju dan pihak berkuasa tempatan. Data dianalisis menggunakan analisis deskriptif, analisis konjoin dan analisis kandungan. Dapatan menunjukkan bahawa profil perumahan yang paling disukai untuk perumahan berpendapatan sederhana adalah profil perumahan dengan harga RM100,000 hingga RM200,000, lokasi berhampiran dengan sekolah, jenis teres dengan pelan lantai antara 1001-1500 kaki persegi dan empat buah bilik tidur. Kajian ini juga menunjukkan bahawa faktor yang dapat mengatasi bekalan yang tidak mencukupi termasuk peraturan, insentif kepada pemaju, mempercepatkan proses pemilihan pembeli, dan menekankan aspek permintaan dan penawaran perumahan dalam kelulusan perancangan. Dapatan ini kemudian dimasukkan dalam rangka kerja konsep yang menggambarkan cara untuk meminimalkan ketidakpadanan perumahan. Rangka kerja ini menunjukkan bahawa ketidakpadanan yang disebabkan oleh pemaju berorientasikan keuntungan yang membawa kepada masalah ketidakcukupan penawaran dapat diselesaikan dengan menekankan aspek permintaan dan penawaran dalam kelulusan perancangan, mengawal aktiviti pemaju oleh penguatkuasa undang-undang, dan memberikan insentif. Ketidakpadanan juga dapat dikurangkan dengan menekankan aspek keutamaan perumahan sebelum memulakan projek perumahan.

TABLE OF CONTENTS

	TITLE	PAGE
	DECLARATION	iii
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT	vi
	ABSTRAK	vii
	TABLE OF CONTENTS	viii
	LIST OF TABLES	xvii
	LIST OF FIGURES	xix
	LIST OF ABBREVIATIONS	xxi
	LIST OF SYMBOLS	xxii
	LIST OF APPENDICES	xxiii
CHAPTER 1	INTRODUCTION	1
1.1	Background of the Study	1
1.2	Problem Statement	2
1.3	Research Aim	5
1.4	Research Questions	6
1.5	Research Objectives	6
1.6	Scope of the Study	7
	1.6.1 Area of Study	7
	1.6.2 Respondents	7
	1.6.2.1 Middle-Income Buyer	7
	1.6.2.2 Developer In Johor Bahru	8
	1.6.2.3 Local Authority (MBJB)	8
	1.6.3 Data Collection Method	9
1.7	Significance of the Study	9

1.9	Thesis Structure	9
CHAPTER 2	MIDDLE INCOME HOUSING	
	MARKET	13
2.1	Introduction	13
2.2	Middle Income Housing	13
	2.2.1 Definition of Middle Income Buyer	14
	2.2.2 Housing for Middle- Income	15
2.3	Middle-Income Housing Market	19
	2.3.1 Housing Demand	19
	2.3.2 Housing Supply	20
	2.3.3 Market Equilibrium	20
2.4	Housing Mismatch	22
	2.4.1 Definition of Housing Mismatch	22
	2.4.2 Factors Contribute Middle-Income Housing Mismatch	23
	2.4.2.1 Developer Behaviour	23
	2.4.2.2 Buyer Preferences in Housing Purchasing	27
	2.4.2.3 Inefficient of Government Intervention	30
	2.4.3 Factors to Overcome Middle-Income Housing Mismatch	33
	2.4.3.1 Government Intervention by Control	33

	Housing Development	
	2.4.3.2 Promote	
	Alternative Material	40
	2.4.3.3 Obtaining and	
	Emphasize Housing	
	Preferences Information	40
2.5	Related Framework in Delivery	42
	Housing for Middle-Income	
2.6	Coceptual Framework	52
2.7	Summary	53
CHAPTER 3	PREFERENCES TOWARDS HOUSING	
	ATTRIBUTES	55
3.1	Introduction	55
3.2	Housing Preferences	56
	3.2.1 Definition of Housing	
	Preferences	56
	3.2.2 Role of Housing	
	Preferences in Buying Decision	
	Process Model	57
	3.2.2.1 Problem	
	Recognition	59
	3.2.2.2 Information	
	Seach	59
	3.2.3.3 Information	
	Evaluation	60
	3.2.3.4 Purchase	
	Decision	61
	3.2.3.5 Post Purchase	62
	3.2.3 The Influence of Socio	
	Demographic in Housing	
	Decision	63
	3.2.4 Benefit of Housing	67

	Preferences Information	
	3.2.4.1 Understand	
	Current Supply	68
	3.2.4.2 Shaping	
	Housing Supply	68
	3.2.4.3 Inputs for	
	Policy Maker	69
	3.2.4.4 Bridging the	
	Gap Between Demand	
	and Supply	70
3.3	Preferences Towards Housing	
	Attributes	70
	3.3.1 Housing Preferences	
	Based on Previous Study	70
	3.3.2 Middle-Income Housing	
	Attributes	74
	3.3.2.1 Price	77
	3.3.2.2 Location	78
	3.3.2.3 Accessibility	79
	3.3.2.4 Neighbourhood	79
	3.3.2.5 Structural/	
	physical Attribute	80
	3.3.2.6 Tenure	81
3.4	Housing Preferences	
	Approaches	82
	3.4.1 Revealed Preferences	82
	3.4.2 Stated Preferences	83
	3.4.2.1 Conjoint	
	Analysis	86
3.5	Summary	88
CHAPTER 4	RESEARCH	
	METHODOLOGY	89

4.1	Introduction	89
4.2	Research Design	89
4.3	Research Framework	91
4.4	Research Methodology Flow	94
	4.4.1 Stage 1: Preliminary Survey	96
	4.4.1.1 Step 1: Identification of Housing Attributes	96
	4.4.1.2 Step 2 : Selecting of Attributes and Level of Attributes	103
	4.4.1.3 Step 3: Selecting Conjoint Analysis Methodology	104
	4.4.1.4 Step 4 : Construction of Housing Profiles	104
	4.4.2 Stage 2:Cojoint Survey	106
	4.4.2.1 Step 5: Data Collection (Conjoint Questionnaires Survey)	106
	4.4.2.2 Step 6: Data Analysis	107
	4.4.3 Stage 3: Semi-structured Interview	109
	4.4.3.1 Step 1 :Participant Selection	109
	4.4.3.2 Step 2: Interview Administration	111
	4.4.3.3 Step 3:Data Analysis	113

4.5	Framework Development	113
4.6	Summary	114
CHAPTER 5	MIDDLE INCOME HOUSING	
	PREFERENCES	115
5.1	Introduction	115
5.2	Respondent's Profile	115
5.3	Preferences Towards Housing	
	Attributes	118
	5.3.1 Preliminary Survey	
	Results	118
	5.3.2 Conjoint Anaysis	
	Results	120
5.4	Discussion on Middle Income	
	Preferences	126
5.5	Summary	130
CHAPTER 6	FACTORS TO OVERCOME MIDDLE-INCOME	
	HOUSING MISMATCH	131
6.1	Introduction	131
6.2	Factors Contribute to Middle-	
	Income Housing Mismatch	131
	6.2.1 Developer Profit	
	Oriented	132
	6.2.2 Middle-Income Housing	
	Government Responsibilit	136
	6.2.3 Unprofitable	139
	6.2.4 Time-Consuimng	
	Selection Purchaser Process	140
	6.2.5 Mismatch Housing	
	Attributes	141
	6.2.6 Low Affordability	144
	6.2.7 Inefficient of Housisng	
	Planning	146

6.3	Factors to Overcome Middle- Income Housing Mismatch	147
	6.3.1 Imposed Regulation	148
	6.3.2 Emphasize Housing Demand, Supply and Price	149
	6.3.3 Emphasize Housing Preferences	151
	6.3.4 Incentive	152
	6.3.5 Expedite the Selection of Purchase Process	155
	6.3.6 Financial Assistance through Housing Schemes	156
6.4	Middle-Income Housing Preferences vs Developer Behaviour	157
6.5	Finding	158
6.6	Summary	161
CHAPTER 7	CONCEPTUAL FRAMEWORK MINIMIZING MIDDLE-INCOME HOUSING MISMATCH	163
7.1	Introduction	163
7.2	A Conceptual Framework for Minimizing Mismatch of Developer, Buyer and Government Intervention of Middle-Income Housing	163
	7.2.1 Government – Developer-Buyers	166
	7.2.2 Government- Developer	168
	7.2.2.1 Regulation throug Schemes	169
	7.2.2.2 Incentives	170
	7.2.3 Government-Buyer	172

	7.2.4 Developer-Buyer	174
7.3	Framework Validation	176
7.4	Summary	180
CHAPTER 8	CONCLUSION	183
8.1	Introduction	183
8.2	Finding Based on Research Objective	183
	8.2.1 Research Objective 1: Middle-Income Housing Preferences	184
	8.2.2 Research Objective 2: Factor to Overcome Middle-Income Housing from Perspective Government Intervention and Developer Behaviour.	185
	8.2.3 Research Objective 3: A Conceptual framework for Minimizing Mismatch of Developer, Buyer and Government Intervention of the Middle-Income Housing	186
8.3	Contribution to Knowledge and Practice	188
	8.3.1 Contribution to Knowledge	188
	8.3.2 Contribution to Practice	189
8.4	Limitation and Recommendation for Further Research	190
	8.4.1 Limitation of Study	190
	8.4.2 Recommendation for Further Research	191
8.5	Summary	192

REFERENCES	193
LIST OF PUBLICATIONS	251

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 2. 1	The Composition of Affordable Housing According to DPRJ for Areas within Iskandar Malaysia	37
Table 3.1	Housing Attributes According to Previous Research	75
Table 4.1	Attributes and Level of Attributes	100
Table 4.2	Five-Point Likert Scale	101
Table 4.3	Table of Reliability Level	102
Table 4.4	The Coefficient Value of Cronbach’s Alpha Value	102
Table 4.5	Attributes and Level of Attributes Conjoint	103
Table 4.6	Twenty Two Stimulus Housing Profiles	105
Table 4.7	Participant of Semi Structure Interview	111
Table 5.1	Socio Demographic of Respondent	116
Table 5.2	The Most Important Attributes as Perceived by the Respondent in Preliminary Survey	119
Table 5.3	The Most Important Level of Attrivues as Perceived By the Reespondent in Preliminary Survey	120
Table 5.4	Conjoint Analysis Results of Attributes Important Values	121
Table 5.5	Conjoint Analysis Results of Utility Estimate for Attributes Level	122
Table 5.6	Twenty Two Stimulus Housing Profiles with Total Utility and Rank	125
Table 5.7	Four Housing Profiles in the Highest Position Based on Total Utility	126
Table 6.1	Sub Themes Indicating Developer Profit-oriented	136
Table 6.2	Sub Themes Indicating Middle-income Government Responsibility	139

Table 6.3	Sun Themes Indicating Affordable Housing is Unprofitable	140
Table 6.4	Sub Theme Indcating Selection purchaser Time-Consuming Unprofitable	141
Table 6.5	Sub Themes Indicating Mismatch Housing Attributes	144
Table 6.6	Sub Themes Indicating Middle Income has Low Purcahsig Power	146
Table 6.7	Sub Themes Indicating The Inefficiency of Housing Planning	147
Table 6.8	Sub Themes Indicating Imposed Regulation	149
Table 6.9	Sub Themes Incating Make Housing Planning Efficient	150
Table 6.10	Sub Themes Indicating Emphasize Housing Preferences Aspect	151
Table 6.11	Sub Themes Indicating Developer needs Incentives	154
Table 6.12	Sub themes Indicating Expedite Selection of Purchaser Process	156
Table 6.13	Sub themes Indicating Contiue Financial Assistance to Middle-Income	157
Table 6.14	Housing Profiles Middle-Income Housing vs Developer Preferences	158
Table 6.15	Factors Contribute Housing Mismatch together with Factors to Overcome Middle-Income Housing Mismatch	159
Table 7.1	Participants of Framework Validation	177
Table 7.2	Results of the Validation	178

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 2.1	Consumer and Practitioner Housing Preferences Framework	29
Figure 2.2	The Interaction between Buyer and Developer in Housing Market	42
Figure 2.3	The Framework of Housing Mismatch Phenomenon	43
Figure 2.4	Preferences-Housing Gap	44
Figure 2.5	Aspect for Housing Policy Framework on Supply Side	45
Figure 2.6	Dynamic Models For Residential Land Supply-Side Reform	46
Figure 2.7	A Framework for Sustainable Affordable Housing	47
Figure 2.8	Housing Program Strategy of Oe-Cusse regions in East Timor	48
Figure 2.9	Four Cluster of Policy Instruments to Encourage Private Sector Involvement in Affordable Rental Housing	49
Figure 2.10	Framework on Element of Demand and Supply Side Schemes	50
Figure 2.11	Conceptual Framework of Middle-Income Housing Mismatch Occurences	52
Figure 3.1	Buyer's Decision Making Process Model	59
Figure 3.2	Value Information and the Decision Making Process Model	62
Figure 4.1	The Deductive Approach	91
Figure 4.2	Research Framework	93
Figure 4.3	Research Methodology Flow	95
Figure 5.1	Middle Income Housing Preferences	130
Figure 6.1	Factors to Overcome the Middle-Income Housing Mismatch	160

Figure 7.1	A Proposed Conceptual Framework for Minimizing Mismatch of Developer, Buyer and Government Intervention of Middle-Income Housing Mismatch	165
Figure 7.2	Government-Developer-Buyer	166
Figure 7.3	Government-Developer	169
Figure 7.4	Government-Buyer	172
Figure 7.5	Developer-Buyer	175
Figure 7.6	Option 1	175
Figure 7.7	Option 2	176

LIST OF ABBREVIATIONS

AIDA	-	Awareness, Interest, Desire and Action
CUEPACS	-	Congress of Unions of Employees in the Public and Civil Services
CIDB	-	Construction Industry Development Board
DPRJ	-	Dasaar Perumahan Rakyat Johor
GST	-	Good and Services Tax
HDB	-	Housing and Development Board
IBS	-	Industrial Building System
JLW	-	Jones Lang Wotten
JKKB	-	Jawatankuasa Pecah Sempadan dan Belah Bahagian
LA	-	Local Authority
PKJ	-	Perumahan Kominiti Johor
PKJA	-	Perumahan Kominiti Johor Type A
PKJB	-	Perumahan Kominiti Johor Type B
PPA1M	-	Perumahan Penjawat Awam 1 Malaysia
PR1MA	-	Perumahan Rakyat 1 Malaysia
SPNB	-	Syarikat Perumahan Negara Berhad
MBJB	-	Majlis Bandaraya Johor Bharu
MHLG	-	Ministry of Local Government
MIPPM	-	Malaysian Institute of Professional Property Manager
MM2H	-	Malaysian My Second Home
MOCT	-	Ministry of Construction and Transport
NAPIC	-	National Property Information Centre
NHP	-	National Housing Policy
REDHA	-	Real Estate and Housing Developer Association
RMMJ	-	Rumah Mampu Milik Johor
RUMAWIP	-	Rumah Mampu Milik Wilayah Persekutuan
SLMR	-	Sijil Layak Memiliki Rumah
SPEKTRA	-	Skim Perumahan Rakyat

LIST OF SYMBOLS

- n_0 - Sample size, which was estimated
- z^2 - Selected critical value of desired level of confidence or risk
- p - Estimated proportion of an attribute that is present in the population or maximum variability of the population
- e - Desired level of precision or margin of error

LIST OF APPENDICES

APPENDIX		TITLE	PAGE
Appendix A	-	Preliminary Questionnaire	225
Appendix B	-	Conjoint Questionnaire	228
Appendix C	-	Interview Letter	231
Appendix C1-C6	-	Interview Question for Semi-Structured Interview	232
Appendix D	-	Five Years Malaysian Plan	242
Appendix E	-	Data from Property Report	245
Appendix F	-	Middle-Income Housing Schemes	246

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Everyone would like to have their own home. Therefore, housing provider especially the government should be responsive to the housing demand by developing housing project that suit the population's needs and wants (Tan, 2011b) for all categories of income level; low income, middle income, and high income. One of the central issues in the housing market recently is the insufficient supply of middle-income housing. The developer has supplied more high-end units in the market to the point where it is almost impossible for the middle-income group to own their first property (Ain Aqilah, 2013). The middle-income group faced challenges when looking for a place to live as the price of purchase continues to increase rapidly due to health economy growth (Wan et al., 2010). There is a mismatch between what have been supplied in the market and middle-income affordability. This issue basically has been tackle by the government through several housing schemes that provide affordable housing but it seems that the mismatch still exists. The mismatch would trigger unsold housing units and causing the overhang problem (Kwoun et al., 2013).

The units remain no takers even it is affordable. Some questions arise from this situation. Why mismatch still exists? Why those housing units being unsold? Why are there unsold units although current market showing the strong demands for housing? According to Tan (2008), the unsold units did not attract the target market nor cater for the housing needs of the targeted house buyers. The majority of these units remain unsold for reasons beyond the price factor, ranging from poor location to unattractive houses with lack of adequate amenities and facilities. It can be said that these units may fail to attract the buyer and eventually causing difficulties in selling (Al-Momani, 2000). Accordingly, to avoid such mismatches, Harvey (1996)

suggests that the right information on the supply side is essential in order to reduce the occurrence of the mismatch. Having the right information can foster a healthy housing development to meet the preferences and may avoid mismatch between the housing stock and buyers' housing demand (Jim and Chen, 2007). To put it simply, housing supply must be corresponding to the population housing demand. The problem to this situation is further explored in the area of the existence of mismatch between the buyers' behaviour preferences, developer behaviour and the government intervention.

1.2 Problem Statement

National Property Information Centre (NAPIC) mentioned that in 2015 and 2016, there was less than 30% new housing development which is RM250, 000 and below. Meanwhile, the Property Market Status Report revealed that most of the new housing supply is priced from RM300, 001 and above from 2014 to 2016. It is about more than 60% (102,556 units out of 167,374 total units). In addition, Bank Negara Malaysia 2015 remarks that there is a shortage of housing supply for middle-income as compared to the supply of houses at price RM500,000 and above. Again, in 2016, Bank Negara Malaysia Report claimed that the housing market in Malaysia did not provide sufficient supply of the middle-income group; only 35 % of the new supplies in the market were affordable to them (Bank Negara Report, 2016). In the report also stated that the houses in Malaysia have been classified as severely unaffordable according to World Bank Standard. This portrays housing in the market definitely undergone insufficient supply given the fact that the middle-income group made up 40% of the Malaysian population (Budget, 2016). Accordingly, a mismatch is exists (Khazanah Research Institute, 2015). There is a mismatch between what has been supplied in terms of house price and the middle-income housing affordability in the open market. As a result, there is an insufficient supply of housing for the middle-income group (Wan et al., 2010). According to Bank Negara (2015), Malaysian needs about million houses to be built for the middle-income group between the year of 2016 and 2020. Unfortunately, there in only about 255,341 units that has been complete between year 2013 and October 2017 (Aris et al, 2019). This shows that the supply of middle-income housing is not in tandem with the middle-income group

housing demand. Hence, this has created supply gap of houses among the middle income (Aris et al., 2019; Hassan et al., 2019).

This happens because of developer behaviour (Ramli, 2017). The developers are keen to build high-end housing projects which definitely give high profit to them. The high-end projects give greater profit than middle-income and low-income housing project. Developers are profit-oriented (Foo and Wong, 2014). They are always seeking opportunities to maximize their profit (Foo, 2010). They were not keen on building medium cost housing might due to the low profitability. In some cases, even though the policy has been regulated, the developers still has less interests to participate in affordable housing development (NAPIC, 2014). Thus, not surprising that there are not much housing for the middle income and this situation leads to mismatch problem. Therefore, the government intervention in the control by offering affordable price to middle-income in control market is needed.

In response to this issue, the Malaysian government launched a few housing schemes for the middle-income group such as PR1MA, My First Home Scheme, Rumah Selangorku, and Rumah Mampu Milik Johor. Unfortunately, there is number of houses under those schemes remain no takers. However, there were not many applicants that participated in those housing schemes. SPNB revealed that 8,000 units under My First Home Scheme have no takers (Thomas, May, 2011). The Stars Property News on May 17, 2011 revealed that 4, 516 housing units are priced under the same scheme with a poor response of no takers. In another case, PR1MA has failed to meet the demand (The Sun Daily, 2015). Recently, it was reported in Kedah that most of the unsold units were under PR1MA scheme. Kuala Muda District recorded 3,401 unsold units in which nearly 69% of the PR1MA houses (Property Market Report for First Half, 2017). It is quite questionable why middle-income did not attract to buy those housing units. It seems that middle-income response found to be less favorable, although the government has been facilitating financial matters in the schemes. It could be said that the housing schemes failed to solve or reduce the problem of housing mismatch between demand and supply.

Bank Negara Malaysia stated that the housing units were not sold due to the location as well as the preferences for landed over high-rise properties (Bank Negara Report, 2017). The units are affordable, but they are built far from the city. House type has also the reason why those affordable units has no takers particularly strata type. In Johor, more than half of the affordable housings which have no takers were apartments (The Star, July 2017). There is possibility related to buyer behaviour whereby housing under the scheme might not match middle-income housing preferences. The units that have no takers did not attract the target market or cater to the housing needs of the targeted house buyers (Tan, 2008). There is a mismatch of what has been built and what house that the buyers want in terms of housing attributes (Tawil et al., 2011, Jim and Chen, 2007; Tan, 2011a, Wang and Li, 2004) and lead to unsold and overhang problems (Schwanen and Mokhtarian, 2004; Hamid and Norhaya, 2008; Kwoun et al., 2013).

The housing schemes may one a good approach to solve the mismatch and meet the population demand, nevertheless, most of the schemes were designed without taking into account the housing preferences towards housing attributes (Lopez and Parades, 2018). Most of the housing schemes only focus on housing affordability (Bogdon and Can, 1997; Mulliner et al., 2013; Ariff et al., 2016); assist the buyer in the financial matter. Another point to be highlighted is that, based on the study by Lo (2011) it was found that that the middle-income take into account the aspect of housing attributes compared to the low-income in the housing purchasing. It was about middle-income behavior in housing purchasing. They consider various housing attributes such as housing type, location, desisgn and others. Not solely about the house price. Therefore, in developing housing schemes for the middle-income, the housing providers need to consider the middle-income housing preferences aspect. On the other hand, not all the middle-income group are eligible to purchase housing in the control market i.e housing shemes. They are not eligible to purchase neither in the control market nor in the open market. Thus, at the same time, the government also needs to take initiatives to encourage the developer to provide more housing for middle-income in the open market.

From the above discussion, it can be seen that the mismatch occurrences basically came from developer behaviour in supplying housing, the middle-income buyer's preferences, and the government intervention in housing development for the middle-income housing. Thus, there is an urgent need to minimize the mismatch occurrences as it could lead to insufficient, unsold and overhang problem. Accordingly, most of the available frameworks much focus on the affordability of buyer; how to address the affordability issue and how to increase the supply of affordable housing. For example, aspect of housing policy framework (Jana et al.,2016), four cluster of policy instruments to encourage private sector involvement rental housing (Tsenkova and Witwer, 2011) and framework for sustainable affordable housing (Chan and Adabre, 2019). None of them specifically aiming to minimize housing mismatch matter except from Saleh et al. (2016); has discussed and developed a framework of housing mismatch phenomenon and ozaki (2002); discussed on bridge the mismatch occurrences by emphasize on buyers housing preferences. Hence, this study attempts to fill the gaps by proposing a conceptual framework specifically to minimize the mismatch of the developer behaviour, buyer preferences and government intervention for middle-income housing. In addition, this study also attempt use conjoint analysis in determine the middle-income housing preferences as it give a best combination of multiple housing attributes that they would like to have.

1.3 Research Aim

Thus, this study aims to contribute significant insight on developing a conceptual framework that could minimizing the mismatch that exists between housing demand and supply that leads to the insufficient supply of middle-income housing. The conceptual framework consist of three main aspects; government intervention, developer behaviour and middle-income buyer preferences. All these three aspects need to be interrelated to each other so that it could minimize the housing mismatch. There are three elements that have been highlighted in the framework. First, this study would shed light emphasizing on the aspect of housing preferences as it could become a basis for both government and developer to improve and minimize the housing mismatch occurrences for the middle-income housing.

Second, the government intervention is needed not only towards buyer (financial assistance and meet the middle-income housing preferences), but also towards housing developer. The government needs to control the housing supplying by the developer, encourage them to get involved in the middle-income housing development and at the same time could create a win-win situation between them. The developer could get optimum profit and the government could meet the demand of middle-income group.

1.4 Research Questions

1. What are the buyer preferences of middle-income towards housing attributes?
2. What are the factors to overcome middle-income housing mismatch from perspective government intervention and developer behaviour?
3. How can the information of the middle-income housing preferences and the factors that can overcome the housing mismatch could minimize mismatch of developer behaviour, buyer preferences and government intervention of the middle-income housing?

1.5 Research Objectives

1. To determine buyer preferences of middle-income towards housing attributes.
2. To investigate the factors to overcome middle-income housing mismatch from perspective government intervention and developer behaviour
3. To develop a conceptual framework for minimizing mismatch of developer behaviour, buyer preferences and government intervention of the middle-income housing.

1.6 Scope of the Study

1.6.1 Area of Study

The study area is confined to Johor Bahru as it has the highest number of units of overhang properties compared to other areas. With regard to the house price, within the three years (2014 to 2016) according to Property Market Status Report between 2014 to 2016, most of the units of newly launched housing unit are priced RM500, 001 and above, accounted 12,643 units compared to the middle-income housing which is only about 7,102. These housing units are definitely are very expensive, unaffordable and definitely not preferable to the middle-income buyers. Khazanah Research Institute reported the same thing by state the housing indicator in Johor is at the level of 4.2 which indicate 'housing is seriously unaffordable'.

1.6.2 Respondents

There are three types of respondents in this study: middle-income group, housing developer, and local government.

1.6.2.1 Middle-Income Buyer

The scope of this study focused on the middle-income housing. The middle-income group nowadays has facing difficulties in housing purchasing as most of the housing in the market beyond their affordability. Accordingly, there is insufficient supply for them. However, at the same time, there is also unsold and overhangs of affordable housing. Thus, this present study intends to focus on middle-income group. With regard to the middle-income group, there is no definite definition about who is the middle-income group. Datuk Abdul Rahman Embong; a Malaysian Scholar from Universiti Kebangsaan Malaysia's Institute of Malaysian and International Studies have affirmed the fact that more than half of Malaysia's population are now classified as the middle class ranging from administrators, managers and professionals with incomes between RM10, 000 to RM30,000 monthly to semi-professionals like technical and clerical workers earning around RM2,000 to

RM4,000 monthly (Leng et al., 2017). Then, based on Budget 2016, the middle-income group defined as people who have household income between RM3, 860 to RM8, 319 and this group is called M40. In other perspectives, based on the available housing schemes for middle-income (PR1MA, Rumawip, Rumah Selangorku, RMMJ, etc), the eligibility starts from RM2, 500 until up to RM15, 000. Thus, this study follows the range by available housing schemes, the middle-income group who earn from RM2, 500 to RM15, 000. From the survey, this study found that most of the middle-income households that went to the middle-income exhibition are those who earn between RM4500-RM6499 monthly. Hence, this study refers to this income range for the definition of the middle-income group. This study also collected data from the developer and local authority to obtain their insights in supplying houses.

1.6.2.2 Developer in Johor Bharu

Developer plays an important role in the housing supply. The researcher conducted interviews with well-known developers, who are currently active in the housing development in Johor Bahru. The interviewees are the persons who are involved in the planning department, to be specific; the project manager.

1.6.2.3 Local Authority (Majlis Perbandaran Johor Bharu)

For the authority, the researcher interviewed the Planning Department of Majlis Bandaraya Johor Bahru (MBJB). The authority represents the viewpoint of implementers of housing regulation. In Malaysia, any development including housing development has to get approval from the local planning authority before it is permitted to be developed (Alias, 2006). Referring to Act 172, the local planning authority has the right or power to regulate and control the land use development within their areas via the procedure of planning permission. In terms of housing development, the local planning authority plays a role in giving approval permission to the developer. The local authority of this study area (Johor Bharu) is the Planning Department of MBJB.

1.6.3 Data Collection Method

This study adopted the mix method approach, combination of quantitative and qualitative approaches. For the quantitative approach of this study, the data were collected via questionnaires to obtain the middle-income group's housing preferences on housing attributes. For the qualitative data, a semi-structured interview was conducted with several well-known housing developers in Johor Bahru and Majlis Bandaraya Johor Bahru.

1.7 Significance of the Study

The significance of research is viewed in terms of how a research can contribute significantly theoretically and practically. The completion of this research was significance in attempting to fill the gap by contributing a conceptual framework that could minimize the housing mismatch that exists in the middle-income housing supply. The conceptual framework could be used as a guide to the government to provide better housing for the middle-income group. Through the framework, the government could control developer activities, improve the supply of middle-income by imposing regulation to the developer, encourage the developer to build middle-income housing through incentives, reduce the problem of insufficient and oversupplu, and fulfil housing preferences of the middle-income buyer. Meanwhile, the developer may get acceptable profit and others benefits such as tax deduction and the middle-income buyer could purchase housing that meet their preferences. All in all, the conceptual framework attempted to minimize the middle-income housing mismatch that exists between developer behaviour, buyer preferences and government intervention aspect.

1.8 Thesis Structure

The thesis report is divided into Eight chapters. Chapter One introduces the research background and problem statement, followed with the aims, research

questions, objectives, and scope of the study. The significance of the study and a brief explanation of the research methodology are also presented in this chapter.

Chapter Two basically to evaluate the literature review, which this chapter access the current secondary data. In this chapter, it focuses on the aspect in the in the housing market in the context of demand and supply, insufficient supply and middle-income demand. It highlights that the supply should meet the buyers' housing demand otherwise; it may trigger a mismatch situation that could lead to insufficient supply.

Chapter Three is also literature review of the study. This chapter has reviewed on housing buyer's behavior in housing decision making, particularly on their preferences towards housing attributes. It emphasizes that buyers tend to buy those housing projects that match with their housing preferences. This chapter then goes into the socio-demographic aspects as it was found has influence to the buyers in the housing decision making. This chapter also discussed the middle-income housing that is available in Malaysia context. At the last of this chapter, it gives a general overview regarding approaches in assessing housing preferences.

Chapter Four explains the research methodology, presents the research approach including data collection and method of data analysis. As mentioned previously, this study employed quantitative and qualitative approaches. For the quantitative approach, the questionnaire survey was analyzed using descriptive analysis and conjoint analysis. For the qualitative approach, transcribed responses of the semi-structured interviews were analyzed using content analysis.

Chapter Five reports the results of the questionnaire survey. This chapter reports the results of the conjoint analysis which explain the respondents' housing preferences. Meanwhile, Chapter Six provides results from the semi-structured interview. Chapter Seven is about the development of resolving framework for housing mismatch of middle-income occurrence.

The last chapter, Chapter Eight, concludes the study by summarizing the obtained results. Recommendations, study limitations, and directions for future research are also discussed in this final chapter.

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