A Critical Evaluation of Housing Affordability for Middle-Income Groups in Saudi Arabia

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ABSTRACT

The aim of this study is to develop a conceptual framework that can help investigate middle-income housing affordability policies in Saudi Arabia. It also strives to collect data on existing affordability policies to evaluate their effectiveness and inform future research and decisions. This will be achieved by identifying critical drivers that have influenced the development of affordable housing solutions from both a planning policy and socio-cultural perspective in the city of Jeddah.

The literature review reveals that support for the Saudi Arabian housing sector has been limited by government budget allocations and the lack of a strong public policy. In addition, there is no clear standardised system which supports affordable housing. Consequently, initiatives to promote the provision of affordable housing have been inadequate since local housing policies need to constantly change and adapt as the housing market matures. Therefore, a conceptual framework was developed to guide this research by identifying major stakeholders and key influencing factors and this was used to inform a mixed method approach for this study involving both questionnaires and in-depth interviews with major stakeholders.

The research shows that a large proportion of middle-income participants in Jeddah, while willing to spend 30% of their monthly income on housing costs, struggle to own their home because of the long waiting time associated with government real estate loans and the fact that housing needs are not being met. Other findings identified various challenges to middle-income affordable housing including the price of land, the culture of not opting for long-term loans, and the disapproval of new Government housing policies in support of bank loans. This suggests that a change in housing policies on its own may not be sufficient to encourage end-users to take out loans.

The findings suggest that middle-income participants are more likely to be affected by economic factors than by socio-cultural ones, a clear shift from the past. In addition, policy and regulations were shown to be interdependent with newly introduced complex socio-cultural and economic preferences. Furthermore, education was also shown to be an important factor that contributes to this complex relationship. Overall, the study indicates that affordable housing is a multifaceted issue with interaction between different stakeholders across several domains.

The research has shown that while the new Saudi Ministry of Housing and other governmental authorities have ambitions to resolve the affordable housing crisis in the country and to bridge the gap between different stakeholder groups, there is still a clear gap between policy and implementation in this highly evolving society. Effort must be placed on developing a more holistic solution to middle-income housing that is proactive rather than reactive.

Dedication

To my Grand Father Mr. Ahmad Abed who passed away while I was doing my PhD. May God forgive him and bless his soul.

Acknowledgement

Declaration statement

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Abbreviations

CF	Conceptual Framework
FYDP	Saudi 5-year Development Plans
GASTAT	General Authority for Statistics in Saudi Arabia
GBP	British Pound Sterling
GCC	Gulf Cooperation Council
HDI	Human Development Index
HUD	U.S. Department of Housing and Urban Development
KAU	King Abdul-Aziz University
REDF	Saudi Real Estate Development Fund
SA	Saudi Arabia
SAMA	The Saudi Arabian Monetary Authority
SMEP	Saudi Ministry of Economic and Planning
SMOH	Saudi Ministry of Housing
SR	Saudi Riyal
SSP	Supply Support Policy
UK	The United Kingdom
US/USA	The United States (of America)

Presentations and Publications

Abed, A., Dunse, N. and Jones, C., 2018. *A Critical Evaluation of Affordable Housing Provision in Saudi Arabia* (No. eres2018_195). European Real Estate Society (ERES).

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Chapter 1: Introduction and Background

1.1 Statement of the Research Problem and the Gap in Knowledge

Clapham (2019) described housing as a very complex multifaceted commodity which is very difficult to easily comprehend. Furthermore, he theorised that housing can be used as a means to distribute wealth in a society and can be regarded as an investment as well as a consumption good. On the other hand, the United Nations views housing as a human right. Adequate housing should be regarded as "a component of the right to an adequate standard of living" (Edgar *et al.,* 2002:17). Indeed, Clapham (2019) recognised this view as he argued that adequate housing can play an important role in quality of life and can contribute to social cohesion.

Arguably, governments are by far the most influential player in the housing market. It is therefore important that they analyse and understand the housing sector and evaluate the effectiveness of their policies (Tipple & Wallis, 2003). Ultimately, governments put into place policies that assist local councils and municipalities to plan, build, and manage the places where people live. This includes decisions on what types of housing should be built and what rules are in place to sell or rent them. Affordability, which simply means the ability to own or rent a suitable property, is a concept that has become an important issue in housing policy (Bramley, 2012).

Researchers such as Chaplin *et al*. (1994), Whitehead (2007) and Stone *et al.* (2011) have all focused on the concepts of 'affordability' and 'affordable housing'. Furthermore, they have explored both terms from different perspectives and within different contexts to attempt to distinguish between them, an imperative issue which will be reviewed fully in this thesis. That said, there is no consensus between researchers and locales on a clear distinction between these terms. Instead, each country adopts its own standards, and formulates its own definitions based upon its own understanding and needs (Stone, 1994; Stone, 2006a; Stone, 2006b). Consequently, in order to explore the general development of affordable housing policy, it is first useful to identify a common definition of 'affordable housing' and 'affordability', as there appears to be some similarity between the two terms to the point where they are used interchangeably (Al-Halaj *et al.,* 2013). This has become especially relevant in recent years, as the issue has become a significant topic in housing policy in both developed and developing countries, where social and

economic progress has altered focus and has led to an increased emphasis on affordable housing policy development (Lund, 2017).

A review of the literature has shown differences on the issues of housing policy and low-income groups. Linneman and Megbolugbe (1992) have argued that housing affordability issues, such as home-ownership and rental affordability, are no longer considered low-income issues, but have now become a challenge to middle-income groups as well. Globally, middle-income groups intersect and share similar housing issues with those faced by low income groups (Linneman and Megbolugbe, 1992; OECD, 2019). The middle-income group is an important segment of the population but due to the fact that their jobs are typically located in large urban centres, they face particular challenges obtaining affordable housing (Linneman and Megbolugbe, 1992; OECD, 2019). The middle-income group percentage is a larger percentage of the population than higher income groups and they have greater spending power than both the lower and upper-income groups (OECD, 2019). Moreover, individuals from middle-income backgrounds are generally better educated and represent an essential and significant portion of the workforce, whereby they occupy well-paid jobs in businesses and professions, and thus significantly contribute to the productivity and performance of organisations, which in turn produces positive economic and societal benefits (OECD, 2019). However, as a large percentage of this workforce is required to work in urban and semi-urban locations, it is important for this group to be able to purchase or rent property within these areas (Stone, 2006b). Yet with the scarcity of land, and increasing property costs, many middle-income individuals are finding it increasingly difficult to rent or purchase suitable and affordable properties to satisfy their housing needs (Linneman & Megbolugbe, 1992; Lund, 2017; Anacker, 2019). Authors such as Kutty (2005), Stone (2006b), Elena *et al*. (2008) and O'Neill (2008) also state that moderate or middle-income groups face difficulties in accessing affordable housing.

As Stone (2006b:154) states, the term 'affordable housing' still "lacks precise and consistent definition" and recently has come to include not only "social housing and low-income housing, but also financially assisted housing for middle-income households that find it difficult to purchase houses in the private speculative market". This income category is increasing due to economic growth around the world, and yet in terms of housing, it is often struggling with little support as, in many countries, most policies are only directed at low-income groups (Ravallion, 2010).

Therefore, examining how different housing policies deal with affordable housing issues among different income groups is extremely important; and must include a study of policies specifically targeting middle-income groups and how they are managed in the public sector. For example, affordable housing in the United Kingdom (UK) is considered a policy instrument, whilst the United States (US) focuses more on the role of credit facilitation and indirect subsidy (Al-Halaj *et al.,* 2013). In the UK, the government has recently been using planning policy and other statutory instruments and incentive schemes to address the issue of housing affordability; the former of which requires new housing developments of a certain size to include affordable housing within the property mix (Wilson & Barton, 2019). Other schemes have included shared ownership options and house deposit assistance (Wilson & Barton, 2019). In contrast, the federal government in the US provides some assistance in the form of subsidies and vouchers to aid affordable house rental and ownership, with individual states playing a significant role in deciding their own individual affordable housing policies (Schwartz, 2010).

Nonetheless, the issue of housing affordability is not limited to developed countries but is also a problem in developing countries. For example, many countries within the Middle East are facing rapid urbanisation and high population growth that has led to a large increase in middle-income groups (Smith *et al.,* 2014), which in turn has led to rapidly increasing demand for affordable housing within these locations. Specifically, within the Gulf Corporation Council (GCC), countries such as Saudi Arabia (SA) include high numbers of middle-income groups that account for more than 50% of the population, who still struggle to own or even rent their own homes (SMOH, 2016a). Additionally, while Saudi Arabia distinguishes between low and middle-income groups, the former is addressed more within the country's housing policies, as they are believed to struggle to afford housing even with government assistance. The GCC region, similar to other areas around the world, faces a set of challenges that are unique to its specific geographic, economic, political, and socio-cultural situation. This is characterised by a fast-growing young population, socio-cultural and religious influences on financing, rapid urbanisation, a large expatriate workforce, and multi-tiered residential markets segregated by law, configuration, and location, making housing policy in these countries "absolutely urgent as a national priority" (Smith *et al.,* 2014:1).

In the GCC, Saudi Arabia stands out because of its large population, area, and economic importance. In 2017, the SA population was estimated to be 32 million, of which around

37% were non-Saudi nationals, with an annual population growth rate of 2.5% and a family growth rate of 5.6% (SMOH, 2016b; CIA Factbook, 2018). Furthermore, in 2016, it was reported by the Saudi Ministry of Housing (SMOH), that around 87% of the population were aged below 45 and 66% were clustered in three urban centres located in the Riyadh, Makkah, and Eastern Region (SMOH, 2016b), as indicated in Figure 1.1 from the General Authority for Statistics in Saudi Arabia (GASTAT, 2018).
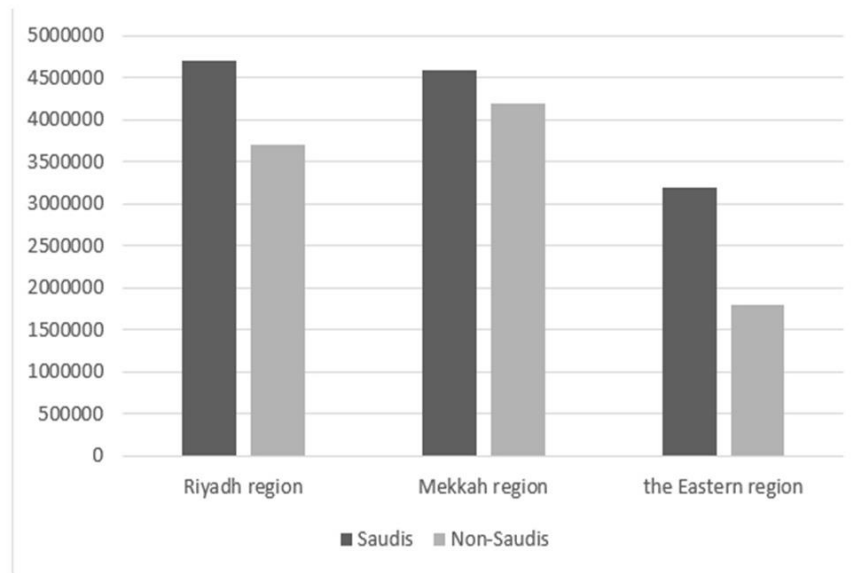
Figure 1.1 The distribution of the Saudi population in the three main populated areas in Saudi Arabia, GASTAT (2018).

These statistics highlight that the population in Saudi Arabia is growing and requires improved levels of service provision, including housing. The largest proportion of the population in SA ranges from 20-40 years old (CIA Factbook, 2018). This tends to be the age range where people get married and therefore a new household is formed. In contrast to the UK and US, the predominant approach adopted by the SA government has been the provision of public sector funds and, more recently, encouraging the private sector and increasing international involvement in the construction of affordable housing within the country (Retalk, 2017). Figure 1.1 shows that the majority of the SA population is clustered in three regions, namely Riyadh, Makkah and the Eastern Region. Many Saudi Arabians are migrating from small towns to large cities where they can find better jobs and services. This trend demonstrates strong growth, and as estimated in 2013, 66% of

the population have migrated to urban areas (Jeddah Economic Forum, 2013), suggesting a strong need for this pattern to be addressed by government policy.

Unfortunately, the policy initiatives developed by the SA government do not reflect population growth and demand, and mainly focus on providing short-term solutions. As stated in the 9th 5-Year National Development Plan from 2010-2014, "the housing sector in the Kingdom of Saudi Arabia faces several issues and challenges, including, adequacy of supply of housing units, rate of home ownership, prevailing price and rent levels for housing units, and availability of finance for housing and residential land" (SMEP, 2010:353).

However, notwithstanding the SA government's recognition of these housing issues, including those identified in government reports and research in relation to Saudi housing issues and affordability, there is still much to be developed. For example, the SMOH indicated in a recent report that without a clear housing plan, there will continue to be an annual shortage of affordable housing of between 140,000 to 200,000 units per year (SMOH, 2016a). This is confirmed by research which suggests that the housing market in SA is facing a crisis because of the shortage of available affordable housing (Assaf *et al.,* 2010). This problem is further illustrated by a recent media report, which suggests that the SA "housing shortfall [is] expected to increase from 700,000 houses to 2.4 million units by 2020" (Retalk, 2017), with the majority of this shortage being experienced within the middle-income population. Therefore, how SA addresses the issue of affordable housing for both low and middle-income groups in its residential housing planning and development policy will be critical to the country's future stability and success.

It is apparent that SA is facing a significant housing problem as its younger population reaches maturity and requires homes they can afford. There is a need for independent research to explore the country's affordable housing market, especially for middle-income groups. This research should identify the different factors that affect affordability from the perspective of all the stakeholders involved, such as the government, planners, financial institutions, and developers. Therefore, there is an opportunity to fill this gap in the knowledge through a study that looks at affordable housing, specifically for middle-income groups in the rapidly changing environment of SA.

1.2   The Research Aims, Questions and Objectives

The aim of this study is to develop a conceptual framework to investigate housing affordability policies that are applicable to middle-income households in Saudi Arabia. It also strives to collect data relevant to existing housing affordability policies to evaluate their effectiveness and inform future decisions. This will be achieved by identifying the critical drivers that influence the development of affordable housing solutions from both a planning policy and socio-cultural perspective. In particular, the study will focus on affordable housing issues as they relate to one of the three main urban centres, Jeddah, on the west coast of Saudi Arabia. The rationale for this choice is based on several factors. Firstly, Jeddah is regarded as the commercial hub of SA and it also provides a gateway to Makkah (World Population Review, 2018). Secondly, it is the city within the Makkah region that has the highest urban population, and it also has the second highest population in the country, after the capital, with a density of 6,400 people per square mile (World Population Review, 2018). Based on these factors, Jeddah is likely to have a large middle-income population, which is the target group for this thesis.

1.3   Key Research Questions

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

2. What are the causes of these issues and who are the main actors involved?

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?

4. How do these current policies address the problem of middle-income affordable housing?

5. How can these policies be developed further to address existing or future issues?

6. Which other policies can be introduced to contribute to a solution?

In developing the answers to these questions, the research undertaken will need to fulfil the following objectives.

1.4   Research Objectives

1. To identify and review affordable housing policies for middle-income groups used in selected developed and developing countries; these countries are the UK, the US, China and countries in the Gulf Cooperation Council (GCC), and specifically Saudi Arabia,

2. To identify the reasons for the lack of affordable housing in Saudi Arabia, specifically within middle-income groups residing within the city of Jeddah,

3. To create a conceptual framework to address the issue of middle-income housing affordability within the country,

4. To apply a methodology to identify critical elements of affordable housing policy in the case study, city of Jeddah,

5. To identify key elements of affordable housing policy and measure its use in Saudi Arabia,

6. To identify more generic implications of affordable housing policy for the Middle East and other developing countries.

1.5   Thesis structure

The thesis has been divided into eight (8) separate chapters. The current chapter presents an introduction to the thesis, which includes an overview of the background to the study and the rationale for the subject choice. It also identifies the research aims and objectives and the key research questions identified for this thesis. The structure and content of each chapter is outlined below:

Chapter 2 – provides a critical review of the current literature and the theoretical foundation that identifies the need for affordable housing. It commences by defining the meaning and context of affordability and affordable housing and then explores its causes and its subsequent progress within developed and developing countries.

Chapter 3 – is the second literature review chapter and examines the housing market in Saudi Arabia, the factors that have led to affordable housing issues within the country, and an overview of the housing policies that have been developed to address this challenge.

Chapter 4 – presents the conceptual framework developed for this research which was developed from the two literature review chapters (Chapters 2 and 3).

Chapter 5 – outlines the methodology that has been adopted for the research and explores the theoretical foundation that justifies the methodological models that have been used. The chapter also explains the relevant stages of the research and the data collection process.

Chapters 6 and 7 – respectively present an analysis of the quantitative (Household Perspective) and qualitative (Stakeholders' Views) data collected based on the themes that have been identified in the literature review and conceptual framework chapters. Furthermore, both analysis chapters provide a discussion of the study findings within the context of the research aims and objectives and are guided by the conceptual framework.

Chapter 8 – brings the study to a conclusion by identifying the implications of the study for the different stakeholder groups within the housing policy environment in relation to Saudi Arabia. It then outlines the contribution to knowledge, theory and practice. The complete structure can be summarised in the following diagram (Figure 1.2).

Chapter 1
Introduction and Background

Chapter 2
Affordable Housing Policy Trends

Chapter 3
Affordable Housing Policy in Saudi Arabia

Chapter 4
The Conceptual Framework

Chapter 5
Research Methodology

Chapter 6
Household Perspective
(Quantitative Data Analysis)

Chapter 7
Stakeholders' Views
(Qualitative Data Analysis)

Chapter 8
General Discussion, Recommendations and Conclusions

Figure 1.2 Thesis Structure

Chapter 2: Affordable Housing Policy Trends

2.1   Introduction

The aim of this thesis is to investigate the issue of affordable housing for individuals categorised as middle-income in Saudi Arabia. The issue of affordable housing is one of global significance and is a challenge faced by many countries. Therefore, it is essential to first explore what affordable housing means in other geographical settings before discussing SA affordable housing policy. In this respect, since the terms 'affordable housing' and 'affordability' or 'housing affordability' appear to be used in a transposable manner, the meaning of affordability and its key drivers will be addressed to ultimately clarify the relationship between these terms.

The key elements in affordability issues and the different stakeholders that contribute to the practical implementation of an affordable housing policy in different countries will be described. Three developed countries with different housing policies and political systems have been chosen. These are the UK, USA and China. Within this context, the challenges of managing such policies in these countries are identified and discussed.

In summary, the aim of this chapter is to map how three different countries deal with affordability issues to inform the development of a conceptual framework for this PhD programme of study. However, it is essential to first define the middle-income group in the next section before discussing different affordable housing policies across the globe.

2.2 Definitions of Middle-income group

In this thesis, dividing households into different categories followed a definition identified by The Organisation for Economic Co-operation and Development (OECD). According to the OECD, middle-income group are those households with 75-200% of the median income (Thewissen *et al.,* 2015). In the UK, the latest figures suggest that the middle-income group constitutes 58% of households compared to 61% of households in Europe as a whole (OECD, 2019). Using a similar definition of the middle-income group in the USA, which defines 'middle-income' households as earning two-thirds (66%) to double (200%) the national median income, it is estimated that 50% of US households fall within this category (Fry & Kochhar, 2018; Martin, 2018). This has been the case since 2011 (Fry & Kochhar, 2018). It is important to say that these statistical definitions of middle-income cannot be applied everywhere. For example, in China, other metrics,

based on the World Bank purchasing-power-parity (PPP) which relates to a *dollars per day* amount were used to divide households into different income groups (China Power Team, 2017). The case of China is peculiar because the middle-income group has rapidly developed in the last few decades. The Chinese government used income bands to define middle-income groups. According to Chinese sources, it is estimated that 39% of the population falls into the middle-income group (China Power Team, 2017).

2.3   The concept of housing affordability

In simple terms, housing affordability means that potential households are able to spend a part of their household income on owning or renting a house without this having a great impact on their ability to pay for other basic needs such as food and utilities. This definition was noted by Chaplin *et al.* (1994:6) who defined affordability as "whether the household has enough income left over for the other necessities of life once the housing bills are paid". Relatively recently, Stone *et al.* (2011), also confirmed that affordability is specifically related to an individual's financial ability to have sufficient income to be able to either rent or purchase a property that will suit their needs.

However, in the last two decades, the impact of the money spent on owning, or indeed renting, a house has become an increased burden on the total household budget, especially for low and middle-income families (Anacker, 2019), with the latter being the focus of this research. Therefore, it is not easy to address the challenges of housing affordability for the three reasons stated by Anacker (2019:5), which are that "it is difficult to decrease household expenditure; it is difficult to increase household incomes; and household expenditure and incomes grow slowly over time". Therefore, policymakers in many countries have found it difficult to solve the problem of housing affordability and thus, to deal immediately with sudden housing issues that occur as the result of an economic crisis (Anacker & Carr, 2011; Rajan, 2010). In many countries where housing affordability became a highly debated political and social issue, new approaches to defining and categorising affordability were introduced by policymakers. Globally, there is a great demand for housing because the increase in population is faster than the increase in household income and the availability of proper affordable housing projects (Joint Centre for Housing Studies of Harvard University, 2013; Morduch & Schneider, 2017). The failure to provide affordable housing projects can lead to several social challenges such as an increase in the crime rate (Ellen & Lacoe, 2015), health inequality (Currie & Tekin, 2015) and higher rates of eviction (Desmond, 2016). However, it is fair to say that housing

affordability is not only about providing physical units of housing; it can also be addressed by other policies including income support and increasing the availability of jobs.

Offering a more elaborate definition, Whitehead *et al*. (2008) linked the term 'housing affordability', not only to the cost of owning a house, but also with the ability of the individual or household to sustain these costs over time within the private rather than the public sector. Furthering this theme, Jones *et al.* (2010:7) assert that "affordability is not just about access to home ownership but the nature and type of housing available generally and to specific groups of households in particular areas". Stone *et al.* (2011:11) indicated that the term 'affordability' or the lack thereof, is focused on describing the "relationship between [affordable] housing and people".

Based on a critical review of these definitions, it is apparent that the general opinion is that "housing is affordable if expenditure relative to income is reasonable or moderate" (Kutty, 2005:115). However, within the context of this current study, the definitions provided by Whitehead *et al.* (2008) and Jones *et al.* (2010) are the most relevant. The reason for this is that it is the middle-income group which tends to be focused on securing affordable housing within the private sector. Their reliance on public sector housing does not satisfy their desire for a higher standard of living and increased social standing. As will be discussed later in this chapter, the challenge is for middle-income groups to afford reasonable housing within their preferred neighbourhood (Lund, 2011). Securing this objective has led to the inclusion of affordability within the current context of most governmental housing policies across the world (Lund, 2011), including Saudi Arabia. The two main points worth stating at this stage is that the definition of housing affordability ranges from strict criteria around how much the household can afford to pay to own a house to a more elaborate definition about access to housing. The second point is that the concept of affordability exists in different societies but is not necessarily associated with the middle-income group.

2.4   Measuring housing affordability

As is the case with defining 'affordability', the literature has shown that there are different measures associated with the term, and indeed differences in the way these measurements are applied within different countries. Consequently, there are many different views of

affordability and especially of "how it should be measured and at what thresholds" (Bramley, 2012:150).

Nonetheless, in terms of actual measurement models generally applied within this context, as has been indicated in the research conducted by Jones *et al.* (2010:3), there are broadly two main models which are commonly used: "one is based on the ratio of housing costs to income and the other on the residual income remaining after meeting housing costs". One could argue that these two measurement models approach the issue of affordability from opposite ends of the spectrum. The house price-to-income model seeks to determine the proportion of an individual's or household's income that should not be exceeded to own a house (Jones *et al.,* 2010). The residual model is based on an assessment of whether the amount of disposable income remaining after paying housing costs still leaves the person with a sufficient level of income (Jones *et al.,* 2010). These models of measuring affordability are discussed in further detail in the following subsections of this chapter.

2.4.1 House price-to-income ratio model

The approach of measuring affordability "gives a general indication of whether house prices are affordable in relation to incomes" (Whitehead *et al.,* 2008:5). This model is acknowledged in the literature as the oldest and most popular format used to assess housing affordability and has been widely adopted by many developed and developing countries (Stone, 2006b). One of the main reasons for the popularity of this model is that it has been designed to clarify the relationship between housing costs and income (Stone, 2006b). Therefore, this measurement is intended to determine whether house prices within the chosen area, or the area in which the household is located, is affordable in relation to income (Whitehead *et al.,* 2008).

The income ratio model takes into account that household income needs to cover a range of different costs, such as food, clothing, and other necessities (Stone, 2006b). This means that there is a limited percentage of that disposable income that can be committed to housing costs (Stone, 2006b). Therefore, it is this measurement that is used to determine whether house prices are affordable within available income (Whitehead *et al.,* 2008).

As Whitehead *et al.* (2008) also comment, in terms of affordability, the application of the house price-to-income ratio is also important when deciding affordable areas and when

to buy. The literature has confirmed that there are at least two reasons why the house price-to-income ratio model is currently being widely used. Stone (2006b), suggests that it has a long history, is easily understood, and is simple to calculate. These are most likely to be the reasons why it has been officially adopted by many governments. Equally, from the viewpoint of housing policy development, its usage is considered important because it provides an outcome that can "help the relevant authority to decide where new housing should be built, or which areas may be in need of regeneration, alongside other considerations such as environmental issues, infrastructure constraints, flood risk or planning matters that may also be important in determining the location of new homes" (Whitehead *et al.,* 2008:6).

Furthermore, there is a need to have a benchmark/threshold measurement of affordability as different countries may have different acceptable thresholds. If we take the US as an example, the study conducted by Stone (2006b) found that the ratio of housing cost to income is an acceptable indicator of affordability where it is approximately 30% of income. Moreover, the higher the percentage of housing costs, the greater the housing cost burden becomes, and this burden has been indicated as severe when this ratio is 50% or more of the household income (Schwartz, 2010).

Based on a review of the literature, a 30% level of house price-to-income ratio appeared to be generally used by all income groups and policy makers as the upper threshold of affordable housing. However, this approach needs to be treated with caution when applied globally as recent housing affordability indices have shown changes in the levels of affordability and the cost of living in different regions and countries may be higher. To summarise, in relation to the affordability of home ownership in all income population groups, the house price to income ratio is the measurement that is primarily used as a means of determining the extent to which the individual or household will be able to access the capital required to purchase a property (Whitehead *et al.,* 2008).

2.4.2   Residual income model

The residual income model of affordability measurement is, in essence, the reverse of the ratio model. It is "the income a household has left over after they have paid housing costs" (Whitehead *et al.,* 2008:9). Jones *et al.* (2010), Whitehead *et al.* (2008) and Stone (2006b) argue that, although the income ratio model is the most popular, the residual income measurement is more accurate. This is because it is designed to determine what disposable

income remains available after the household has paid its housing costs, whether related to mortgage or rent (Jones *et al.,* 2010; Whitehead *et al.,* 2008; Stone, 2006a; Stone, 2006b). The intention of the residual income measurement is to assess whether, after paying housing costs, there is a sufficient level of remaining disposable income to provide for the individual/household's basic needs, for example food, clothing, electricity, gas, and other everyday basic costs.

If the residual income after paying housing costs is not sufficient to cover the remaining living costs, then affordability is an issue (Whitehead *et al.,* 2008). The residual model not only allows the identification of affordability issues among lower income households, but is also capable of highlighting affordability issues for middle income groups (Stone, 2006b), not least because of the increasing differences between private house and rental prices and incomes. Table 2.1 summarises the advantages and disadvantages of these two models.

Table 2.1 Advantages and disadvantages of the housing price-to-income ratio and residual affordability measurement models

Ratio measure	Residual measure
Strengths	Strengths
- relatively easy to apply - easy to compare - reflects market realities in relation to housing and income	- assesses household living standards - sensitive to household structure - sensitive to diverse income levels - reflects market realities in relation to housing and income
Weaknesses	Weaknesses
- arbitrary benchmark - needs modification to address household structure - needs modification to address issue of households with different income levels - does not address housing quality and adequacy	- more complex to apply - not sensitive to geographic variations in cost of living - does not address housing quality and adequacy

Source: Henman & Jones (2012:10)

There are other approaches to measuring affordability which are also used by different governments (Whitehead *et al.,* 2008). One approach used to decide the proportion of affordable houses that needs to be developed is to measure whether housing is affordable to "different household groups" (Whitehead *et al.,* 2008:7), including the middle-income segment, which is the focus for this research. Other approaches include calculating the annual income necessary to purchase a house and the access to finance model (Whitehead *et al.,* 2008).

It can be inferred that there is no specific approach that is considered the "single or correct measure of affordability that will cover all aspects, because each one has its strengths and weaknesses" (Whitehead *et al.,* 2008:10). Therefore, a composite of measures should be used because a different approach to measuring affordability can be applied depending on the purpose of the measurement (Whitehead *et al.,* 2008).

In summary, whilst recognising that the usage of measurement models is dependent on the purpose, it is important to briefly review their respective advantages and disadvantages. For the house price-to-income ratio model, the main purpose is to assess the individual or household's suitability for access to finance and their ability to pay the related housing costs. Nonetheless, it can be argued that the disadvantage of this model is that it tends to provide a superficial view of affordability which generally does not take into account individual circumstances. For example, if two households have identical household incomes, then their access to borrowing generally will be considered equal. However, this may not effectively consider the spending differences between these two households; for example, if one household has three children and the other has none, it is clear that the former will have a lower level of affordability due to their increased basic needs and living costs. Similarly, while it may be true that the residual income measurement model addresses the limitations of the house price-to-income model, it also has a potential disadvantage in that, until recently, it was solely focused on lower-income groups, and thus ignored others. However, as further discussion will show, personal residual income varies between different countries and different income groups within countries.

2.5   The causes of unaffordability

As previously noted in this chapter, over recent decades concerns related to the affordability of housing have moved beyond a focus on housing problems within the low-

income populace. Research has begun to recognise that difficulties related to affordability issues are increasingly being experienced within middle-income groups as well, especially in urban areas.

Over the years, there has been an extensive body of literature on the causes of the lack of affordability of houses and recent research suggests that one of the main causes is the value of land within urban areas in many countries (Gillespie, 2018; Peterson, 2018). Other causes include inappropriate building regulations and difficulties in obtaining financing (Gillespie, 2018). Another reason for unaffordability, which has a global impact, is the rising cost of building and construction materials (Jakabovics *et al.,* 2014). In addition to all of these reasons, some literature suggests that the market economy necessitates that developers, in search of profit, replace older affordable housing units with new-build houses for upper-income clients (Prevost, 2013; Sherman, 2017; Anacker, 2019). Indeed, the practice of building houses for the rich has had a great impact on the availability of affordable houses, as identified by many authors (Harrington, 2016; Hay, 2013; Keister, 2005; Piketty, 2014; Rogers, 2017). In many countries, there have been austerity measures at the national level which have affected social policies and services, including funding for affordable housing (Lennartz, 2017; Lennartz & Ronald, 2017; Ronald & Dewilde, 2017). In oil producing countries, for example, the decline in oil prices has sometimes resulted in constraints on national budgets and government housing programmes.

However, it has been argued by a number of researchers that the main cause of the rise of the affordability challenge is the slow rate of change of household incomes in comparison with the rising costs of owning a house and other housing expenditure (Brennan & Lipman, 2008; Joint Centre for Housing Studies, 2009). Other researchers have suggested that property taxation, housing expenditure and other related housing costs such as food, clothing, healthcare, education, and the cost of construction also contribute to increased difficulties in affordability (Kutty, 2005; Schwartz, 2010; Stone *et al.,* 2011; Austin *et al.,* 2014). Indeed, the literature identified a noticeable reduction in average household incomes because of the increasing price of non-housing expenditure, taxes, and the lack of high salary jobs in many sectors (Anacker, 2019). For non-western countries, the fall in the value of local currencies has also contributed to the fall in average household incomes.

Notwithstanding these reasons, a review of the literature shows that the lack of affordability in many countries is directly related to factors that have skewed the housing supply and demand process (Bramley, 2012; Mulliner *et al.,* 2013). For example, during the period from the late twentieth century to the present, many countries have seen massive increases in house prices, which causes affordability issues, especially for first-time buyers (Bramley, 2012). The question that needs to be asked here is what has caused this price inflation.

A report conducted by the World Bank has indicated that a significant contributor to lack of housing affordability was the rapid increase in urbanisation (Spence *et al.,* 2009). Urbanisation has occurred as part of the globalisation process. The rise of major cities and large communities to support industrial and other services within cosmopolitan areas has led to higher housing prices in these places (Spence *et al.,* 2009). Thus, urbanisation has seen an increasing influx of people migrating to major cities and towns such as London, New York, Sydney, and Dubai (Wong, 2017). This foreign influx has increased the demand for and the costs of housing (Warren, 2010; Wong, 2017). Another factor that has also contributed to the increase in housing prices connected to the supply-demand cycle is the availability of suitable land (Spence *et al.,* 2009), which due to government policies and particular infrastructure issues may be limited. This shortage in land pushes up the cost of construction which results in price increases.

Internationally, challenges related to affordability have become an issue for both developed and developing countries. Thus, "in most countries housing is primarily produced and distributed through market mechanisms, there is often pressure on governments and local authorities to devise policies and programmes to deal with housing problems" (Clapham, 2019:1). In the UK for example, the government dealt with significant challenges with the provision of affordable housing because of the factors identified above, by creating a gap in the supply of housing, which failed to keep up with demand (Mulliner *et al.,* 2013). In the US, the National Association of Home Builders (2019) identified affordability challenges in terms of shortages of housing construction and the high price or lack of land (Richardson, 2019).

Similarly, affordability issues have also arisen in developing countries (Clapham, 2019). In these regions, the management of land available for development in cities is a major problem (Gillespie, 2018). In addition, finance is not available to boost the housing market due to limited resources (Fields & Hodkinson, 2018). This crisis in the affordable

housing market has also led to a higher level of homelessness (Wetzstein, 2017; Fields & Hodkinson, 2018). Unfortunately, this has resulted in many governments, specifically in the developing world, producing "policies that make housing less affordable and less secure for many segments of the population" (Fields & Hodkinson, 2018:1) as well as less safe (Madden, 2017). These issues show that a continuous evaluation of housing policies is needed to address housing needs.

In summary, there is a lack of global affordability, which is caused by many reasons as illustrated in the previous section and aggravated by a global financial crisis. This has been well acknowledged in the literature (Brenner, 2006; de Lis & Herrero, 2008; Crouch, 2009; López & Rodríguez, 2011; Whitehead & Williams, 2011; Immergluck, 2015; Byrne & Norris, 2018; Clapham, 2019). It was also noted that the housing market is affected by global factors (Paris, 2013; Pow, 2017). There is evidence from the literature that the housing market is now a global industry with many international players developing housing projects across many countries (Clark & Lund, 2000; Nijman, 2000; Bardhan, Edelstein, & Leung, 2004; Zhu, Sim, & Zhang, 2006; Sheller & Urry, 2006; Bardhan & Kroll, 2007; Warren, 2010; Weber, 2010; Rogers, Lee, & Yan, 2015; Aalbers, 2016; Pow, 2017; Wong, 2017). Therefore, global factors are an important component in the understanding and development of housing policy. The next section will focus on the concept of affordable housing policy and development.

2.6   Definition of affordable housing

In the United States, the term 'affordable housing' was originally used in the 1980s when low income groups were facing affordability problems (Stone, 2006b). Since then the term has been used by both policymakers and researchers, typically to represent affordability problems for the poor (Lux, 2005; Stone, 2006b). Thus, the term 'affordable housing' in relation to policy making has become generally associated with socio-economic development and equality and as such, there is a debate among experts from around the world about the exact definition of the term (MacLennan & Williams, 1990; Freeman *et al.,* 1997; Chaplin & Freeman, 1999; Whitehead, 2007; Yates *et al.,* 2007; Yates *et al.,* 2008). This view is endorsed by Al-Halaj *et al.* (2013), who state that, in addition to there being no clear unified definition of the concept of affordable housing, there are also contradictions between many terms concerning housing. For example, terms such as economical housing, social housing, low-cost houses, low-income and middle-income housing, popular or labourers' houses, and other related terms are

sometimes used interchangeably (Al-Halaj *et al.,* 2013). Additionally, the meaning of these terms differs from one country to another and from one system of governmental policy and subsidy to another (Al-Halaj *et al.,* 2013).

In recent times, however, not only is the low-income group struggling to find decent 'affordable housing', but so are 'middle-income groups' in many nations across the world, whether in developed or developing countries (Anacker, 2019). In addition, over the years, each nation has tried to define the term 'affordable housing' in accordance with their understanding of the current local housing market, due predominantly to the differences between the political environment and culture across nations. Despite this focus, however, the term in each individual nation still "lacks precise and consistent definition" (Stone, 2006b:154). In the UK, there is social housing and low-income housing for the most disadvantaged sections of society and the government has developed procedures and assistance for those who cannot buy directly from the private market (Stone, 2006b). In the UK, a recent report identified people without jobs, those on low salaries, the homeless, and new migrants as those who take the most advantage of the system (Equality and Human Rights Commission, 2016). Thus, in the UK, affordable housing means housing provided to households who cannot afford to buy from the market directly (DCLG, 2012a). Therefore, houses are allocated according to predetermined eligibility criteria by local planning authorities (Fears, Wilson, & Barton, 2016).

Accordingly, in order to examine the issue of 'affordable housing', the meaning of the term needs to be resolved, as there are differing views as to how it should be defined and to whom it applies. As Stone *et al.* (2011) argue, the term 'affordable housing' can only be meaningful if these three important questions are answered:

1. To whom is it affordable?
2. What is the standard of affordability?
3. For how long?

This can be achieved by identifying which group within the populace is experiencing housing affordability issues and what are the factors, such as income and price, that affect affordability. Another definition of 'affordable housing' is "housing that is appropriate for the needs of a range of low to moderate income households and priced so that low and moderate incomes are able to meet their other essential basic living costs" (PRWG, 2006 in Milligan *et al.,* 2007:26). As Yip (1995) suggests, this means that affordability is related to the extent to which the price of housing is at a level beyond the income of low

and middle-income groups such that their income is insufficient to purchase residential property. However, the term does not actually explain who can or cannot afford housing, nor does it provide a clear relationship to the type of housing that would be available (Stone, 1994). However, as Al-Halaj *et al.* (2013) noted, most countries define three main categories of affordable housing:

1. Houses provided from within the private sector without governmental subsidy and controlled by market mechanisms of supply and demand.
2. Houses for categories of people whose income does not enable them to own suitable housing according to market mechanisms and who need governmental help to be able to live in acceptable housing.
3. Houses for low-income households that cannot, even in the presence of a governmental subsidy, own a suitable house according to official market mechanisms.

Therefore, it is not easy to address affordable housing challenges. As Anacker (2019:8) states; "first, it is impractical to regulate inter/intra-state and inter/intra-city movement; second, it is difficult to reduce building regulations; and third, it is difficult to decrease design, construction, utility and regulatory fees and developer profits". The following two sections of this chapter present a brief overview and comparison of the forms of affordable housing challenges that have presented themselves in developed and developing countries.

2.7   Housing policy and its development

It is important first to define the term 'housing policy', as there are many definitions of the term. A recent definition states that housing policy is "any action taken by any government or government agency to influence the processes or outcomes of housing" (Clapham, 2019:11). Earlier, Lund (2011:1) stated that affordable housing policy is "best understood as an attempt by governments to modify the housing market or, perhaps more accurately, housing markets to achieve social objectives". He also stated that, "housing policy is about the state attempting to make corrections to the housing market" (Lund, 2017:20). Therefore, housing policy is a socio-political initiative by the government to achieve social justice goals. The policy is a set of regulations that influences the provision of housing for people who otherwise could not afford it.

Clapham (2018) outlines several stages of a successful housing policy. These include gathering information about the housing market, analysing it to identify the problem, then setting clear objectives, and finally finding ways to achieve these objectives in the most cost-effective manner (Clapham, 2018). Thus, as noted by Clapham, housing policy should aim for the well-being of the end-users and the community as a whole (Clapham, 2019). Lund (2017) also outlined a similar strategy which involves identifying the problem and setting up an action plan.

2.7.1 The stakeholders

A stakeholder is any person, group, or organisation that can affect or be affected by an organisation's actions, objectives, and policies (Business Dictionary, 2020). In the case of housing, this organisation is the entity that controls the housing market and sets its policy. In most countries, governments are the main stakeholders involved within housing market policy. Indeed, they are the main player in setting the rules for the housing market and instructing and shaping the main institutions that influence this market (Clapham, 2019).

In most countries, governments work through many public agencies and other organisations at different levels in the housing market. There can be agencies at state, federal, regional, and local levels such as in the USA, and these entities together aim to establish a legal and financial framework within which the housing market can thrive (Clapham, 2018). Therefore, for policy to succeed, it is essential that governments hold a superior status in the process and set the rules (Madden & Marcuse, 2016) as the interests of many stakeholder groups may overlap with or contradict each other.

However, Clapham (2019) goes further to specify the different actions all stakeholders working with governments should take. They can be summarised as follows:

1- Regulating the private sector.
2- Direct engagement in building houses.
3- Finance.
4- Providing information and guidance.
5- Accountability according to government and legal rules.
6- Defining issues and problems.
7- Non-intervention.

The decision for a government to intervene in the housing market, either directly or accepting other stakeholders' actions, is an issue of debate in the USA, the UK, and most developed open-market countries (Clapham, 2019). This point is of great significance in the study of housing policy in countries where the political system is more dominant, such as in China or Saudi Arabia. Governments in most developing countries tend to dictate all the rules and control stakeholder actions within the housing market.

The other main stakeholders in any housing policy, besides the state, are the finance sector, developers, planners, contractors, and end-users. These will be outlined in the conceptual framework to be applied in this thesis in Chapter 4. For any policy, there is also a provision for regulations, taxation, guidance, information, and accountability for all parties involved in the process (Clapham, 2019).

The government, as previously outlined, is the main stakeholder and its housing policy is the core political strategy that affects the housing market. Housing policy can be seen as an absolute political action driven by a specific ideology and rational reasoning (Durnova *et al.,* 2016). Thus, the "policy-making process is complex and can vary between different countries, situations and over time" (Clapham, 2018:163). Clapham (2019) outlined four different approaches to housing policy to guide governments and the other stakeholders involved. These are:

- The rational approach; based on an analysis of affordable housing problems and focused on finding solutions.
- The political approach; more or less driven by a political ideology to offer affordable houses.
- The structural approach; encompassing the historical evolution of housing policies and their impact on the outcome.
- The discursive approach; an approach which frames the problems and the means through which actors interact.

These approaches are broadly identified either against housing policy or through an explanation of the causes of the housing problem and solutions offered (Lund, 2017). It is worth noting that housing policy may not be beneficial to all members of society or stakeholders, and continuous evaluation is essential. It is also important to note that housing policy can easily be affected by other global factors to the point that some countries control their local housing markets to avoid the impact of external factors such

as the global finance market. As Aalbers (2015) mentioned, the housing market is both national and global in nature. He added that local and regional factors can play a role in shaping this market (Aalbers, 2015). Therefore, there is a strong connection between housing, economic, and financial factors (Clapham, 2019).

Lund (2017) suggested that it is of benefit to any housing policy to explore other similar situations in other countries to understand the different local, national, regional, and global factors that could lead to a better policy. This comparative approach can alert governments to a failed housing policy or provide interesting alternatives for implementation.

However, some authors warned against comparative housing policy studies because "policy learning and policy transfer between countries are at best problematic and at worst dangerous endeavours" (Crook & Kemp, 2014:228), and thus, "there are obstacles to forming robust conclusions on policy inputs and outputs due to data limitations" (Lund, 2017:77). This is as a result of differences in the social and cultural structures between countries and is a very significant issue to bear in mind when designing the conceptual framework of this research. The next section delves in more detail into affordable housing practices in both developed and developing countries.

2.7.2 Affordable Housing Policy in Developed and Developing Countries

Housing policy is not only a set of rules issued by the government to support certain programmes and regulate taxes; it is, in fact, a holistic approach that "affects how housing is financed, developed, rented, and sold" (Schwartz, 2010:8). In many European countries, including the UK, social housing initiatives and policies are introduced by the government to solve the affordable housing issue (Byrne & Norris, 2018). The 'right to buy' scheme is the best-known housing policy in the UK and was introduced in 1980 (Tunstall & Pleace, 2018). Essentially, it gives social housing tenants the right to buy the houses they live in; the rent paid up to the date of purchase is calculated to reduce the price of the property. However, it is now less widespread for a variety of reasons including the scarcity of social housing units (Tunstall & Pleace, 2018). Additionally, because of the inadequacy of government housing policy, there is a trend in the UK wherein parents assist their children by providing the initial deposit required to buy their first home (Lund, 2017). This indicates that the current UK housing policy is not working for all people in need of housing.

It is also important to note that the political structure of a country has a direct impact on its housing policy in many ways. For example, countries with a federal or a semi-federal system with a central government and different regional entities (states in the USA or constituent countries in the UK) have different strategies to whether to decentralise housing policy to lower levels of government or maintain a single approach for the country (Clapham, 2019). In the USA and Australia, States play a key role in deciding housing policy, while in the UK, "housing is one of the devolved functions to the constituent countries of Wales, Scotland and Northern Ireland" (Clapham, 2019:12). However, "policies that have a major impact on housing such as income support or economic policies are not devolved" (Clapham, 2019:12). Furthermore, Lund (2017) suggests that there is a trend towards restricting access to social housing in the USA and the UK through free housing market regulations that are in place in most instances. Therefore, it is clear that developed countries use different strategies as far as housing policy is concerned. For example, while the UK has privatised houses belonging to local government, the United States has focused on the role of credit facilitation and the tools of indirect subsidy (Al-Halaj *et al.,* 2013). A number of other European countries have also adopted policies that are a mix between taxes, exemptions, and planning tools to merge affordable housing into new projects so as to avoid dividing cities into rich and poor sections (Al-Halaj *et al.,* 2013). Therefore, in developed countries, the current trend related to affordable housing development has been the transition of various key responsibilities related to affordable housing from the public to the private sector. This approach has also been applied to the provision of affordable housing for their respective middle-income populace.

In contrast, the literature indicates that the use of affordable housing standards varies within developing countries. As discussed, in these environments, additional government and international assistance may be required, due to the inability of many countries to acquire the required capital to enable them to provide high quality housing facilities or support lower and middle-income groups in urban areas.

However, notwithstanding this diversity, it can be argued that housing policy is related to the process through which accommodation is provided to members of the community in need of assistance. In this respect, housing policy is related to diversity of tenure, or the occupation of a property and the rights of the occupant. In the UK, housing policy is predominantly focused on the preference for tenure, which is "shaped by considerations

of finance, availability and quality and also by ideology" (Conway, 2000:85). Tenure in the UK is generally driven by the desire to secure housing based on owner-occupation or through a rental tenancy agreement (Fitzpatrick *et al.,* 2014). Equally, there is a diversity of property types that can be secured, which includes houses and apartments.

UK housing policies, their structure, development, and tenure objectives have also been adopted in other developed commonwealth countries, particularly New Zealand and Australia (Austin *et al.,* 2014). Indeed, in terms of tenure, this similarity is apparent because "the three nations now have similar rates of home ownership and rental tenure, with 68% of Australians owning or purchasing their home, compared with 66% in England and 64% in New Zealand" (Austin *et al.,* 2014:458). Additionally, while policy is developed by the central government in these three countries, and government support is available, the implementation of affordable housing in practice is predominantly performed by organisations within the private sector. Therefore, the development of housing policy in these three environments is a process that requires negotiation between a wide range of different stakeholders concerned with the housing sector. Fundamentally, Australia and New Zealand, like the UK, have not only "become heavily dependent on planning gain as a mechanism to deliver additional affordable homes and mixed communities" (Mulliner *et al.,* 2013:405), but they have also aligned their housing policies with others such as social inclusion, welfare, and employment (Conway, 2000), together with the objective of achieving and supporting economic growth.

Overall, it would appear from the literature that several factors have affected the development of the affordable housing policies adopted by different governments.

2.8   Affordable housing policy in the United States of America

People in the USA aspire to own a house for many reasons including accumulating wealth, as two-thirds of home owners benefit economically from having their own property (Yun & Evangelou, 2016). In the USA's capitalist economy, it is not surprising that the government protects private property and supports the private sector in the housing market through legislation including, "tax preferences, credit guarantees, and regulatory flexibility" (Khare, 2018:8).   Therefore, the private sector has clearly influenced affordable housing policies in the USA (Khare, 2018). Due to its political structure, "the United States has an extremely complicated affordable and public housing system with multiple and sometimes competing programmes and functions" (Rosan,

2014:5). Therefore, "the expansion of home ownership and the mortgage market is most commonly attributed to financial innovations, particularly the securitization of mortgage loans and subprime loans and the originate and distribute model these developments gave rise to" (Byrne & Norris, 2018:51). One example of these financial innovations is the 'means-tested choice vouchers' that are issued to help lower income groups pay rent for private accommodation (Lund, 2017). Other products include the 'Low-Income Housing Tax Credits' (LIHTC) programme (HUD, 2017). LIHTC programme is "one of the federal government's primary policy tools for encouraging the development and rehabilitation of affordable rental housing" (Keightley *et al.,* 2014:2).

As noted in the research conducted by Buckley and Schwartz (2011:3) in the USA, historically as far back as the 1940s, most households rented their home, but then home-ownership gradually increased to reach over 60% mainly through "the creation of the 30-year, self-amortizing, fixed rate mortgage under the auspices of the Federal Housing and Veterans Administrations". The home-ownership rate reached approximately 70% in 2004, but started to decrease again in 2007 (Buckley & Schwartz, 2011).

In practice, housing policy in the US is predominantly developed and controlled by local state governments, although there are federal government subsidies available for those living in lower-income communities (Buckley & Schwartz, 2011). However, the literature has shown that in terms of the division of that support, "the state government provides a much larger housing subsidy for the affluent in the form of tax benefits for home ownership" (Schwartz, 2010:6-7). In contrast, it is the federal government that "provides subsidies for low-income households" (Schwartz, 2010:7). As has been previously noted, these federal policies, in the form of vouchers, have been directed towards population groups whose residual income does not reach 30% (Kutty, 2005).

Equally, in terms of planning and housing development, it is the individual state governments that are responsible for decisions such as the allocation of land to facilitate development in urban areas, in addition to their responsibility for the infrastructure and transportation networks required to sustain and cater for urban growth (Diniċ & Mitkoviċ, 2011). However, in contrast to European countries such as the UK, there are large empty areas available around the central cities in the US (Diniċ & Mitkoviċ, 2011). Consequently, the impact of the availability and price of land has a much lower effect on housing construction and affordability than is the case in major cities in the UK, especially London and its suburbs. However, in the US, government policies tend to favour the

private housing market (Khare, 2018). The literature suggests that the political system in the US aims to privatise government housing services (Hackworth, 2007; Glynn, 2009; Hodkinson, Watt, & Mooney, 2012; Marcuse, 2012; Aalbers & Christophers, 2014a; Khare, 2018). This has led to public housing being treated as a commodity with an exchange value that is exposed to private market forces (Khare, 2018).

The following policy approaches show the gradual "transfer of ownership from public authority to private sector entities" for the current affordable housing situation in the US as outlined by Khare (2018:9):

- In 1970, the government issued and regulated mortgage loans and insurance which resulted in profit-driven low-income housing.
- The gradual roll-out of policies provided supplemental rental assistance through tenant-based vouchers used to subsidise the cost of housing in the private market.
- In 1986, there was a roll-out of the Low-Income Housing Tax Credit (LIHTC) programme.
- In 1998, HUD's public housing reforms legitimized public–private partnerships, mixed-finance models and mixed-income development, through such policies as the Quality Housing and Work Responsibility Act of 1998 and HOPE VI.

As a result, in the US, "these policy approaches typically involve the transfer of ownership from public authority to private sector entities and allow for the wholesale redevelopment of the land on which public housing complexes once stood" (Khare, 2018:9). The US government recently created a series of funds to help overcome the harmful effect of its policies on affordable housing. Most of these funds were used to support loans and mortgages. Thus, in the USA, "Excessive Housing Cost Overburden is the most commonly used housing affordability measure" (Lund, 2017:99). "It refers to households spending more than 30% of their disposable income on housing with 'Severe Housing Cost Overburden' relating to more than 50% of disposable income being spent on housing" (Lund, 2017:99). However, as the US is a federation of states, housing affordability is supported by the national (federal), state, local, and private corporations (Anacker, 2019). For example, as stated in Anacker (2019:11) by McClure (2019) and Richter *et al.* (2019), "in the United States, states and cities have pursued a so-called dual approach, utilising Housing Choice Vouchers (HCVs), established in 1974, and the Low-

Income Housing Tax Credit (LIHTC), established in 1986, to assist eligible low-income households".

2.9 Affordable housing policy in the United Kingdom

In the UK, the government aims to build "a thriving, active but stable housing market that offers choice, flexibility and affordable housing" (HM Government, 2011a:vii). Therefore, in contrast to the USA, the UK government focuses on encouraging local authorities to map and support affordable housing needs (Jones *et al.,* 2018). In the development plans of local councils, there is a government expectation that at least 10% of each construction project goes towards affordable housing (Jones *et al.,* 2018); in reality, this varies between 30-50% (Crook *et al.,* 2016). In England and Scotland, "infrastructure needs to encompass affordable housing where there is an identified need for it in the local plan. It has become accepted that affordable housing is a reasonable obligation provided that the need is demonstrated and included in the Local Development Plan" (Jones *et al.,* 2018:22). Affordable housing units in the UK can be social rented units or affordable rented housing with fixed rents (which is specific to the UK, at a maximum of 80% of the market value) and low cost home-ownership including shared ownership (Jones *et al.,* 2018). Statistics show that, in 2015, only half of UK families owned their homes (Lund, 2017). This figure led to the government promising one million additional homes for England as part of a five-year plan to expand homeownership (Lund, 2017).

Tenure in the UK refers to the rights and obligations which apply when occupying a property (Lund, 2017). Thus, there are four main tenure types in the UK and "there is considerable mixing in tenure forms, such as shared ownership" (Lund, 2017:3). These four types are: "owner-occupation, renting from a local authority as a 'secure' tenant, renting from a private landlord and finally renting from a not-for-profit landlord" (Lund, 2017:3). Jones *et al.* (2018), reported that planning rules have resulted in mixed communities by insisting on having a substantial proportion of affordable housing in all new developments in both England and Scotland.

The delivery of affordable housing in the UK includes the "direct provision and sale to social landlords, subsidised or gifted land, and direct sales to private individuals" (Jones *et al.,* 2018:23). For example, "Section 106 Agreements in England have contributed

significant numbers of affordable homes and a high proportion of all affordable housing" (Jones *et al.,* 2018:23).

In the UK, the 'Help to Buy' scheme was designed to support first-time buyers and proved to be effective (HM Government, Department for Communities & Land Government, 2017; May, 2018). The following initiatives were also beneficial to affordable housing policy (adapted from Anacker, 2019:2):

1- "Homes England, a national housing agency, secures land and supports smaller and innovative developers (Ministry of Housing, Communities, & Local Government, 2018a).
2- The Home Building Fund assists small developers who have difficulties obtaining conventional funding from the private sector (HM Government n.d.b., May, 2018).
3- The updated National Planning Policy Framework, released in July 2018, provides a framework for locally prepared plans for housing and other development to be produced, aiming at building more affordable homes more quickly (May, 2018; Ministry of Housing, Communities & Local Government, 2018b)" (cited from Anacker, 2019:2).
4- Another option that has been made available within the current housing policy, which is also targeted at the middle-income group, is the opportunity for shared ownership, a scheme that is provided by housing associations operating privately (HM Gov., 2018). The scheme allows the person to purchase a specific share of the property (between 25% and 75%) and to rent the remaining percentage, and often includes the opportunity to increase their share of the property ownership over time (HM Gov., 2018).

Despite these plans, some authors and observers of the affordable housing market still remain sceptical. Anacker (2019) doubts that many end-users are able to afford the down payment requirements for a mortgage and states that a longer timeframe is needed to judge these initiatives. So, despite the presence of many intermediate housing products (e.g. shared ownership, intermediate rent and planning agreements) which were welcomed back in 2011 when Gurran and Whitehead (2011) reported the importance of affordable housing supply, the focus of most stakeholders was on low cost

homeownership (LCHO) (Monk & Whitehead, 2010; Mulliner & Maliene, 2013; The National Housing Federation of England, (NHF), 2017). It is clear from the literature that the main affordable housing finance product in the UK is the traditional council house building core model financed from long-term public loans (Gibb, 2018). New challenges, however, may undermine this model as Gibb (2018) noted that borrowing limits imposed by the government in the last decade have negatively impacted on this model.

In conclusion, council houses and the right to buy scheme, supported through the government model in the UK, is evolving into privately owned companies providing affordable housing (Gibb, 2018), further suggesting that there are financial constraints on local and central government. Moreover, based on the criteria used to support the housing needs of the population, it is clear that these policies target both low and middle-income groups within certain salary bands.

2.10   Affordable housing in developing countries

In this sub-section of the chapter, the review focuses on examining the causes and the development of affordable housing in an example from a developing country. China has been chosen because its housing development policy is strictly controlled by the ruling party. Another reason to discuss China is that it has a lower Human Development Index (HDI) than Saudi Arabia, whilst the UK and USA have higher HDIs than SA (UNDP, 2019). The Human Development Index (HDI) is "a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and having a decent standard of living. The HDI is the geometric mean of normalised indices for each of the three dimensions" (UNDP, 2019).

2.10.1 Affordable housing in China

Zhang *et al.* (2018) reported that, in the last two decades, the housing market in China has transformed from public-led provision to free market-controlled dynamics. This, according to Zhang *et al.* (2018:29) has resulted "in significant policy shifts since 2010 toward the promotion of low-end housing for lower middle and low-income groups".

Wang *et al.* (2011:250) confirmed that "China is a rapidly urbanising, developing country with huge income gaps between the rich and the poor", which has contributed to an increase in housing affordability issues. Scholars have also suggested that Chinese housing policies are similar to those of developed countries, in that they are focused on

external organisations, including state-owned and other international corporations, but at the same time they are driven by state rather than citizens' interests (Wang *et al.,* 2011). That said, as a result of China's increased growth in the international economy, the focus of its housing policy has been on the supply-side of housing, which has supported new housing development and has included special interventions to improve affordability for the middle-income group (Wang *et al.,* 2011).

China is very different from many other countries in the world as movement within the country is restricted (Anacker, 2019), and this in turn has impacted its housing policy. One of China's affordable housing projects, entitled "Ownership-Oriented Affordable Housing" varies from city to city (Zhang *et al.,* 2018:40). Statistics estimate that there is 89% and 97% homeownership in urban and rural areas respectively (CHFS, 2014). However, more than 7 million people living in cities in China are unable to afford basic housing because of high prices (Woetzel, 2015). Therefore, Yang and Chen (2014) assert that housing affordability is a major social challenge in urban China.

China, as a one-party state, firmly controls its housing market and aims to address the housing affordability challenge by using a mixed ownership housing system (Wang, 2013). Government housing policies in 2010 were able to control house prices to help families to access affordable homeownership according to Chinese observers (Chen, 2016). This was achieved through different policies including building affordable houses to boost the low-end market (Barth *et al.,* 2015), and introducing a two-tier affordable housing policy that included 'cheap rental housing' (CRH) and 'economic comfortable housing" (ECH) (Shi *et al.,* 2016), and finally 'shantytown redevelopment housing' (SRH) which has been categorised as a type of affordable housing since 2007 (Chen *et al.,* 2013; Shi *et al.,* 2016). Chen *et al.* (2013) reported that the plan was for 80% of urban households to be housed in ECH. ECH is "ownership-oriented housing provided by developers on free land allocated by local municipal governments, and sold to qualified households at government-controlled prices" (Huang, 2012:942). Data indicate that approximately 36 million affordable houses were available by the end of 2015 (MOHURD, 2016).

Zhang *et al.* (2018) identified three housing schemes in China within their urban low-income or non-market housing schemes which is partially financed by the central government and local states:

- **Ownership-oriented affordable houses:** where land is offered free to developers, but where local government keeps part ownership of the land. This programme failed to support low-income homebuyers or new young families.
- **Public rental houses:** which targets new young families who cannot buy; the rent is controlled by local government to help them access housing.
- **Low-rent housing**: which targets very low-income households and is regulated by the municipal housing bureau as part of China's socialist housing provision.

There is increasing criticism of these housing programmes including a debate about whether or not they are appropriate in the more open economic atmosphere of China today. Zhang *et al.* (2018:46) describe this as "the privatization, commodification, displacement, and speculation that have characterized recent Chinese real estate market changes; this newly emerging financialization marks an intensification and new phase of urban neo-liberalization in the main Chinese cities". It was reported that high-income citizens are taking advantage of these schemes to make a profit which shows that the policy mechanisms of these schemes are weak and not optimal (Zhang *et al.*, 2018).

In China, besides the central government, both the local government and developers play a major role in all aspects of affordable housing (Ge *et al.*, 2014). The challenges identified in the literature include lack of funding, limited or simple financial solutions and over-reliance on the government as a major player and stakeholder in the financing and management of land (Cao, 2018; Tan *et al.*, 2016; Yuan, 2014).

2.11 Summary

It is clear from the discussion above that there are three key aspects in producing an effective housing policy. These are: the role of government; effective financing solutions; and identifying and cooperating with stakeholders in the housing market. These will be discussed in the following sub-sections.

2.11.1 The role of government

As noted in the introduction to this chapter, the development of housing policies has become focused on providing initiatives that create a foundation for the development of affordable housing. This is currently being extended to accommodate the increasing affordability needs of the middle-income group. Many of these policy objectives have been embodied within the role of the public and private sector. Therefore, it must be considered that the role of the government is not only to dictate affordable housing policy,

as is the case in China, but instead to "ensure that the market functions in an efficient and appropriate way" (Clapham, 2018:18). In the case of the UK, by comparison, the government works alongside the housing market to ensure suitable policy, while in the US, the private sector and the market economy have a greater role. It is important to realise that each of these three strategies have their advantages and disadvantages and are not all suitable for every country. The following table summarises the criteria, advantages and disadvantages of the main housing policies in the UK, USA and China:

Table 2.2 Summary of the criteria, advantages and disadvantages of the main housing policies in the UK, USA and China

	UK	USA	China
Political system	**Democracy**	**Democracy**	**One Party system**
Human Development Index (HDI)*	0.922	0.924	0.752
House ownership %	66% (England) (in 2015 only half of UK families owned their homes)	70%	89%
House price-to-income ratio**	13.13	4.18	40.8
Main housing policies	Right/Help to Buy scheme (central government and local councils) and discounted rate/sales. Starter Homes (1st time buyers). Right to acquire. Shared ownership schemes (Resales).	Housing Choice Vouchers ('means-tested choice vouchers). Low-income Housing Tax Credit (LIHTC).	Government-built affordable houses to boost the low-end market. Two-tier affordable housing policy that includes: Cheap rental housing (CRH). Economic comfortable housing (ECH). Shantytown redevelopment housing (SRH). Ownership-oriented affordable houses. Public rental houses. Low-rent housing

Financing the schemes	Taxation. Exemption of taxes. Planning Tools/Rules (planning gain). Traditional council house building core model financed from long-term public loans.	Credit facilitation Indirect subsidies. Tax preferences. Credit guarantees. Regulatory flexibility.	Financed by the central and local states. Central government, local government and developers.
Main features of policies	The government works alongside the housing market to ensure suitability.	The private sector and the market economy have a greater role and influence on affordable housing policies.	The government controls the housing market and housing policies are more or less dictated by the government.
Advantages	Controls house prices and offers discounts.	House prices are realistic, and the housing market is healthy. Large empty areas of land available around its central cities (availability of land).	Many people can afford houses as the house ownership % suggests. Gradually evolving to allow for more private sector involvement.
Disadvantages	The government must subsidise the housing market to keep schemes healthy. Financial constraints on local and central government. Challenges the provision of affordable housing.	Low income group cannot afford open market prices. Shortage of housing construction. High price of land. Lack of land.	This is state controlled housing and does not reflect the real prices of houses and cannot be sustained for long. High prices of houses in cities. Affordability is a major social challenge in urban China. Policy mechanisms of schemes are weak and not optimal. Lack of funding. Weak financial solutions. Over-reliance on the government as a

			major player and stakeholder including the financing and management of land.

*UNDP (2018) ** Towergate Insurance (2019) *** HM Government (2019)

The table above shows the advantages and disadvantages of housing policies in the countries reviewed. It shows that the political system and the characteristics of each country are directly connected to its housing policy. Thus, housing policies and social, political, and cultural factors are influential when it comes to the success or failure of these strategies. These factors will be further explored in both Chapter 3, that focuses on affordable housing policy in Saudi Arabia, and the conceptual framework chapter.

2.11.2 Housing finance

Housing finance provides an important and essential foundation for the implementation and success of affordable housing policies developed by governments. Thus, this section discusses the role of housing finance within the affordable housing supply and demand chain and how these models have been implemented in various developed and developing countries.

Finance is considered to be one of the main housing market components (Clapham, 2019). Most international financial policies today appear to be directed towards other types of funding tools to guarantee that citizens obtain genuinely suitable and fair options (Al-Halaj *et al.,* 2013). However, there is a growing need to create a more competitive environment that includes the provision of small and micro financing to help individuals enter the housing market (Al-Halaj *et al.,* 2013). This is especially relevant in addressing the middle-income affordability issue and, of equal importance, the exclusion of middle-income groups from the housing market.

2.11.3 Stakeholders in the housing market

Conway (2000:8) confirms that, in terms of involvement in the housing market, "the key players in housing include landowners, the construction industry, banks, building societies, the financial markets and homeowners, and a range of public and other agencies". Therefore, it is clear that identification of the main stakeholders is essential for developing an effective affordable housing policy. While the different stakeholders have been discussed in detail earlier in this chapter, in some instances, there are international

players that affect housing policies across different countries. One such example is the European Union, which does not regulate housing in its member states, but impacts housing indirectly through taxation and other policy regulations (Clapham, 2019), thus, it can be regarded as a significant actor in the housing market. This logic often applies to other stakeholders who are directly or indirectly involved in the market, leading to stakeholders being seen as organisations or individuals directly or indirectly involved in the process as users, providers, or regulators. This involves, in no particular order, clients and end-users, government officials, land developers, builders and planners, and finance companies and banks. To decide whether a stakeholder is private or public can sometimes be challenging, however, the distinction between public and private agencies in providing affordable housing is very important. In the UK for example, local councils and Housing Associations receive financial support from the government and they are regulated, so they can therefore be regarded as public agencies (Clapham, 2019).

Government interventions in the affordable housing market in both the developed and developing world have been reported by many authors as a major factor that may be beneficial in offering affordable housing units, but only if supported by evidence-based research. Some of these interventions involve directly building affordable housing, targeting the rental market, improving transport to allow for more homes on the outskirts of cities, and encouraging multiple-person households (Reed, 2015).

2.12 Conclusion

The definitions and policies introduced in this chapter were all designed to improve the provision of affordable housing. However, it is noted in the literature that in terms of affordable housing policies, these strategies can be different from one country to another. Therefore, to develop a successful framework for affordable housing policy, it is important to examine the relevance of these strategies to specific governance systems and their social and cultural structure.

Additionally, the balance between private and public sector involvement in the housing market varies in different countries from market-driven, to state-controlled, to reasonably balanced between the state and the private sector.

Regarding developed countries, there is "less room to manoeuvre in terms of housing affordability" as far as housing policies are concerned because household expenditure on non-housing goods is difficult to control and it is challenging to increase household

incomes (Anacker, 2019:9). While this is also true in many developing countries, they can learn from the effectiveness of different models and policies applied given the relatively long history of affordability measures in countries like the US and the UK.

The critical review of the literature presented in this chapter examined and defined the concept of housing affordability and its recent development within different national environments over time. The literature has confirmed that there are two main measurement models that are generally adopted for the purpose of determining whether an individual or household can afford to purchase or rent a residential property. These are: the house price-to-income ratio and the residual income models, both of which are focused on the various factors at play within supply and demand. The main difference noted between the two models is that the house price-to-income measurement uses market house prices and multiples of individual/household ability to purchase, whereas the residual income model seeks to determine whether there is sufficient disposable income remaining after paying all living costs to be able to afford to purchase or rent the standard of housing required to suit an individual's or household's needs.

Following on from this discussion, the issues that have contributed to the increasing levels of 'unaffordability' were explored. As discussed in the review, restrictions in relation to planning policies, low availability of land, and high costs within the context of urban areas have resulted in increased housing prices, all of which have led to the crisis of affordability that is currently being experienced particularly by middle-income groups living and working in urban areas. Affordability, therefore, is a social and political issue of high significance to every country. Its main challenge is that household income often increases very slowly in comparison to land, building materials, and housing costs.

The following chapter examines the issue of affordability and the development of affordable housing polices within Saudi Arabia, the focus of this study, with specific attention paid to the challenges of affordability as it relates to the middle-income population group located within urban areas.

Chapter 3: Affordable Housing Policy in Saudi Arabia

3.1 Introduction

Housing affordability, affordable housing definitions and policies in three different countries were discussed in the previous chapter. The broad literature review has shown that affordable housing is an issue that has become increasingly important over the past few decades in both developed and developing countries (Aalbers, 2015; Lund, 2017; Clapham, 2019). The policies of the Arab States of the Gulf Cooperation Council (GCC), and specifically Saudi Arabia's housing policy, have been influenced by global factors that shape the global housing market including the recent changes in affordable housing concepts, definitions, design, cost, and the availability of different models and financial products which support affordable housing provision (Sidawi, 2008; Sidawi & Meeren, 2011). The reasons why affordable housing issues have risen in prominence include several factors such as the increase in disposable income, expectations of and demand for better living standards and population growth (Sidawi & Meeran, 2011; GIZ, 2013; Jeddah Economic Forum, 2013). However, due to these housing issues and the consequent rise in market prices, many segments of the population, including first-time middle-income buyers in Saudi Arabia, are still not able to afford, or receive appropriate financial support, to purchase or rent quality accommodation. This is one of the main issues explored in this research and it is therefore essential to study Saudi Arabia's housing strategy and policies.

Therefore, the focus of this chapter is an examination of affordable housing policy development in SA. The aim is to describe Saudi Arabia's historical and economic structure relevant to affordable housing policies. More significantly, this chapter will examine in detail the social and cultural factors that have an impact on housing policies. It will then go on to explore the development of affordable housing in SA and the recent housing policies adopted by the newly established SMOH.

3.2 The Saudi Housing Market and Government Policies

Saudi Arabia's society is mostly conservative and generally follows Islamic guidelines and traditions. Therefore, it is not surprising to find that the foundation of all government policies are based, at least partly, on Islamic and Sharia legislation and practices (Al-Hathloul & Edadan, 1995). This Sharia legislation extends into the country's financial regulations. The most important factor within this legislation is that individuals and

organisations, including financing companies and other housing lenders, are prohibited from acquiring profit from lending for religious reasons, which mainly means they cannot charge interest on loans (Osborne, 2013). It is apparent that this restriction has a profound impact on the SA housing market, specifically in the context of affordability for middle-income citizens as well as other income groups. This important point is a core issue and will be discussed later in the chapter.

However, over the past century or more, with the increasing global reliance on the production of oil and other natural energy sources, Saudi Arabia has gained in popularity as a place of opportunity for western and Asian companies, and this has therefore led to the growth of a large expatriate community. This has impacted on the housing market for the entire populace in SA, as the expat community now represents 37% of the population of the country as of 2018 (CIA Factbook, 2018).

These economic changes have led to Saudi Arabia becoming regarded as a 'high-income' developing country. Nonetheless, despite this description, as mentioned by Alkadi (2004), there are similarities between Saudi Arabia's recent period of economic growth and that witnessed in developed countries such as the US, the UK and Europe during the latter part of the twentieth century. One particular challenge that has been noticeable during this period has been an increasing divide between high-income groups and the middle to low-income population, and the inability of both the government and the private sector to provide affordable housing in urban areas because of the high demand and prices in these areas (Assaf *et al.,* 2010).

Although there has been limited in-depth literature that has examined the housing market environment and the development of housing in Saudi Arabia, a number of academics have highlighted the link between housing policies and the expectations of residents from diverse communities, including middle-income groups (Struyk, 2005; Salama, 2006; Awliya, 2017). In this respect, past findings have focused on how government policy should improve the residential environment in the country's major cities of Riyadh and Jeddah (Glaze & Alkhayyal, 2002). However, more recent studies have expanded this scope to cover government policy changes in other parts of the country (Opoku & Abduk-Muhmin, 2010). These policies were partially driven by the country's increasing low-income population and the existing poor housing conditions (Opoku & Abduk-Muhmin,

2010). An example of this shift in the focus of government housing policy occurred in March 2011 when King Abdullah announced that the government would provide 250 billion Saudi Riyals (SR) (50 billion GBP) for the purpose of constructing 500,000 new homes in urban areas of the country (Jeddah Economic Forum, 2013). The project was to be overseen by the newly established Ministry of Housing whose main mission was to tackle housing issues, including affordable housing, by focusing on five focal elements; finance, urban planning, the real estate market, construction, and management (GIZ, 2013). In addition, all legal matters related to these points were also to be considered by the Ministry and they identified four main challenges of the real estate sector (GIZ, 2013). These are:

- The weakness of Government regulations related to housing;
- The inefficiency of the housing market;
- The inadequacy of housing support provided to citizens; and
- The inadequacy of production systems and the provision of housing.

It is apparent from the Saudi Ministry of Housing and other relevant literature that the combination of increasing urbanisation in the country and the reduction in government revenues has placed an increasing burden on the Saudi Arabian residential real estate market. This situation has further "exacerbated the problem of providing affordable housing to the populace" (Salama, 2006:67). Nonetheless, the Saudi Arabian real estate market has recently grown beyond recognition to become one of the largest among the Gulf States. The reason for this rapid growth is the Saudi government's awareness of the economic and social importance of the real estate market as well as the need to address challenges the country has been facing within this sector, and its influence on social stability (Salama, 2006; Susilawati & Al-Surf, 2011).

To resolve these issues, the Saudi Arabian Government has begun to introduce a number of measures which are aimed at organising, regulating, and systemising real estate activity within the sector. Among the most notable of these measures has been amendments to real estate finance laws (Jeddah Economic forum, 2013), the purpose of which is to provide "better lending access to home ownership seekers, and wider funding options for low and middle-income groups" (Jeddah Economic Forum, 2013:9). As previously noted, in 2018, around 37% of the Saudi Arabian population were expatriates and, of this population, around 84% lived in urban areas (CIA Factbook, 2018). Thus, it can be argued

that these two factors are significant contributors to the increasing challenge of housing affordability faced by the government.

It is essential to have a deeper understanding of the country to be able to develop a proper methodology to address the aims and objectives outlined in this thesis; therefore, the following sections focus on Saudi Arabia's history and stages of urban development.

3.3 Profile of the Kingdom of Saudi Arabia

3.3.1 Geographic and population information

Saudi Arabia is located in the South-Eastern region of Asia and occupies an area of 2 million km^2, making it the largest country in the Arab peninsula (Figure 3.1) (Sallam & Hunter, 2013; Vassiliev, 2013). It is also the second largest country in the North Africa and Middle East region (Sallam & Hunter, 2013). The country is mainly desert, but also comprises mountains, a long coastline, and large areas which are uninhabitable, limiting the urban areas and land available for development (Fisher, 2013). Based on the most recent census in 2016, the population of SA is approximately 32 million (General Authority for Statistics, (GASTAT), 2016). The estimate of the population in 2019 is 33,838,827 with an annual average population growth rate for 2019 of 2.4% (Population Pyramid, 2019; GASTAT, 2019) suggesting an increase of 600,000 people per year (Dudley, 2014). The largest city in the country is the capital, Riyadh, with a population of 4.2 million, followed by Jeddah with a population of 2.9 million, which is located on the Red Sea and is the study area of this thesis (World Population Review, 2019). The major source of revenue for Saudi Arabia is oil and its derivatives. There is also a considerable return from the Muslim pilgrimage to holy sites in Makkah and Medina. Additionally, the country is in the process of implementing a long-term strategic plan to transform the economy from oil dependence to other sectors which will be discussed in more detail later in this chapter.

Figure 3.1 Map of the Kingdom of Saudi Arabia and the location of its major cities (VectorStock, 2019).

The following population pyramid further highlights the demographics of SA in relation to housing policy (Figure 3.2). In this pyramid, it is clear that a large proportion of the population are 30 to 50 years old; this place considerable pressure on the housing market as this age range is the main time of life when individuals acquire a first home in Saudi Arabian culture. As years progress, the new generation of those below 30 will also put additional pressure on the housing market, although they represent a smaller portion of the population, as families become smaller with fewer children. Therefore, among other factors, the scarcity of available land and the relatively large young population will have a direct effect on any housing policy in the country. In any study of housing policy, these two factors should occupy the centre stage as they are very significant in shaping future housing plans.
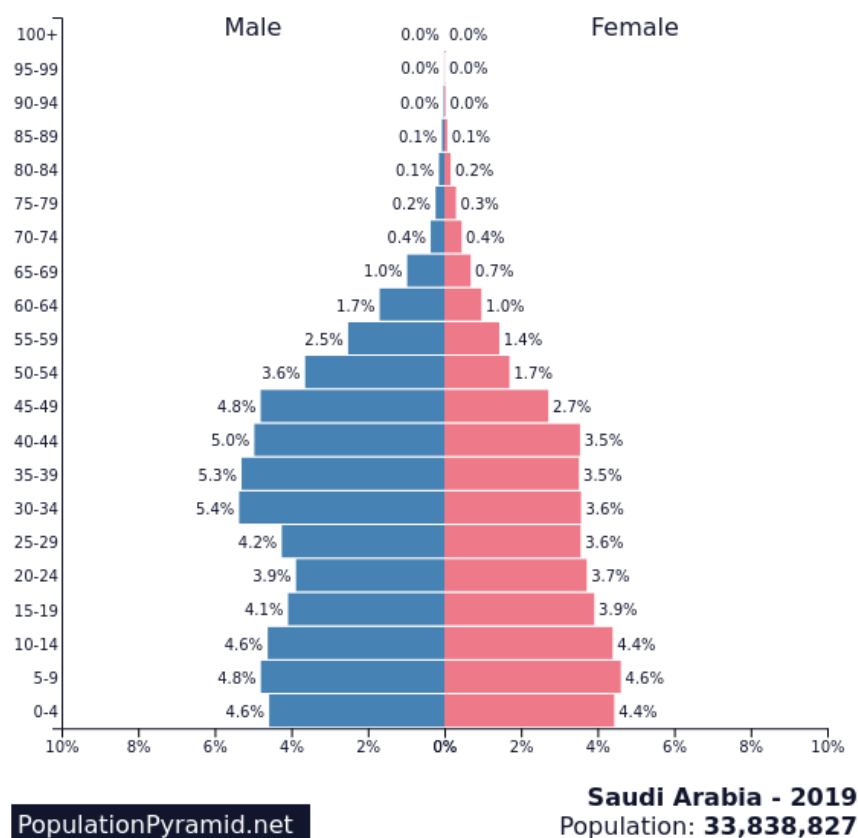
Figure 3.2 The population pyramid of the Kingdom of Saudi Arabia (Population Pyramid, 2019).

To understand the background to affordable housing in Saudi Arabia, a brief history of the country's urban development is needed. This will be followed by a comparison with other Gulf states which share the same geopolitical and social history as SA.

3.3.2 Urbanisation of Saudi Arabia

Urbanisation can be simply defined as a "multidimensional process that manifests itself through rapidly changing human population and changing land cover" (Seto *et al.,* 2013:4). Statistics have shown that approximately 83% of the total population of Saudi Arabia live in larger urban areas (World Population Review, 2019). This means that among the approximately 34 million Saudis, just over 28 million live in cities, thus creating a large impact on the housing market and other services such as education and health. As far as the housing market is concerned, with a lack of new data, older estimates from 2014 suggest that house ownership in the major cities ranges between 30 to 40% (Salam *et al.,* 2014).

This figure clearly indicates that the two main urban areas that have the lowest level of home ownership are Riyadh (the capital) and Jeddah, the latter of which forms the focus of this thesis and is situated in the Makkah Region.

Although home ownership data in SA differs from one source to another, a recent report from 2016 suggested that "47 percent of Saudi families already own their homes" (Kingdom of Saudi Arabia, 2016:28). Nonetheless, based on Saudi Vision 2030, the newly established SMOH focuses on raising the level of home ownership to 70% by 2030 through "the enactment of a number of rules and regulations, stimulating the private-sector, and building an effective partnership with the citizen to provide adequate housing in accordance with ownership paths by offering savings and financing solutions that suit the citizen's needs" (SMOH, 2019b).

The historical development of Saudi Arabia as a nation and its subsequent focus on the inclusion of a housing strategy policy has evolved during the period from 1932 to date. Within that timescale, it is apparent from the literature that the social and economic development of Saudi Arabia has evolved over four distinct stages (Al-Hathloul & Edadan, 1995; Salama, 2006; Mubarak, 2007). A formal housing policy was not adopted during the earliest stages of this timeline (Fadaak, 1989; Al-Hathloul & Edadan, 1995). However, while Mubarak (2007:7) mentions that a "formal intervention in the production of housing in Saudi Arabia goes back to 1951", it was not until 1970 that the challenges related to housing policy were incorporated as an integral element of the Saudi Arabian government's successive five-year national development plans (Fadaak, 1989; Al-Hathloul & Edadan, 1995). Within this context, it was only in the second stage of Saudi Arabia's national development that the issue of affordability in housing was first considered.

Therefore, in terms of the historical development of the national housing strategy in Saudi Arabia, the different stages can be summarised as follows (Al-Mayouf & Al-Kayyal, 2011), with a fifth stage related to future development plans.

3.3.3 Stage 1: 1932-1969 – The initial development of Saudi Arabia

The modern Kingdom of Saudi Arabia was established as a Middle Eastern nation in 1932 (Al-Hathloul & Edadan, 1995; Mubarak, 2007). During its early history, the development of SA was mainly focused on the development of modern infrastructure and the establishment of modern towns for its nomadic tribes. In this context, it was apparent that

the country began to experience the "transition from a tribal society to a modern vibrant society" (Al-Hathloul & Edadan, 1995:275). Housing was not initially an important issue as "only 20% of the population were living in urban areas" at this time (Al-Mayouf & Al-Khayyal, 2011:60).

However, in terms of the formal development of the country's infrastructure, this began to occur during the latter part of the 1930s, following the discovery of significant crude oil resources in the eastern region of the country (Al-Mayouf & Al-Khayyal, 2011). As a consequence of this discovery, and the economic and physical infrastructure that was required to service ARAMCO (the Arabian-American Oil Company, now the Saudi Arabian Oil Company), the government was forced to consider "modernising its traditional society and built environment" (Al-Mayouf & Al-Khayyal, 2011:60). Although housing development formed a key part of the restructuring of the SA built environment, it was during this stage that the initial focus was placed on employment needs. These needs were associated firstly, with the rapid expansion of the oil production industry, and secondly, the centralisation of the government and political structures (Al-Mayouf & Al-Khayyal, 2011). To facilitate these objectives, two housing development programmes were initiated.

The first of these housing projects, known as the 'ARAMCO Home Ownership Program', was introduced in the early 1950s (Mubarak, 1999). Although funded and operated by ARAMCO, with land provided by the national government (Mubarak, 1999), as the project title suggests, it was based on the development of housing for individuals and families employed within the oil industry (Mubarak, 1999). This was done through the provision of loans and rental guarantees to constructors to encourage housing development (Al-Mayouf & Al-Khayyal, 2011). The second housing project, which was instigated in the same year, was designed to facilitate the centralisation of Saudi Arabian governmental operations, which were being relocated to the capital, Riyadh (Al-Mayouf & Al-Khayyal, 2011). As Al-Mayouf and Al-Khayyal (2011) state, this was to provide housing for employees transferred to Riyadh. As the government had no expertise in the development of such a project at this stage, nor was any formal housing authority in existence, they "sought the help of foreign expertise to design a complete housing project for government employees" (Al-Mayouf & Al-Khayyal, 2011:61).

It is noticeable from the points mentioned above that the two housing projects implemented during this period were based on economic and political needs. During this

stage of development, the housing policies adopted by the government were not concerned with addressing the accommodation needs of the populace as a whole. Equally, the policies were not designed to address the needs of a growing population. Rather, it was the increase in urbanisation resulting from the development of the oil production industry and the centralisation of government that precipitated the need for housing development programmes (Al-Mayouf & Al-Khayyal, 2011).

3.3.4 Stage 2: 1970-1990 – Accelerated economic growth and urbanisation

The year 1970 marked the commencement of the Saudi Arabian government's series of five-year development plans, the first four of which were published within the second stage of the country's development (SMEP, 2015). Furthermore, in response to the country's accelerated economic growth, due to the surge in global oil and energy demand, the process of urbanisation also began to accelerate. The urban population growth rate was most notable in the country's major cities, such as Riyadh and Jeddah, which witnessed, as mentioned earlier, a population increase from approximately half a million in the 1970s to over 1 million by the beginning of 1987. This situation "created major problems for the agencies responsible for planning and managing urban growth in Saudi Arabia" (Daghistani, 1993:3). Not surprisingly, this led to a significant increase in the demand for housing and precipitated a dramatic change in the residential property market in major urban areas.

To accommodate these economic and population changes, the Saudi Arabian government created the Ministry of Planning in 1975, which was later to become the Ministry of Economy and Planning (SMEP). One of the central roles of this ministry was the preparation of the 'five-year development plans' (FYDP) (SMEP, 2015). Over the course of two decades (1970-1990), these plans went through three main phases. The first was focused on formalising the economic, infrastructural, and social policy objectives of the country (Al-Mayouf & Al-Khayyal, 2011). The second phase witnessed the initiation of housing policies designed to deliver accommodation and housing services which met prevailing health and safety standards and, more importantly, matched the population's disposable income levels (Al-Mayouf & Al-Khayyal, 2011). The final phase concentrated on supporting private sector involvement in the financing and delivery of low-cost housing (Al-Mayouf & Al-Khayyal, 2011).

Although the first FYDP identified the impact of urbanisation on housing shortages in urban areas, and the importance of quantifying housing sector needs through a census, it

was the second FYPD that outlined the development of housing policies specifically devised to address associated challenges and concerns (Daghistani *et al.,*1983; Daghistani, 1989; Mubarak, 2007; Al-Mayouf & Al-Khayyal, 2011). The main objectives in this respect were:

1. To make cities, towns and villages healthier, more comfortable, more enjoyable and less costly places in which to live, work and travel; and
2. To improve the efficiency of cities, towns and villages as the locations for trade, industry and services (Ministry of Planning 1975 in Daghistani, 1993).

To facilitate these objectives, the government adopted both direct and indirect approaches. The direct approach took the form of the construction of public housing, which included housing projects that were directly related to the provision of housing for government agency employees (Al-Mayouf & Al-Khayyal, 2011). In contrast, the indirect approach consisted of the provision of free residential land plots for eligible citizens throughout the country and providing interest-free loans through the public Real Estate Development Fund (REDF), which was founded in 1975 (Al-Mayouf & Al-Khayyal, 2011). It has been argued in the literature that this first stage of Saudi Arabia's economic and social development plans was "the most productive stage in the history of the country with respect to public housing*"* (Al-Mayouf & Al-Khayyal, 2011:63). This was perhaps to be expected, as it was also the period during which Saudi Arabia experienced the most dramatic rise in economic growth as a result of its oil production revenues, which provided the government with the capital to fund these housing projects. The large number of housing units constructed during 1970-1990 confirm this to be the case and can be seen in Table 3.1 (*Ministry of Public Works and Housing, 1999 in Al-Mayouf & Al-Khayyal, 2011:63).*

Table 3.1 Number of housing units constructed during 1970-1990.

Provision Approach	Total	Percentage
The Ministry of Public Works and Housing	24,570	1%
Governmental staff housing	221,600	9%
Sub-total	**246,170**	**10%**
The real estate development fund	466,700	19%
Self-financed	1,749,120	71%
Sub-total	**2,215,820**	**90%**
Total	2,461,990	**100%**

However, notwithstanding this success and the contributions made to urban housing, lower oil prices in the 1980s resulted in cut-backs in the government's financial commitment to housing (Mubarak, 2007). Ultimately this led to a re-emergence of housing shortages during the following stages of Saudi Arabia's development as will be discussed in the next section.

3.3.5 Stage 3: 1991-2005 – Re-emergence of housing challenges

During this stage of Saudi Arabia's development, the fifth, sixth and seventh five-year development plans were published (SMEP, 2015). However, during this period the Saudi Arabian economy was adversely affected by two major issues: the reduction in global oil demand and its subsequent influence on oil prices; and the impact of the Gulf War (Mubarak, 2007; Al-Mayouf & Al-Khayyal, 2011).

The combined consequences of these two events resulted in an increasing national budget deficit (Al-Mayouf & Al-Khayyal, 2011), thus reducing the capital available for economic and social infrastructure development. Therefore, it is not surprising to find, as Al-Mayouf and Al-Khayyal (2011:64) observed, that the lack of capital "incapacitated most national development goals including those related to housing. Thus, the housing sector became debilitated and unproductive during the entire 1990s". It is apparent that this situation had an adverse effect on housing development programmes in Saudi Arabia, which in turn resulted in an increasingly large housing shortage as a result of the widening gap between supply and demand (Al-Mayouf & Al-Khayyal, 2011). The reduced contribution to housing development was confirmed in the data issued by the Ministry of Public Works and Housing (1999) and further reported by Al-Mayouf and Al-Khayyal (2011:63) as can be seen in the following table.

Table 3.2 Number of new housing units in 1970-1990 and 1991-2005.

Provision Approach	1970-1990	Average Per Year	1991-2005	Average Per Year	Total	%
The Ministry of Public Works and Housing	24,570	1,228	-	-	24,570	0.6
Governmental staff housing	221,600	11,080	-	-	221,600	5.6
Sub-total	**246,170**	**12,308**	-	-	**246,170**	**6.2**
The real estate development fund	466,700	23,335	143,300	9,553	610,000	15.3
Self-financed	1,749,120	87,456	1,384,710	92,134	3,133,830	78.5
Sub-total	**2,215,820**	**110,791**	**1,528,010**	**101,867**	**3,743,830**	**93.8**
Total	**2,461,990**	**123,100**	**1,528,010**	**101,867**	**3,990,000**	**100**

The data presented in Table 3.2 confirms that housing construction reduced by around one million units during the 1991-2005 period as a result of the almost complete absence of public housing production and support. According to Al-Mayouf and Al-Khayyal's (2011) research, this situation continued to increase during the latter years of this stage, and also had an impact on the structure of the housing market in terms of ownership and rental percentages. As the authors state, "by the end of 2005, the accumulated demand on housing exceeded 164,959 units and house ownership decreased from 67% in 1991 to 55%" (Al-Mayouf & Al-Khayyal, 2011:64). Nonetheless, although it is apparent that the absence of public housing contributed to the housing shortage during this period, it can also be argued that the continuing rise in population, including the expatriate segment, and urbanisation, also exacerbated the situation (Mubarak, 2007; Assaf *et al.,* 2010).

That said, there has been particular attention paid to the development of affordable housing in the country. One of the most significant of these initiatives has been the introduction of the "free land plots system" (Alkadi, 2004:2). During the period from the late 1980s to the early 2000s, a total of 1.2 million of these plots were allocated to eligible low and middle-income Saudi Arabian citizens, including some areas in Jeddah (Alkadi, 2004). As an additional aid to the development of affordable housing, the government also introduced a second significant initiative, the Real Estate Development Fund (REDF), whose role was to provide "easy term and interest-free loans to Saudi citizens who owned land plots" (Alkadi, 2004:3). This programme included interest-free loans, with only 80% of the loan repayable over a 25-year period, which enabled over 400,000 citizens to build their own homes (Alkadi, 2004).

3.3.6 Stage 4: 2006-2010 – Housing Policy Reforms

The third stage of Saudi Arabia's economic and social development was notable as a period of complete reform for the government's housing policy, which resulted in major changes to the sector. This included a change in government agencies that were responsible for the development of housing strategy in the country and the establishment of the General Housing Authority (GHA) in 2008, which took over all responsibility for housing policy and national strategy from the SMEP (Al-Mayouf & Al-Khayyal, 2011). Additionally, as an integral part of these reforms, the GHA was also provided with funding that enabled it to meet the needs of the population for the development of quality housing. GHA's main responsibilities, according to Al-Mayouf and Al-Khayyal (2011:65), included:

1. Devising the country's future housing policies;
2. Setting up a housing database;
3. Conducting studies and taking responsibility for research concerning local housing issues;
4. Taking all practical steps to increase the rate of home ownership considering the average household income;
5. Providing suitable and quality housing facilities to citizens all over the country within a specific timeframe; and
6. Increasing the supply of housing stock by means of promoting private sector participation in housing delivery using comprehensive agreements that define the rights and obligations of all parties.

An integral element of these responsibilities, particularly as they relate to points 2 and 4 above, was to focus on the government's change of policy direction, which had become predominantly focused on affordability. However, GHA faced significant challenges in achieving these objectives. From a social viewpoint, these challenges related to the increase in the overall population (Assaf *et al.,* 2010), changes in household structure, and rising concerns over affordable housing shortages. This resulted in a renewed focus to "provide affordable housing to lower and medium-income families in urban areas" (Assaf *et al.,* 2010:290).

However, as previously highlighted, the reduction in revenue during this period meant that the Saudi Arabian government was less able to support the scale of the improvements required from its own financial resources. These challenges all led to additional changes in the structure of the government agencies responsible for the housing market sector and the policies they have produced as outlined in the following final stage.

3.3.7 Stage 5: 2011 and beyond - development plans for the future

In 2011, the Saudi Arabian government terminated GHA (see Figure 3.3) and established a new Ministry of Housing (SMOH), whose specific role was to prepare and develop a national housing strategy (GIZ, 2013). This ministry became the only authority responsible for housing issues in the country. The new strategy developed by SMOH, pushed by a royal command to generate 500,000 housing units for Saudi citizens by the next 5-year plan, included many changes, developments, and regulations related to the housing sector (GIZ, 2013). At the same time, another key aspect of this plan was the

intention to focus on urbanisation in other cities and towns throughout SA as opposed to only the three main urban areas in the country.

A significant amount of research was undertaken by the Ministry of Housing, which identified six main obstacles to fulfilling the objectives of this strategy. These consisted of:

1. Demographic pressure and an increasing young population;

2. High land prices and the cost of housing construction;

3. The gap between supply and demand in affordable housing;

4. The absence of a housing policy;

5. The immature housing finance market; and

6. The lack of affordable housing regulations & incentives (SMOH, 2016d)

Further, the main issues and challenges facing the SA housing sector were outlined in more detail from the perspective of the 9th national FYDP, between 2010-2014, as follows:

1. Lack of affordable housing;
2. Low and stable home ownership;
3. High cost of housing units;
4. The weaknesses and long waiting lists of the REDF;
5. Limited real estate financing;
6. The requirements of housing and urban planning in major urban cities; and
7. The lack of a housing database.

The five stages of development of a national housing strategy can be summarised in the following diagram:
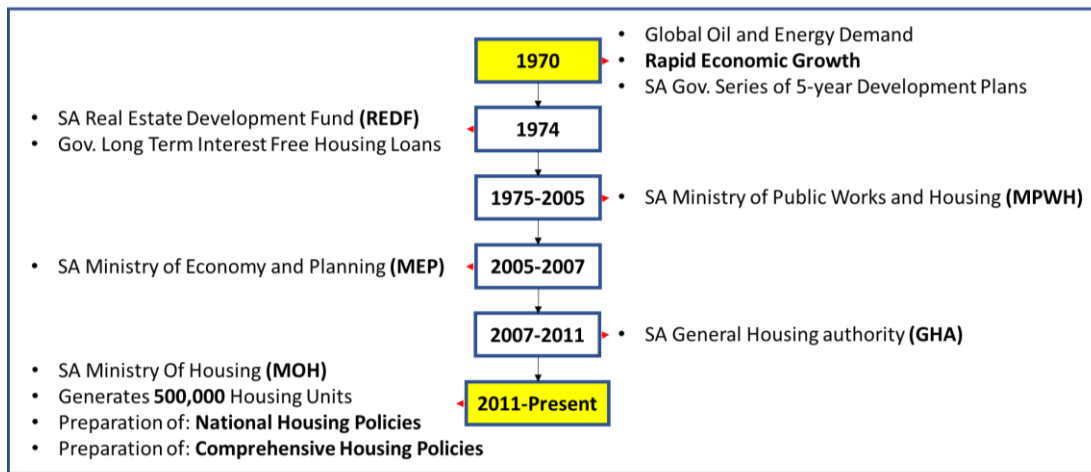
Figure 3.3 Summary of stages (1970-2020) showing main government stakeholders responsible for housing in SA.

Based on this historic review, the main issues and challenges facing the newly established SMOH will be explored further in the following sections. Generally, there are clear issues that prove the SA housing market needs to develop and adopt effective policies. Thus, the housing strategy was designed to resolve housing shortages that have evolved as a result of these challenges by increasing the level of capital funding and land available for housing construction. Additionally, to assist with the successful outcome of this approach the ministry also sought to attract an increase in Foreign Direct Investment (FDI) and external housing construction expertise (GIZ, 2013).

Before explaining the affordable housing problem in SA, it is essential to compare the Saudi housing market to its counterparts in the Gulf states who are fellow members of the Gulf Cooperation Council (GCC) due to the similarities in social and cultural elements.

3.4 Comparison of Saudi Arabia's housing policies with those of other Gulf states

The GCC states are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). The literature has confirmed that, over recent decades, the majority of GCC countries have signalled their intention to diversify their economies "away from oil and gas through expanding their private sectors and encouraging entrepreneurship and small-to-medium enterprises (SMEs)" (Neal, 2017:iv). This change of economic direction has been driven by a number of factors, which include a global reduction in the demand for fossil fuels, changes in policies regarding the usage of non-renewable natural

resources, improved energy efficiency (in households and vehicles) and increasing environmental impact concerns (Mishrif & Al Balushi, 2018). However, while some Gulf states have made significant progress towards this objective, such as Dubai and Bahrain, as indicated by Neal (2017:iv); "most Gulf states have struggled to create vibrant and mixed private sectors". Diversifying the economy will ultimately have a great impact on all economic policies including those related to the housing sector.

The support for affordable housing in the GCC has been focused predominantly on four key factors. These consist of the provision of housing loans, land for development, financial grants, or providing completed housing units (Smith & Freeman, 2014). One of the most important indicators of the success of a country's housing policy is the extent to which it resolves national residential housing shortages. Using this measurement as a comparison of housing policy outcomes for countries within the Gulf states, one could argue, based on 2014 data, that Saudi Arabia's housing market has so far proven to be in need of more housing units than some other GCC states, as shown in Table 3.3.

Table 3.3 Housing shortage in the Gulf states.

Country	Potential units needed
Iraq	1,000,000
Egypt	1,500,000
Oman	40,000
Tunisia	95,000
Saudi Arabia	**500,000**
Kuwait	90,000
Morocco	1,000,000
UAE	30,000
Bahrain	60,000
Estimated total throughout region	4,315,000

Source: Adapted from Smith and Freeman (2014:152)

In a recent research project related to the issue of housing policy in the GCC, it was also confirmed that "housing is a spatial expression of a society's values and morality, and of its commitment to an inclusive society" (Smith, cited in Smith & Freeman, 2014:11), as is the case in many other parts of the world. Equally, the same author goes on to argue that over the past two decades, for similar reasons to those presented in relation to Saudi Arabia, not only has housing become an urgent national priority throughout the region, but also that affordable housing has become an essential focus for that policy. This is particularly important given that the rate of urbanisation of cities and towns has grown

rapidly over this period. Furthermore, as Smith and Freeman (2014:13) confirm, since the Arab Spring, it is not surprising to find that "housing supply and affordability are significant priorities for many Middle East and North African (MENA) governments". In this context, it is apparent that the objective of affordable housing policies in the Gulf states has become more focused on achieving a greater level of social cohesion.

To assess the extent to which this social cohesion is being achieved across the Gulf states, housing affordability can be measured by the relationship between monthly income and housing costs as shown in Table 3.4.

Table 3.4 GCC states income vs housing costs

Average monthly household income			Average monthly housing cost		
Country	National currency	PPP International dollar	National currency	PPP International dollar	% housing cost/income
Qatar	41,483	10,529	11,937	3,030	29%
Bahrain	1,214	3,793	312	975	26%
SA	**9,183**	**3,200**	**2,141**	**746**	**23%**
UAE	42,360	15,689	7,064	2,616	17%

Source: Adapted from Smith and Freeman (2014:26)

The outcome of this calculation suggests that income-based housing affordability is the third highest in SA. However, this situation changes when a review of residual income is included within the measurement. In this respect, it is apparent that Saudi Arabian citizens have the second lowest level of residual income (Figure 3.4), which suggests that securing affordable housing in Saudi Arabia remains more difficult than in the UAE, Qatar, and Bahrain. In other words, the Saudi Arabian populace are left with less disposable income after housing costs than the other three states mentioned.
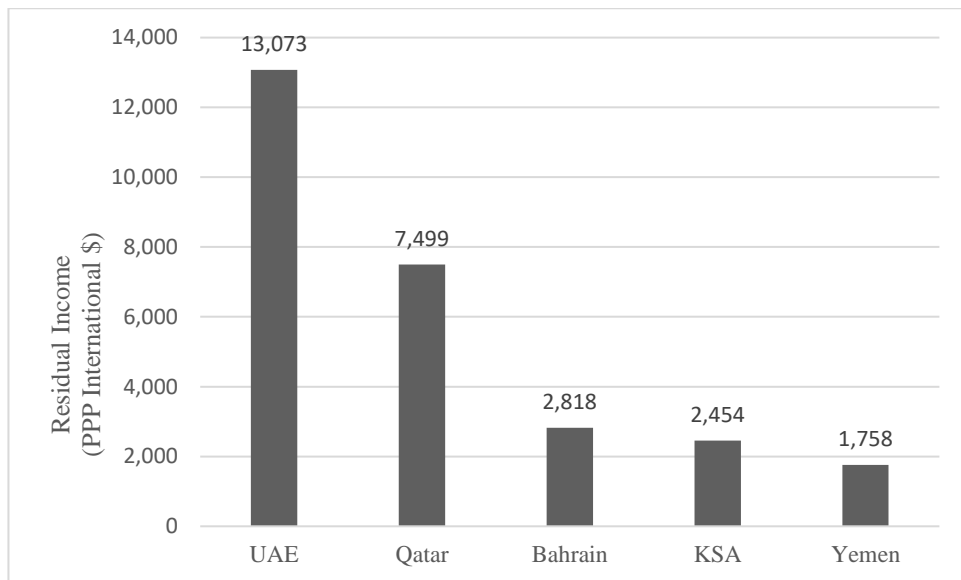
Figure 3.4 Residual income in the Gulf states. Adapted from Freeman (Smith & Freeman, 2014:36)

There are several reasons for the housing issues faced by GCC countries. These issues are challenges related to housing affordability and lack of availability due to rapid population growth (Bohsali *et al.,* 2014; Ramadan, 2015). This is particularly relevant to SA as it has the largest population in the GCC, resulting in a growing demand for housing particularly as the younger population gets married and searches for a marital home (Bohsali *et al.,* 2014). Other housing issues facing the GCC countries were summarised by Bohsali *et al.* (2014:8), as follows:

1- Escalating land prices;
2- No regulatory incentives to build or sell (for example, through property taxes);
3- Potential home buyers face difficulties securing real estate financing;
4- The lack of a legal framework for banks to offer such financing; and
5- Strict requirements that render many potential buyer's ineligible for real estate financing.

Therefore, housing policy initiatives have been undertaken across GCC countries as they recognised their housing market issues. For example, in Bahrain, the government supports affordable and social housing by providing all eligible citizens with "direct provision of housing units and flats; rental flats; loans for purchasing, building or renovating housing

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units; as well as land plots" (Kingdom of Bahrain, Ministry of Housing, 2019). Meanwhile, housing authorities in UAE work on the distribution of land, free housing, housing loans and housing and maintenance facilities, to eligible citizens of the State (UAE Government, 2019). Similar housing initiatives were launched in SA by SMOH in order to deal with and solve the accumulated housing issues facing the country. These housing policies are discussed in more detail in the following section.

3.5 Affordable Housing policy in Saudi Arabia

It is clear from the statistics shown in the previous sections and in the literature that SA is facing increased rates of urbanisation and a need for more housing units. The country's existing plans and policies are clearly not adequate as the figures suggest that the demand for housing will continue to exceed supply. Comparisons with other Gulf states show similar problems, but because of SA's relatively large population, its housing policy is more challenging. That said, the SMOH has recognised these issues and in its 2030 vision, states that it aims to increase house ownership by 70% (SMOH, 2019a; SMOH, 2019b). In order to achieve this vision, the Ministry of Housing has identified four primary challenges within the SA housing market, as follows (SMOH, 2019b):

1. Limited availability of suitable housing units for all segments of society;
2. Difficulty in accessing adequate housing funding;
3. The inefficiency of the private real estate sector; and
4. Heavy reliance on government funding.

While it is obvious that there are many challenges facing the affordable housing market in SA, the new Ministry is now focusing on the private sector in order to develop and boost the housing market through a strong and flexible partnership. This is a concept which has been adapted in many developed and developing countries such as the UK and US, and is an important component in understanding and developing appropriate policies for middle-income groups. For this reason, the SMOH aims to involve the private sector within the housing development cycle through encouraging policies and incentives. This is made clear through the SMOH's vision that states its aims to "organise and facilitate a balanced and sustainable housing environment" (SMOH, 2019b). Their mission statement also looks "to develop programmes that stimulate the private and public sectors

through cooperation and partnership in organising, planning and monitoring to facilitate housing for all community segments at a reasonable price and quality" (SMOH, 2019b). Both elements can be summarised in the following points (SMOH, 2019b):

1. Research and communication awareness;
2. Supporting planning and control; and
3. Sustaining the Ministry's resources through funding and investment.

This study is therefore timely and designed to support identification of the challenges of affordable housing policies to middle-income residents in well-populated urban cities in Saudi Arabia. To reach this goal, it would be first practical to identify and review the main strategic objectives of the Ministry of Housing (SMOH, 2019c) which are listed below:

1. To stimulate real estate supply and raise productivity to provide residential products at reasonable price and quality;
2. Engage with private sector developers on the Ministry's land;
3. Stimulate the development of housing products on private sector land;
4. Stimulate the land which is subject to the IDLE land tax;
5. Promote the development of slum areas and the city centres;
6. Urban regulation;
7. Develop Ministry land for the benefit of housing subsidy beneficiaries;
8. Centralised procurement; and
9. Exploitation of public sector land.

To accomplish these strategies, the SMOH has developed a set of initiatives and housing policies. These initiatives will be discussed in detail in the following sections.

3.5.1 Ministry of Housing Initiatives

In order to achieve the Saudi Arabian housing programme 2020, which emanates from the 2030 vision for the country, the Ministry of Housing has begun the implementation of 14 programmes and initiatives as summarised in Table 3.5 below. These initiatives arise from the following four main housing policies as summarised by the Harvard Business Review (2019):

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1. Housing finance and support policy
2. Supply support policy
3. Policy development of systems and legislation
4. Policy of services development

Table 3.5 Summary of SMOH affordable housing policy initiatives (adapted from SMOH, 2019d)

1 Sakani (Residential)	A programme run by the **Saudi Ministry of Housing & the Real Estate Development Fund** to allocate **280,000** residential products such as fully constructed and ready-to-build housing units. The programme distributes residential lots and issues new numbers for the REDF
2 Mullak (Owners Union)	A programme which seeks to establish a relationship between **landlords and joint-ownership housing** unites occupants in a union
3 Etmam (Developers Services Centre)	The **Developers Services Centre** (ETMAM) is one of the most important national initiatives and aims to accelerate the real estate sector in the country and increase investment
4 Eskan (Housing)	The Housing Subsidy ePortal is an electronic platform developed to receive **Housing Subsidy Applications**
5 Ejar (Renting)	An integrated system that aims to develop the housing and real estate sector & to **preserve the rights of all parties involved** in the standard contract for residential leasing
6 Idle Lands (undeveloped land)	This programme charges an annual fee of **2.5%** of the land value for non-governmental **white land** (empty land plots within the city limits that have not been developed)
7 Development of Housing	An initiative that integrates the non-profit sector with the 2030 vision in order to **increase the contribution of the non-profit sector** in the non-oil industry GDP
8 Sustainable Building	This aims to provide a range of services and solutions that contribute to **raising the quality of residential construction** and increasing energy and water efficiency
9 Saudi Real Estate Institute	An institute dedicated to the dissemination of the **best global practices in the real estate sector**, providing **training** and qualifications for practicing professionals in the real estate sector
10 Building Technology Stimulus Programme	A programme which aims to develop smart, affordable and sustainable housing units for the future
11 Exemption from the 5% VAT	Initiative by the Saudi Ministry of Housing to pay the **5% VAT** for first-time buyers, to help and reduce the cost of homeownership for citizens
12 Shrakat (Partnership)	A programme launched by the Saudi Ministry of Housing, which aims to establish **partnerships between the Ministry and the private sector**
13 Units Subdivision	An initiative to **develop and organize real estate units subdivision procedures**
14 Wafi (Off-Plan Sales or Rent Programme)	The **Off-plan Sales or Rent Programme** (Wafi) aims to market and sell the real estate unit before or during the development or construction stage

Each initiative will be discussed in more detail in the following sections.

1- Sakani (Residential)

Sakani 'Residential' is a programme provided by SMOH and the Real Estate Development Fund (REDF) with the goal of allocating 280,000 residential products across Saudi Arabia (SMOH, 2019a; SMOH, 2019e; SMOH, 2019f; SMOH, 2019g; SPA, 2019a). These products include free land, real estate loans, villas, apartments and townhouses with modern specifications and prices ranging between SR250,000 (£50,000) to SR750,000 (£150,000). The programme also focuses on cities with high density and strategic locations (Harvard Business Review, 2019).

As of the beginning of 2017, 120,000 planned or completed housing units have been allocated, 75,000 residential lots have been distributed, and 85,000 new REDF numbers have been issued (SMOH, 2019a; SMOH, 2019f; Sabq, 2019a). Additionally, in 2018, more than 300,000 residential products were also planned to be allocated (SMOH, 2019a; Sabq, 2019a).

Sakani is considered one of the most effective housing policies in SA. Under the Sakani housing policy, the Ministry of Housing has published the initiatives, solutions, and housing options available to citizens. The Ministry aims to raise the percentage of Saudis owning their homes to 60% by the end of 2020 and to 70% by 2030 (SMOH, 2019a; SMOH, 2019f; SPA, 2019a). Therefore, Sakani offers a variety of different options that help citizens to buy their first home. Not only that, the initiative also provides access to residential support in a flexible and accessible manner (SMOH, 2019a; SMOH, 2019f; SMOH, 2019g). As mentioned earlier, Sakani is provided by both the country's Ministry of Housing and the Real Estate Development Fund, therefore the beneficiaries of both can benefit from housing and finance solutions provided by Sakani. These solutions are as follows:

a. Subsidised Real Estate Loan

This is a funding programme launched by the Ministry of Housing targeting individuals registered with the Ministry and the Real Estate Development Fund. Through this support, beneficiaries are financed in partnership with banks and financial institutions. In turn, the REDF pays only the interest either fully or partially (SMOH, 2019a). Support is set according to monthly income and the number of family members, but cannot exceed SR500,000 (£100,000). In order to receive 100% of the funding support available, the monthly income of the applying individual must be SR14,000 (£2,800) or less. The subsidised real estate loan programme can be accessed in four situations; either to self-build, to purchase units from the market, to purchase the Ministry's prefabricated villas, or to purchase and complete units under construction (SMOH, 2019a; SMOH, 2019f; SMOH, 2019g). This is the beneficiary's own choice.

b. Converting an existing housing loan to a subsidised loan

This solution is available to a beneficiary who has an existing housing loan with a bank. In this case, the existing real estate loan can be converted into a subsidy financed by Sakani (SMOH, 2019a; SMOH, 2019f; SMOH, 2019g). The support is provided to pay

interest arrears and compensate for past payments. This scheme will also take responsibility for paying future interest on the funds (SMOH, 2019a). This usually takes the form of depositing the monthly loan interest into an applicant's account. The beneficiary will then be subsidised up to a maximum of 500,000 SR (£100,000) from their real estate loan. This is often done retroactively to support costs, through the termination of procedures without reference to the funding agency, or by continuing to deposit the amount of monthly support after the end of the financing contract.

c. Free Residential Land

Through this third solution, the beneficiary of a Sakani programme can obtain a free plot of land in any housing scheme or residential plan owned by the Ministry of Housing, anywhere in Saudi Arabia. The total number of applicants for the free land option has reached 170,000 beneficiaries, of which 35,000 families have received plots so far (SMOH, 2019a; SMOH, 2019f). By March 2019, the 'Sakani' programme under this initiative has provided 2,076 free residential plots to beneficiaries in different places in SA.

In addition to these solutions, the Sakani programme is concerned with many qualifying aspects of different groups in society through the launch of initiatives and the provision of solutions to facilitate first-home ownership. For example, through a housing loan initiative for people in the military; an initiative to support individuals and retirees aged 50 and older as they can now apply for a second interest-paid loan referred to as 'Qard Hassan' in Arabic (literally means a Good Loan) which covers 20% of the property price/value up to a maximum of SR140,000 (£28,000) which is on top of their original SR500,000 (£100,000) loan; and finally, an initiative to cover the value added tax (VAT) associated with buying a property, which is 5% of its value (SMOH, 2019a; SMOH, 2019f; SMOH, 2019g). This final initiative serves all citizens as the SMOH will pay the VAT for a first home costing no more than SR 850,000 (£170,000) in order to reduce the cost of ownership (SMOH, 2019a; SMOH, 2019f; SMOH, 2019g).

2- Mullak (Owners Union)

The Mullak 'Owners Union' Programme differs from Sakani as it attempts to "establish a relationship between landlords and joint-ownership housing (and) unites occupants through the establishment of regulations, control mechanisms, and property and facilities

management services" (SMOH, 2019h). Additionally, a Landlords Federation has been appointed by SMOH with the goal of raising awareness to ensure proper policy and rights fulfilment, and to promote a culture of co-housing (SMOH, 2019h). Unfortunately, SMOH is finding it difficult to enforce this policy as this is an issue which SA citizens have struggled with historically and which continues to be a challenge. Whether you are a tenant or a landlord it is difficult to claim your rights. For example, if you own or rent an apartment in a multi-storey building, there is no one responsible for maintaining the building or who has the authority to collect annual management fees from all units to pay expenses such as the electricity bill for communal areas and services (e.g. the lift). Therefore, the status quo is that neighbours gather contributions or assign someone to do so, which is not easy as it is not enforceable by law. There are many stories about neighbours not talking to each other because of disputes about these contributions. This has an impact on the relationship between neighbours. Another issue is some tenants' failure to pay rent which is an ongoing problem which needs a solution. These issues are now being addressed by the Government through the SMOH. The Government introduced an online contractual agreement which all parties must abide by and which includes penalties up to £100 (SR500) for each delayed monthly payment (SMOH, 2019i).

These are some examples to show that housing policies, and the laws surrounding housing issues, are still weak in SA and these need strong enforcement and clear guidelines for all parties. Therefore, the 'Mullak' initiative is a good first step in strengthening the relationship between landlords and tenants.

3- Etmam (Developers Services Centre)

The 'Developers Services Centre' (Etmam) aims to accelerate the real estate sector in the country and increase investment in it (SMOH, 2019j). This could lead to an increase of housing units available for lease or purchase and may improve prices and affordability. It seeks to submit applications for licenses, credits and deliveries, directing them and providing follow up with different authorities (Harvard Business Review, 2019). According to SMOH, the programme claims that "through partnership and cooperation agreements, the centre, with its permanent representatives of relevant authorities (Ministry of Housing, Ministry of Municipal and Rural Affairs, Ministry of Justice and others) acts as a nexus through which the real estate developer can follow up his transactions during the various phases of project development" (SMOH, 2019j).

Additionally, "the Centre also studies the real estate development stages, rules and regulations, and cooperates directly with all relevant bodies to work on developing systems and facilitating the procedure for the real estate developer's work and promoting the development of housing projects" (SMOH, 2019j). 'Etmam' has broken the normal procedures of developing projects in SA and it will save time and ensure a trusted real estate market not only for SA developers but also for international ones. This initiative aims to overcome the challenge of the lack of professional housing developers in SA.

4- Eskan (Housing)

Eskan ('Housing') is an online portal which accepts housing subsidy applications whereby citizens can apply for a 500,000 SR (£100,000) interest-free loan (SMOH, 2019k). This programme is an initiative resulting from the policy of services development discussed earlier. This policy aims to establish an electronic platform to serve citizens, through which it facilitates the process of searching for residential products, inspection and communication with banks, applications and then being accepted for a loan. The platform helps connect with developers and funding agencies to improve the customer journey in the search for housing (Harvard Business Review, 2019).

It is also worth mentioning that, according to data from the SMOH, the Ministry seeks to facilitate affordable housing, which will rely on the provision of housing services through the right of use of the online service at a nominal fee or for free. The online portal ensures that clients get the advice needed to make an informed choice about a housing product (SMOH, 2019k). One advantage of the online platform is that it offers the services to the neediest families in different neighbourhoods across Saudi Arabia. The Ministry has real partners working with it on this programme, namely, charities, civil society and housing cooperatives, in addition to the Ministry of Labour and Social Development and the Emirate of the regions (Harvard Business Review, 2019).

5- Ejar (Renting)
According to the Ministry of Housing, Ejar, which literally means 'Renting', is an integrated system aiming to develop the housing and real estate sector in Saudi Arabia through sustainable solutions and the preservation of the rights of different parties in standard rental contracts for residential leasing (SMOH, 2019i). This is an important

initiative which was needed in the housing market in SA in order to have a more reliable, clear, trusted and transparent leasing sector. Implementing this policy, according to real estate experts and economists, is one of the most influential economic developments for the rental market because it has an impact on the lives of about half of the population of SA who rent their place of residence (Harvard Business Review, 2019; SMOH, 2019i). This policy regulates the rental market through a set of integrated e-services in which all parties (tenants, landlords and real estate brokers) are involved (SMOH, 2019i). Simply put, nowadays if someone wants to rent a property, they need to apply for an 'electronic online contract' which both the landlord and tenant need to sign through a real estate agent/broker to make sure that the rent is paid on time. Rent in Saudi Arabia is paid every six months by the tenant through a bank transfer to the landlord's account. If the rent is delayed or if there is an issue with the property or the contract, then the landlord will contact the real estate agent to resolve it. As mentioned earlier, a penalty of 500 SR (£100) will be imposed for every month the rent is delayed (SMOH, 2019i). To conclude, this programme seeks to develop the lease system to preserve the rights of all parties involved in the unified residential lease contract in order to establish a reliable and organized rental market (Harvard Business Review, 2019).

However, unlike other countries in which rent is paid monthly or weekly, the payment of rent twice a year is challenging for some tenants and influences affordability.

6- Idle Land Programme (undeveloped land)
'Idle' or 'white' land in this context means undeveloped land that has been allocated for residential or commercial usage within the urban area of the city. This policy will allow the SMOH to charge an annual fee for non-governmental white land of 2.5% of the land value and use this money to support the housing market, develop infrastructure (public utilities and public services) and support the supply of housing projects (SMOH, 2019l). Thus, the objectives of this programme are to:

a. Increase the amount of land available for potential development;
b. Manage the cost of land to make it affordable; and
c. Avoid the monopoly of land (SMOH, 2019l).

The Supply Support Policy seeks to encourage owners of white land to develop their land and increase the affordable land supply (Harvard Business Review, 2019). Failure to pay

the white land fees during the specified period of payment results in a delay penalty of up to 2.5% of the land value (Sabq, 2019b; SMOH, 2019l). In 2018, the area of penalty invoiced land exceeded 400 million square metres, of which 9 million square metres were developed (Harvard Business Review, 2019). This initiative contributed SR 192 (£38) million for two housing projects in Riyadh and SR 138 million (£28) million for a housing project in Qassim (Harvard Business Review, 2019). In 2019, the 'White Land Fees' programme of the Ministry of Housing announced the disbursement of 25 million SR (£5 million) to complete the first phase of the implementation of infrastructure services and delivery in the housing project north of Riyadh (the capital), located on the Ministry's land west of the airport (SPA, 2019b).

To sum up this point, alongside 'Sakani', this white land policy is considered strong and effective in enhancing the Saudi housing market. It is also worth mentioning that in 2016, when SMOH first announced these new housing policies, they were implemented in major cities such as Riyadh, Jeddah, Dammam and Makkah.

7- Development of Housing

This programme aims to increase the participation of the non-profit sector in the housing market and integrates this with the Saudi Arabian Vision 2030 (SMOH, 2019k). Surprisingly, there was little information or research about this programme in Saudi Arabian sources.

8- Sustainable Building

This initiative works on finding solutions and enhancing the quality of residential construction, to ensure the increasing efficiency of energy and water, and overall sustainability of new housing units and structures (SMOH, 2019m). This impacts directly on the housing market by improving building infrastructure. There is no literature on the effectiveness of this programme. In general, sustainability programmes are in their early stages in Saudi Arabia.

9- Saudi Real Estate Institute

This is an initiative based on bringing together best practice in the real estate sector from around the world (SMOH, 2019n). It also provides routes for training for those within the

Saudi real estate sector. After completing a training programme, individuals are awarded certificates which enable them to enter and work in the real estate market with credentials (SMOH, 2019n). This initiative was launched as part of the 2020 National Transformation Plan to meet the goals of the SA Vision 2030 (SMOH, 2019n).

10- Building Technology Stimulus Programme

The main objective of this initiative is to reduce the cost of construction to ensure affordability and to "develop smart, affordable and sustainable housing units for the future" (SMOH, 2019o). The Building Technology Stimulus initiative stresses the importance of three factors when it comes to analyzing the concept of suitable housing options, namely quality standards, implementation time, and competitive cost (SMOH, 2019o). Modern construction methods need to be able to cope with current and future requirements, which requires support and motivation, empowerment and financing for the construction technology industry in SA. Thus, in 2019, the SMOH claimed that 50% of its new projects use modern construction techniques (SMOH, 2019o). Approximately 14 billion Saudi Riyal (£2.8 billion) was allocated for this initiative/policy of stimulating the use of modern construction techniques, which will contribute to reducing the cost and the duration of projects while ensuring the quality of construction (Harvard Business Review, 2019).

Building technologies support many goals and work towards the "Vision 2030" that promotes the digitization and modernity of Saudi society; these technologies now include using 3D printing to build houses in several hours, alongside other techniques (SMOH, 2019f). The initiative aims to increase the production capacity of construction factories in SA and enhance their utilization by 70%, creating 6,000 jobs for Saudis, raising the contribution to GDP to SR80 billion (£16 billion), and reducing the cost of 5-20% of construction projects (SMOH, 2019f). There are also aims to reduce implementation time to less than 90 days and improve the quality of housing units in order to increase satisfaction (SMOH, 2019f).

While the Government is very optimistic about this initiative it remains to be seen if the new technology has a positive impact on the affordable housing market. There is no research so far on how effective these strategies are. This thesis is designed to gain the

perspectives and views of both households and other stakeholders. However, as these are new policies, it would be unexpected to gather more views from the end-users.

11- Exemption from the 5%VAT for first time buyers

This initiative aims to eliminate the Value Added Tax (VAT) on first homes, reducing the cost of owning a first home (SMOH, 2019p). The Ministry will cover the VAT payment for a person's first residence to reduce the costs for first-time buyers. This is another initiative by the SMOH to help citizens access suitable real estate finance and motivate them to own their first house, similar to the UK where there are several incentives for first-time buyers.

12- Sharakat (Partnership)

"Sharakat" which means "cooperation" or "partnership" is a programme launched by the Ministry of Housing to establish partnerships between the Ministry (government sector) and the private sector, by providing high-quality housing solutions and facilities tailored to the needs of citizens at a price commensurate with their income (SMOH, 2019q). Thus, Sharakat provides good quality residential units at affordable prices in partnership with the private sector. This programme falls under the Supply Support Policy (SSP) which was discussed earlier. By the end of the 2018, 45 Sharakat projects had been implemented in different regions and had provided more than 77,000 high-quality housing units ranging in price from 250,000 to 750,000 SR (£50,000 to £150,000) (Harvard Business Review, 2019).

13- Units Subdivision

At the time of writing this approach is still under development, but it is ambitious in that it aims to increase the number of housing units by dividing large housing units and real estate into smaller units. This could be unpopular if the resultant housing units are too small. Only time will tell if this programme will be successful, however, the Ministry of Housing claim that "the real estate units' subdivision is accomplished through the division of a building or a building complex into several real estate units" (SMOH, 2019r). This service is mainly for owners and developers to provide them with information and regulation on subdividing units (SMOH, 2019r).

14- Wafi (Off-Plan Sales or Rent Programme)

The aim of the 'Off-Plan Sales or Rent' programme or 'Wafi' is, according to the SMOH, "to market and sell real estate units before or during the development or construction stage, by sharing a description of the house plan or building a model in its final form after the completion of the development or construction, and ensuring the commitment of the real estate developer to implement the construction according to the model and agreed specifications" (SMOH, 2019s). This pre-payment scheme is widely used throughout the Middle East to resolve the issue of funding large projects.

In summary, the above are the different programmes and initiatives which target different stakeholders and end-users within the housing market with the goal of regulating the market and producing enough housing units at reasonable and affordable prices. It could be argued that the most effective of these policies as reported by SMOH are the Sakani, and Idle Land initiatives. Other initiatives are still under development and are being used by the Ministry of Housing in long-term housing policy readjustments, although not all have been effective, such as Sustainable Building and Units Subdivision. It is also important to note that there is no non-governmental research highlighting the effectiveness of these programmes.

However, there are many questions in search of answers and these include: How effective are these initiatives? Why is there a lack of non-governmental research highlighting the effectiveness or challenges of these SMOH policies? Of course, part of the answer could be related to the fact that some of these programmes are still under development and yet to be fully implemented, whilst another explanation could be that research on housing in Saudi Arabia is also underdeveloped with little or weak support, hence the need for this study.

One important issue which has had a major impact on affordability is the changing role of the Real Estate Development Fund (REDF), which is discussed in the following section.

3.5.2 The role of the Real Estate Development Fund (REDF)

Before the partnership with SMOH, REDF as a government agency starting in 1974, provided free long-term housing loans of 300,000 SR (£60,000) to citizens, which increased in 2011 to 500,000 SR (£100,000) (Mubarak, 1999; Al-Otaibi, 2004; Al-

Mayouf & Al-Khayyal, 2011). There was little partnership with private banks and the fund was purely a financial provider on its own. The main issue with this system was that there were extremely long waiting times where it could take an applicant as long as 20 years to receive financial support (Jeddah Economic Forum, 2013; REDF, 2019). Additionally, the structure did not consider age differences or the urgency of different cases, nor indeed did it involve any reliable measure of the affordability levels of applicants (Al-Hoiti, 2017). Thus, there was no acknowledgement of the contextual and often complex factors involved in home ownership.

The fund's role after the establishment of the SMOH in 2011 has changed in that, whilst it still provides similar levels of financial support, there are now policies in place which attempt to solve the issue of long waiting times, resulting in what is now an average wait of five years (Al-Hoiti, 2017; Al-Hawamlah, 2019). This has been achieved through partnerships with banks and financial institutions. For example, the REDF issued a total of 750,000 loans between 2011 to 2015 (Ghafour, 2015). Therefore, this shift of role and the introduction of partnerships means that the REDF no longer provides free housing loans, but rather supports applicants with any additional charges on outstanding and existing loans, such as interest. However, the amount of financial support received still stands at a maximum of 500,000 SR (£100,000) (Al-Hoiti, 2017).

The new system means that loans are applied for through banks and financial institutions, which are electronically linked to the REDF to determine the eligibility of the applicant. Then, the amount of monthly support is allocated based on the applicant's monthly income and number of family members (Al-Hoiti, 2017; Al-Hawamlah, 2019). If the monthly salary is 14,000 SR (£2,800) or less, 100% of the maximum financial support is available, however, if the salary is over 14,000 SR (£2,800), then 35% of the maximum support is received (Al-Hoiti, 2017). Support here means paying the loan interest/profit up to 500,000 SR (£100,000) or in some cases only 35% of the interest and the rest is paid by the applicant. In both cases, there is no possibility of receiving financial support over 500,000 SR (£100,000) (Al-Hoiti, 2017; Al-Hawamlah, 2019). In other words, whatever the applicant's monthly salary is, even if a house costs more than 500,000 SR (£100,000) the REDF will still only pay out a maximum loan of 500,000 SR (£100,000).

Currently, the REDF (2019) has released the information that up to 50,000 Saudi citizens have benefited from housing loans through five different channels:

   a. Buying ready built houses from the market,

<ol type="a" start="2">
Buying a house under construction,
Self-build, provided if you own a land,
Real estate finance, and
Support for existing real estate finance beneficiaries.

It is worth mentioning that the "Real Estate Loan" programme is a housing finance product which claims to comply with the provisions of Islamic Sharia law (REDF, 2019).

Whilst the REDF is just one stakeholder, the Ministry of Housing works with other organisations and groups to achieve the Vision 2030 goals of home ownership in Saudi Arabia. These will be discussed further in Chapter 4 in the review of stakeholders.

3.5.3 The Saudi Middle-Income group

There is no doubt that the SMOH has made some progress since its establishment in 2011. This is noticeable from anecdotal evidence of statements made by several citizens of Saudi Arabia in the Saudi media and in social media. However, the Ministry still faces major issues, including the undeniable fact that SA is a large and complex country, with accumulated housing affordability issues.

The majority of the government's policies aim to boost home ownership in the country among all sectors of the society. However, this is unattainable when taking into consideration the high price of housing, particularly in major cities like Riyadh and Jeddah. As mentioned earlier, middle-income groups consist of employees of the public or private sector, and self-employed businessmen with a monthly household income of £2,600 to £4,000 (13,000 SR to 20,000 SR), while high-income salaries are greater than £4,000 per month, and low incomes are generally defined as lower than £2,600 (SMOH, 2016h). This household income, because of cultural norms, is only based on a husband's salary and is not a composite of all the working members of the household, although this is set to change soon. The SMOH will provide 100% of the maximum available amount of 500,000 SR (£100,000) to citizens with salaries of 14,000 SR (£2800) or under. This clearly excludes almost all middle-income earners from full support as their salaries lie between £2,600 to £4,000 according to the SMOH definition.

Anecdotal evidence gathered from recent stories published in the media suggests that, despite all these initiatives, members of the middle-income category of Saudi Arabian society still struggle to own a house. In many cases, housing loans are not sufficient to

pay for the applicant's desired housing unit and in other cases, the housing unit is too small for the potential buyer and their family. This is an issue faced by many in large urban areas such as Riyadh and Jeddah, where most jobs are within facilities and infrastructure. For example, for a middle-income earner (with a salary of more than 14,000 SR or £2,600) who would like to buy a 3-bedroom apartment costing 550,000 SR (£110,000) with an area of 200 square metres, the main financial numbers are as follows:

- The REDF will only pay 35% (£34,000) of the loan profit/interest up to £100,000 of the cost.
- 5% of the first payment (£6,000) is paid by the applicant (which was reduced from 15% to 10% and is now 5%).
- The monthly housing loan payment is £800 for 20 years and is paid by the applicant
- The housing loan interest over 20 years means the total payment will be £200,000 and this is paid by the applicant.
- £200,000 – £110,000 = £90,000 (total bank profit over 20 years).
- £90,000 – £34,000 (35% loan from REDF) = £56,000 net bank profit which is paid by the applicant.

In summary the applicant for this REDF loan will be paying £56,000 interest to the bank over 20 years, or £2,800 per year.

This one example shows how expensive houses are and the amount of support from SMOH provided specifically for middle-income households. Therefore, the main obstacles for the success of government initiatives can be identified as the lack of affordable housing loan solutions in the market and the reluctance of the government to provide financial solutions tailored to low and middle-income categories.

To conclude, the Saudi government acknowledges that housing affordability relates directly to the ability of individuals, or households, to have sufficient disposable income to pay for accommodation, through either purchase or rental, while retaining sufficient levels of income to meet other living costs. However, during the recent stages of economic and social development and due to increasing concerns and challenges, this view has changed, with recent strategies incorporating varying housing affordability solutions that do not necessarily depend on financial support from the government.

It is also noted that SMOH has adopted many initiatives, programmes and housing policies for addressing concerns and challenges in the Saudi Arabian environment, but these initiatives will not succeed without analysing particular social and cultural needs. In the following section of this chapter, the process of determining housing affordability and the targets set, as well as the components of and challenges to the successful outcome of this strategy will be reviewed. Additionally, the role of major stakeholders, including that of the middle-income population, is examined and discussed.

3.6 The Saudi affordable housing strategy - A critical appraisal

The new affordable housing model adopted by Saudi Arabia, although amended to suit local planning laws, assumes that "housing can be considered as affordable if a household spends no more than 30% of its gross income on basic housing costs" (Sidawi, 2009:74). In this context, the object of affordability is to ensure that houses are provided for lower paid and middle-income members of society, which are priced at an ownership or rental level that matches with these income criteria. For example, if a Saudi household has a total income of 15,000 SR per month (£3,000), then their housing and property costs should not exceed 4,500 SR (£900), and this has to be reflected within affordable housing development schemes. The Saudi Arabian Monetary Authority (SAMA) used to set a maximum monthly deduction for loan applicants at 33% for government employees and 25% for pensioners (SAMA, 2018). However, recently SAMA has set new ceilings for the maximum monthly deductions for loan applicants. Applicants are now divided into three groups according to their monthly income (SAMA, 2018).

In 2018, according to SAMA, in a circular addressed to banks and finance companies, the highest repayment rate ceiling for people with a monthly income that reached 15,000 SR (£3,000) was set at 45% for personal loans and other consumable loans, rising to 55% in the case of real estate financing. The ceiling for those with monthly incomes between 15,000 SR (£3,000) and less than 25,000 SR (£5,000), starts at 45% and rises to 65% in the case of real estate finance. SAMA left the ceiling of the third group (a monthly income of over 25,000 SR) to be determined according to the financier's credit policy (SAMA, 2018).

However, despite the potential benefits of the affordable housing programme for Saudi Arabian citizens, its successful design and execution has presented a number of challenges. Based on the literature, these comprise:

a. The appropriateness and adoption of the affordability model;

b. Issues associated with housing finance in general; and

c. Housing market volatility.

Each will be explained in the following sub-sections.

3.6.1 Adoption of the Affordability model

It has long been argued that the adoption of an affordability model, based on the availability of long-term housing loans with interest to buy newly built houses, has not been clearly described within Saudi Arabia's housing policy. Also, the ownership policy and control rights policies do not consider "either the cultural and tradition aspects, nor the differences between different cultures as well" (Sidawi, 2008:68). One of the key cultural traditions of Saudi Arabia is based on the Islamic principle of '*no harm*' (Sidawi, 2008). Within this context, while households may wish to express their own lifestyle within their property through alterations without this affecting their neighbour's privacy and enjoyment, many of the affordable housing-built projects did not allow for this to be achieved due to the lack of cultural consideration at the design stage (Habraken, 2003; Salama, 2006; Sidawi, 2008).

3.7 Social and Cultural Considerations in Saudi Arabia

As mentioned previously, Saudi Arabia has witnessed a dramatic period of economic change. With this change has come increased access to technological advances and an increased urban population in need of housing (Al-Hathloul & Edadan, 1995; Alkadi, 2004). These factors have had a dramatic impact on the social and cultural development of the Saudi Arabian populace (Sidawi, 2008), which has seen a rapid transition from a tribal-based society with extended families happy to share a property, to one that is modern and based on the nuclear family structure seeking privacy in a single house (Al-Hathloul & Edadan, 1995). An integral part of this change has been driven by the increased exposure to modern ways of living and a more direct form of communication and contact with communities in other countries, as well as the multi-cultural mix of the expatriate communities that have settled in Saudi Arabia (Al-Hathloul & Edadan, 1995; Mubarak, 2007; Sidawi, 2008).

As a consequence of these global influences, changes in the demographics of Saudi Arabian society, and the formation of modern households, there has been an increased demand for fair treatment in terms of affordable housing opportunities (Al-Hathloul &

Edadan, 1995). The main sociocultural factors that affect the housing aspirations of communities in SA are both religious and traditional beliefs that affect the views and practice of Saudi Arabians toward home ownership and the use of finance systems based on interest (Perry & Motley, 2010). In particular, devout Muslims are reluctant to engage in interest-based loans and specifically avoid non-fixed interest systems because of the prohibition of these types of loans by religion, making this issue one of the core factors that needs to be addressed in the study of affordable housing. Within this context, the populace has expressed their wish to acquire a home which fits within cultural and Islamic religious traditions (Sidawi, 2008).

Salama (2006:70) argues that the focus on affordable housing is always defined in economic terms, which means that "little emphasis is placed upon addressing the sociocultural and economic aspects in an integrated manner". In this respect, the argument presented by Salama (2006) and others is that affordable housing is not simply a process that provides accommodation for the lower income segment of the population but it is a holistic approach to provide housing solutions to all members of the community (Alkadi, 2004; Mubarak, 2007; Al-Mayouf & Al-Khayyal, 2011; Sidawi & Meeran, 2011). Salama (2006) also argues that the criteria for affordable housing should "offer design solutions that are sensitive to the local context. Issues such as privacy, social cohesion, and perceptions of residential density, preferences, and the lifestyles of the target populations should be considered" (Salama, 2006:67-68).

3.7.1 Housing finance including Islamic style loans

As noted above, the Islamic interpretation of financing for housing prohibits the use of interest-bearing borrowing (Rowey *et al.,* 2006; "Kingdom Needs", 2009; Roberts, 2010; Sidawi & Meeran, 2011). Thus, "Islamic finance is finance under Islamic law (or Shari'ah) principles" (Rowey *et al.,* 2006:1), and the main principles of Islamic finance are:

- "The prohibition of taking or receiving interest;
- Capital must have a social and ethical purpose beyond pure, unfettered return;
- Investments in businesses dealing with alcohol, gambling, drugs, or anything else that the Shari'ah considers unlawful are prohibited;
- A prohibition on transactions involving speculation or gambling (masir); and
- A prohibition on gharar, or uncertainty about the subject matter and terms of contracts".

Therefore, services provided by Islamic banks are provided for a fixed fee (such as safe deposits, property sales, fund transfers, and investments) or they are investment partnerships which share profits and losses (Rowey *et al*., 2006). There are two types of financing that banks and companies deal with in Saudi Arabia, the most widespread of which are the "Murabahah" system and the leasing "Ijara" system, and these vary according to the customer's desire (Property Finder, 2019).

These two-financing options claim to comply with Shari'ah (Islamic) law by:

- **Al-Murabahah (cost-plus credit): "**Purchase and resale. Instead of lending out money, the capital provider purchases the desired commodity (for which the loan would have been taken out) from a third party and resells it at a predetermined higher price to the capital user. By paying this higher price over instalments, the capital user has effectively obtained credit without paying interest" (Sidawi, 2009:82). In other words, the finance company or the bank purchases the property and then sells it to the customer, and the customer pays part of its price as a down payment, and the remainder of the amount is paid in advance instalments throughout the financing period, in which the interest rate is fixed (Property Finder, 2019).

- **Al-Ijara (lease agreement): "**The bank owns high cost assets and assets that deal with rapidly changing technology. After purchasing these assets, the bank then rents them to the customer, giving them an option to either purchase them during the rent period, or after its completion. It is the most efficient and flexible way to utilise high cost assets and technology related products" (Sidawi, 2009:82). In other words, the finance company or the bank purchases the property and then leases it to the customer with the promise of ownership at the end of the financing period, and the customer pays a prepaid rental payment and the rest of the payments during the financing period (Property Finder, 2019). The interest rate for this type of product is variable according to the annual market index, in which the customer repays their loan in instalments that change their value according to the prevailing interest rate (Property Finder, 2019).

Musharakah and Al-Istisnaa are other types of Islamic financing in Saudi Arabia which have been approved by Muslim scholars (Murray, 2007) and these can be defined as:

- **Musharakah (rent-to-own programme):** A programme whereby a partnership is created, forming a business in which profits are shared according to an agreed ratio and losses are split in proportion to the investment of each partner (Sidawi, 2009).

- **Al-Istisnaa:** A contract in which a client signs two agreements, one with a bank for the construction of a site; and another with the construction agency responsible for the development plans (Sidawi, 2009).

However, although Islamic banks have devised certain products that are designed to resolve this situation, within Saudi Arabia itself, the affordable housing market has been hindered by a significant lack of real estate finance products from banking institutions operating within the country (SAMBA, 2010). This is one of the main issues that has contributed to the continuing decline in affordable home ownership in Saudi Arabia, particularly among the younger generation (Sidawi & Meeran, 2011) and middle-income earners as it may take many families from these categories 15 years to buy a house (Assaad & Roudi-Fahimi, 2007; Dhillon & Yousef, 2009; Singerman, 2007). The lack of home financing opportunities in Saudi Arabia has also contributed to the decline in the level of home ownership compared with developed Western countries, and even other neighbouring Gulf states. Furthermore, until recently, limited efforts have been made by the government to intervene and provide alternative modes of financing support for home purchasing, which has further contributed to a decrease in home ownership levels (Jeddah Economic Forum, 2013).

3.7.2 Housing market volatility

Volatility in the housing market means changes in prices and the viability of houses due to demographic changes, the preferences of potential buyers, and land supply among other factors (Fairchild *et al.,* 2015). This phenomenon has fuelled continually increasing home prices in the country. Increased land prices resulting from a lack of supply have deterred community members from building their own homes and have led to the increased influence of multinational home builders on the housing market, whose profit-based

approach has also contributed to increases in house prices. As a result, "land prices and house values for the time being are beyond the ability of self-financing for households with low to middle incomes" (Al-Mayouf & Al-Khayyal, 2011:65).

3.8 Achieving housing affordability within urban housing development

Due to the rise in urbanisation in Saudi Arabia, it is perhaps not surprising to find that the housing market challenges, particularly in respect of affordability, are most acute in the increasingly densely populated areas of the country's major cities (Jeddah Economic Forum, 2013). It is in these areas that the demand for urban housing has been increasing significantly over the last few years. With around majority of Saudi Arabia's population residing in the urban areas of Riyadh, Jeddah, and Dammam, this has meant that one of the main challenges for the country is to control property prices in these areas, which is necessary in order to develop and sustain affordable housing (Jeddah Economic Forum, 2013).

Evidence from the literature from as far back as 2004 suggests that in these urban areas, the increase in house prices has not been accompanied by an increase in individual income levels (Opoku & Abdul-Muhmin, 2010; Al-Otaibi, 2004). This situation is seemingly still the same but needs further research and updates.

For example, in Jeddah, much of the housing development has been focused on the construction of high-priced housing, including villas and apartments. This approach makes it almost impossible for middle-income households to gain access to quality affordable housing. This situation was confirmed in recent research conducted by Ernst and Young (2013:5), which indicated that, in 2013, "an average home costs 700,000 SR (£140,000), nearly 10 times the average national salary of 72,000 SR (£14,400)". It is not surprising, therefore, to find that statistics have indicated that, in 2005, around 18% of Saudi Arabia's urban population were living in what has been described by the UN as 'slum conditions' (UN Habitat, 2013).

One of the problems that this current housing price differential creates is that it particularly affects key public and private sector workers, the majority of whom are within the lower and middle-income audience. As David Smith, CEO of the Boston Affordable Housing Institute commented, "every city has and needs some people who make the city work. Affordable housing is where those critical jobs sleep at night" (quoted in Ernst and Young, 2013:5).

3.8.1 Supply and Demand

The previous discussion has confirmed that there is a growing gap between housing supply and demand in Saudi Arabia. In an open market environment, the supply and demand gap lead to price increases in land, construction, and housing. This means that increasing segments of the population are unable to afford to purchase or rent any form of housing, as has been seen to be the case in Saudi Arabia over recent years. Moreover, without positive interventions to address this situation, the consensus of professional and academic opinion is that this gap will continue to increase over the next few years and even decades (Al-Mayouf & Al-Khayyal, 2011; Mubarak, 2007; Al-Otabi, 2004; Jeddah Economic Forum, 2013). Government reports predict that housing shortages in SA will continue to grow unless positive action is taken by the Saudi Arabian government to implement a change to its housing policy to one that enables this issue to be addressed more effectively (GIZ, 2013; SMOH, 2016g; SMOH, 2016h).

As has been discussed previously, there are two main factors which contribute to housing shortages: population growth and continuing urbanisation. In terms of the former, based on 2013 housing development growth data, it has been predicted that the gap between the size of the housing market and the population growth in Saudi Arabia will continue to widen by 2020 (Jeddah Economic Forum, 2013).

Similarly, although the housing shortage issue is a national phenomenon, the literature review confirms that it is most prevalent in the country's five main urban areas; Riyadh, Jeddah, Makkah, Al-Madinah, and Dammam (Jeddah Economic Forum, 2013). Research published within this decade has predicted that unless the government acts promptly and effectively, shortages in these urban areas will continue to grow, exacerbating social and housing problems for the local populace (Al-Otaibi, 2004; Al-Mayouf & Al-Khayyal, 2011). In a recent PhD study, after conducting semi-structured interviews on affordable housing challenges in Jeddah, Awliya (2017) concluded that the four major obstacles facing affordability in the city were:

- Bureaucracy (especially by the Ministry of Housing and the Municipality of Jeddah);
- Lack of financing options;
- Lack of land; and
- Potential homeowners' culturally-based desires.

Considering all of the factors that have been discussed above, it is clear that, prior to focusing on a more detailed examination of affordable housing problems as they specifically relate to a particular urban area, it is important to examine the role of the key stakeholder groups in Saudi Arabia, and their contribution to these areas of housing.

3.9 Stakeholder roles in the provision of affordable housing objectives

In a study based in mainland Europe and the UK, it was concluded that, apart from the community itself or end-users, there are three major stakeholder groups that play an important role in the development, implementation, and effectiveness of a national housing policy and strategy (Conway, 2000; Lund, 2011, SMOH, 2016a). These comprise:

- The public sector, namely the government, planners and regulators;
- The private sector; and
- The financial markets.

All of these are interlinked in terms of their goals and objectives (Conway, 2000; Lund, 2011; SMOH, 2016a). While the stakeholders in Saudi Arabia are similar in many respects to the ones identified elsewhere, other stakeholders or factors may play a role in the housing market. GIZ (2013), identified the following main bodies in Saudi Arabia, excluding end-users, who are currently concerned with the housing sector:

1. The government/public sector, which includes the Ministry of Housing, the Ministry of Municipal and Rural Affairs, the Real Estate Development Fund and others,

2. The private sector, which includes real estate developers, construction companies, engineering corporations, and other private sector companies and individuals. This also includes the private banks which offer loans to support those wishing to purchase a home,

3. The institutions of civil society that are represented by charitable institutions and associations such as the Institution of King Abdullah bin Abdul Aziz for the Development of Housing and the Association of Prince Salman for Charitable Housing, endowments, and others (including cooperative housing).

These main bodies, who are currently concerned with the housing sector in Saudi Arabia, represent three categories of institutions, namely the government sector, the private

sector, and the institutions of civil society. These stakeholders can be defined as any party that:

1. Might affect or be affected by Ministry works;
2. Is responsible in any way for developing the housing sector (for example, the Ministry of Economy and Planning);
3. Has interests in the development of housing policies and strategies (for example, private companies such as development and real estate finance companies);
4. Has control over the vital resources associated with the housing sector or has related projects (for example, the Ministry of Finance);
5. Has the ability to influence the success of any programmes or projects that relate to housing in Saudi Arabia or obstruct them (for example, the Ministry of Municipal and Rural Affairs) (SMOH, 2016a)

The roles of these different stakeholders and their interconnections will be discussed in more detail in Chapter 4.

3.10 Comparisons and Summary of housing policy in the UK, US, China and Saudi Arabia

Before concluding this chapter, it is important to compare and summarise housing policies in different countries with those implemented in Saudi Arabia as this research supports the idea of a comparative approach, which may support government co-learning, specifically in cases of failed housing policies (Lund, 2017), while still taking into account social and cultural differences between countries. Table 3.6 is an extended table from Chapter 2 (Table 2.2), which shows the summary of the criteria, advantages and disadvantages of the main housing policies in the UK, USA and China. This was developed and gathered by the researcher from the literature review.

Table 3.6 Summary of the criteria, advantages and disadvantages of the main housing policies in the UK, USA, China and Saudi Arabia.

	UK	USA	China	Saudi Arabia
Political system	Democracy	Democracy	One Party System	Monarchy System of Government
Human Development Index (HDI)*	0.922	0.924	0.752	0.853
House ownership %	66% (England) (in 2015 only half of UK families own their homes)	70%	89%	47%
House price-to-income ratio**	13.13	4.18	40.8	3.02
Main housing policies	Right/Help to Buy scheme (central government and local councils) and discounted rate/sales*** Starter Homes (1st time buyers) *** Right to acquire*** Shared ownership schemes (Resales***)	Housing Choice Vouchers ('means-tested choice vouchers') Low-income Housing Tax Credit (LIHTC)	Government-built affordable houses to boost the low-end market Two-tier affordable housing policy that includes cheap rental housing (CRH) Economic Comfortable Housing (ECH) Shantytown Redevelopment Housing (SRH) Ownership-oriented affordable houses	Sakani 'Residential' programmes (free land, real estate loans, villas, apartments and townhouses) Idle Lands, (Charge of 2.5% on white/empty lands)

			Public rental houses Low-rent housing	
Financing the schemes	Taxation Exemption of taxes Planning Tools/Rules (planning gain) Traditional council house building core model financed from long term public loans	Credit facilitation Indirect subsidies Tax preferences Credit guarantees Regulatory flexibility	Financed by the central and local states Central and local government and developers	Financed by private banks and financial institutions (shift from REDF to private banks) REDF supports applicants with loan interest (percentage of support differs)
Main features of policies	The government works alongside the housing market to ensure suitability	The private sector and the market economy have a greater role and influence on affordable housing policies	The government controls the housing market and housing policies are more or less dictated by the government	The government controls the housing market and housing policies are more or less dictated by the government SMOH is building strong and flexible partnerships with the private sector
Advantages	Controls the house prices and offers discounts	House prices are realistic, and the housing market is healthy Large empty areas are available around its	Many people can afford houses as the house ownership percentage suggests Gradually evolving to allow for more private sector involvement	Noticeable that SMOH is developing and has achieved some progress since its establishment in 2011 Clearer housing policies (still many initiatives under development)

		central cities (availability of land)		Gradually evolving to allow for more private sector involvement
Disadvantages	The government must subsidise the housing market to keep the schemes healthy Financial constraints on the local and central government Challenges to the provision of affordable housing	Low income group cannot afford open market prices Lack of housing construction, High land prices Lack of land	State-controlled housing does not reflect the real prices of houses and cannot be sustained for long High prices of houses in cities Affordability is a major social challenge in urban China Policy mechanisms of the schemes are weak and not optimal Lack of funding Weak financial solutions Over-reliance on the government as a major player and stakeholder, including financing and management of land	Demographic pressure and increasing population of young people Limited availability of suitable housing units for all parts of the community Difficulty in accessing adequate housing funding Inefficiency of the real estate sector Heavy reliance on government funding High land prices High cost of housing units Lack of affordable housing Low home ownership

*UNDP (2018) ** Towergate Insurance (2019) *** HM Government (2019)

The table above shows a comparison between the most effective and most commonly used housing policies in the developed and developing countries addressed in this research. Firstly, it demonstrates that Saudi Arabia within its short history has achieved a comparatively strong human development index rating, exceeding that of China and coming relatively close to the UK and US indices, which is in-line with the policy improvements that the SA government has implemented with their 2020 strategy and Vision 2030. On the other hand, the table shows that SA has the lowest home ownership percentage of all the comparison countries. SA also showed the lowest house price-to-income ratio which is a reflection of the affordability and housing obstacles facing citizens. This may be a reflection of a lack of availability and transparency of housing data as there are many housing issues and challenges facing both the SMOH and Saudi citizens, as indicated in the literature.

Additionally, the table showed that Saudi Arabian housing policies support first-time buyers, as is the case in the UK. To progress, SA could also adopt a cheap rental housing programme such as the one seen in China to help citizens buy and own their house in the near future. An important initiative to solve housing issues as considered by the populace is the distribution of land by the SMOH to eligible citizens across the country. Furthermore, similarly to China, the SA government is gradually attempting to build a strong relationship with the private sector as they have realised its significance within the housing sector. SMOH is aiming to be the regulator of the housing market, reduce dependence on government funding and encourage strong involvement from the private sector within the housing market as is the case in the US. For example, Saudi Arabia's old policy of long interest-free real estate loans provided by the REDF has been discontinued, and the provision of loans has been shifted to private banks. This is a policy which was not well-received by citizens, although ultimately it has helped to reduce the waiting times between application and receiving a real estate loan. This demonstrates the gradual changes in SA housing policy since 2011, and the introduction of many initiatives which are still undergoing development.

3.11 Conclusion

In this chapter, the discussion has been focused on the adoption of a housing strategy from a broad perspective, and it is clear that Saudi Arabia will need to learn lessons from

these discussions to improve housing affordability for its middle-income populace. The previous chapter discussed how an affordable housing policy was generally developed and its key components and provided an overview of the challenges to this policy that were being experienced across a number of developed and developing countries. The outcome of Chapter 2 served as the foundation for a closer examination of the development of the housing policy strategy that has evolved over the years in Saudi Arabia, particularly as it relates to affordable housing policy in general and to middle-income groups specifically.

Based on this foundation, from the review and critical analysis conducted in this chapter, a number of conclusions can be drawn that will highlight themes for further investigation into affordable housing policy in Saudi Arabia. The review in this chapter has confirmed that population growth, together with the increase in oil production, have been among the primary reasons for the increase in urbanisation of Saudi Arabia, particularly surrounding its major cities and towns. This has been shown to lead to the development of a range of different types of housing products, and mechanisms that were adopted for this purpose. In this regard, construction and financial companies need to ensure that they have an efficient system for dealing with different types of housing products as well as being able to adapt to changing government policies.

Governments also need to ensure that they introduce an effective system for managing housing needs in light of urban distribution as the population moves from one place to another. In the case of Saudi Arabia, this has not proved to be the case to date. One of the ways in which different cities can deal with the influx of expatriates and the local population is through advance planning of the number of housing units needed, and then ensuring that different developers are given opportunities to build housing units, which can lead to an increase in the supply of the different housing units required. It is also important to consider that different stakeholders need to ensure different types of housing units can be developed according to local needs.

However, there is a substantial gap between policy and practice in Saudi Arabia as there has been a lack of consistency, which is likely to have affected the effectiveness of affordable housing developments in Jeddah. Equally, it has been found that in terms of the practical implementation of a robust housing affordability programme, Saudi Arabia is lagging behind a number of its neighbouring Gulf states, particularly the UAE, Qatar and Bahrain. A clear and consistent policy would send the right message to developers,

and this would lead to long-term development of the various appropriate initiatives. This is essential if a country, or indeed city, is to deliver the right quality of affordable housing. In the case of middle-income housing in particular, this needs to be facilitated so that the different stakeholders' needs can be addressed. This will also ensure that housing needs are addressed and can lead to a reduction in the cost of housing. A consistent policy by the government in providing sustainable subsidies to the housing market is also needed.

The housing policy in Saudi Arabia is overly controlled by the government through many strict regulations and because housing finance is also controlled by the government, it is fair to say that among the countries discussed in Chapter 3, China's housing affordability plan is most similar to the Saudi Arabian plans, with major differences in the expectations of the populace as Saudis expect more spacious housing units. There are also great differences in sociocultural factors such as the reluctance to take interest-based loans in Saudi Arabia, compared to China, the UK and the US.

Furthermore, the outcome of the literature review has also suggested that the application or the implementation of any housing development programmes initiated by the Saudi government in the city of Jeddah is limited. Sociocultural considerations, public policy and regulations, public/private production and financing will comprise the corner-stone of the conceptual framework. However, initially, all the stakeholders involved in the housing market in Saudi Arabia have to be correctly identified and the relationship between these different stakeholders should be discussed. This will be the focus of the next chapter (Chapter 4), where an appropriate conceptual framework is developed.

Chapter 4: The Conceptual Framework

4.1 Introduction

The aim of this study is to develop a conceptual framework and investigate housing affordability policies that are applicable to middle-income households in Saudi Arabia. It also strives to collect data relevant to existing housing affordability policies to evaluate their effectiveness and inform future decisions. This is achieved by identifying the critical drivers that influence the development of affordable housing solutions from both a planning policy and socio-cultural perspective. In particular, the study will focus on affordable housing issues as they relate to one of the three main urban centres, Jeddah, on the west coast of Saudi Arabia.

To reach this aim, various key elements and relationships can be drawn from the literature review (see Chapters 2 and 3). These critical elements have directly contributed to the development and understanding of affordable housing policy as well as in conceptualizing the process for this research. Therefore, the research will first consolidate and link different concepts that were explained in the literature review chapters and their conclusions. To do this, a conceptual framework has to be developed to guide the investigation of affordable housing policies that are applicable to middle-income households in Saudi Arabia.

The objective of the first literature review chapter (Chapter 2) was to examine the development of affordable housing policy from a broad perspective. In this respect, the key objectives were to determine how this concept has been incorporated within the national housing policies of both developed and developing countries, while providing an overview of the challenges to policy that were experienced across different environments. The outcome of this chapter served as a foundation for understanding the development of the housing policy strategy that has evolved over the years in the developing world, particularly in relation to affordable housing.

Subsequently, the objective of Chapter 3 was to examine the development of affordable housing policy in Saudi Arabia, the country of focus for this research. The review confirmed that Saudi Arabia is lagging behind a number of its neighboring Gulf Cooperation Council (GCC) states and identified various key characteristics of the process. The outcome of the review also suggested that there is limited implementation

of public housing development programmes in the country, which particularly affects middle-income groups.

In general, the review identified that there are different methods available to address affordable housing issues, but that there is a need for a framework to make any intervention successful. In this research, the approach to studying affordable housing in the specific context of Saudi Arabia has been guided by establishing a conceptual framework based on the literature. A conceptual framework is an 'analytical tool' which can be applied to achieve an overall picture of the problem identified (Rodman, 1980). Another definition by Miles and Huberman (1994:18) is that a conceptual framework lays out "the key factors, constructs, or variables, and presumes relationships among them". A more recent definition defines a conceptual framework as "the way ideas are organised to achieve a research project's purpose" (Shields & Rangarajan, 2013:24). The conceptual framework used in this PhD programme of studies is designed to facilitate the research by providing "theoretical guidance, and a connection between purpose and data collection" (Shields & Whetsell, 2017:82).

When creating the conceptual framework, the main hypothesis was based on a stakeholder's theory, which was initially developed by Freeman (1994) in a business context, who argues that for any business or project to succeed, every stakeholder who affects or is affected by the process should have a value in the process (Freeman, 1994). This idea slightly differs from previous approaches to studying affordable housing problems in Saudi Arabia.

Different strategies and challenges to affordable housing were previously investigated by several authors (Chapter 3). Examples of these strategies included: the value of a culturally appropriate financing system in improving the willingness of Saudi citizens to take long-term loans (Murray, 2007; Sidawi, 2008; Sidawi, 2009; Osborne, 2013) and the availability of incentives for developers and the private sector to provide reasonably priced housing units (GIZ, 2013; SMOH, 2016d; Awliya, 2017; SMOH, 2019b).

These different housing affordability strategies were used to inform this research to identify the main stakeholders and develop the conceptual framework. Three main areas were identified as key elements in understanding the affordable housing situation in Saudi Arabia. These elements will shed further light on the context of affordable housing policy in Saudi Arabia with the goal of answering the research questions identified in Chapter 1. Thus, it allowed the researcher to explore how affordable housing policy in Saudi

Arabia works, what are the challenges it faces, and more importantly what can be done to enhance and develop the policies further to help middle-income households achieve their goals. These three major elements are:

1. Socio-Cultural Considerations (e.g. Sharia restrictions on variable interest and the preference for large houses due to many having large families);
2. Public Policy and Regulations (e.g. public unwillingness and resistance to taking out certain types of loans); and
3. Public/Private Production and Financing (e.g. real estate/mortgage law).

Other interconnected elements were global and regional influences such as the cost of building materials and the cost of construction. Another significant element is the input of planners and urban designers in the housing market.

Therefore, the conceptual framework for this research was developed to inform the data analysis process. This will direct the researcher in the collection of data, who to target and what type of questions to ask. Finally, the conceptual framework has provided the foundation for the examination of key aspects related to affordable housing policies and practices which were examined in the two literature review chapters (Chapters 2 and 3).

4.2 Sociocultural Considerations

The literature has highlighted that socio-cultural considerations are a primary element in the process in almost every country, which is linked to all the other major points identified in the research. In China, where the nuclear family is small and there was a history of social planning, there have been many government-led initiatives in the affordable housing market. In contrast, the UK housing policy is centered on long-term mortgages that are affected by the market (Chapter 2). This long-term mortgage suits the social structure of the British family in which both partners are in their early working careers and both have a stable job (Lund, 2017; Byrne & Norris, 2018; Tunstall & Pleace, 2018; Anacker, 2019). This is very different from families in Saudi Arabia in which a large proportion of the work force is composed of men only. In the case of Saudi Arabia, sociocultural factors have affected both the economy and affordable housing policy and can be seen as the impact of cultural and Islamic religious traditions on behavior. Socio-cultural considerations have been found to have a strong relationship with Saudi Arabian

public policy and regulations when it comes to affordable housing. It also showed how end-user stakeholders could directly affect government policies. The two main socio-cultural factors that have affected Saudi Arabian housing policy are the avoidance of interest-based loans by many end-users for religious reasons (Chapter 3) and the expectation of having a large house to suit the lifestyles of end-user whose households are characterised by large families and who require segregation of the sexes on social occasions (Al-Hathloul & Edadan, 1995; Mubarak, 2007; Sidawi, 2008; Perry & Motley, 2010; Awliya, 2017).

4.3 Public Policy and Regulations

The Saudi Arabian government is the main stakeholder and the major player through its regulations and public policy. The importance of the role of government was clear in both developed and developing countries with some differences. The US was more likely to restrict the government's role, whereas in China the government controls everything in the housing market, with the UK somewhere in between these two models. On the other hand, Saudi Arabian public policy and regulations showed a weaker relationship with, and influence on, the socio-cultural considerations of end-users. For example, public unwillingness and resistance to taking out certain types of loans from banks was evident, particularly after shifting governmental long-term interest-free real estate loans from the REDF to interest-based loans to be taken from private banks. The different government departments in Saudi Arabia that constitute government stakeholders and their roles are as follows:

4.3.1   Ministry of Economy and Planning (SMEP)

This Ministry is responsible for issuing the five-year development plans (FYDP) for Saudi Arabia and deciding the total budget needed to implement each plan. Alongside this, the SMEP also emphasises the coordination of efforts between all the different government (stakeholder) authorities in order to achieve national goals and strategies (SMOH, 2016f).

Therefore, it is important that the Ministry of Housing coordinates with the SA General Authority for Statistics (GASTAT) to receive updated data and statistical information regularly in order to build a clear vision for the future of the population and housing. Otherwise, the SMEP may make changes to SMOH plans if they are not well-integrated

with the comprehensive development plans of Saudi Arabia. Thus, this partnership is crucial to unify efforts to address the housing sector (SMOH, 2016f).

A further planning and regulatory issue identified in the literature is the geographic distribution of the housing strategy, including affordable housing. Currently, the Saudi Arabian Government strategy is focused predominantly on the main urban areas (Surf *et al.,* 2014). Part of the reason for this is that planning in relation to industry is also focused on these five key areas (Riyadh (the capital), Jeddah, Makkah, Al-Madinah, and Dammam), an approach that automatically encourages high growth rates in these areas. It has been argued in the literature that the spreading out of industry is also needed, which can lead to better management of the housing sector demand (Al-Ghamdi, 1995; Mubarak, 2007). Understanding the wider needs of the industry will also ensure that housing provision can cover different locations, which can lead to the development of new facilities. Meeting these challenges has to be a main policy goal. This will also help different facilities to interact with the government, and will contribute to creating a fair society where housing demand and needs are met for all community groups (Mubarak, 2007).

4.3.2 Ministry of Municipal and Rural Affairs

The role of this Ministry is extremely important as it plays an obvious and essential part in all issues related to urban and regional planning, through municipalities and secretariats and is responsible for activating the policies of the 'Town Planning Agency' (SMOH, 2016f). Examples of some major roles that this Ministry has are:

- Land grants programme

- Transport and traffic planning

- Local planning

- Urban planning

- Adoption of land division schemes

- Project coordination

- Classification of contractors

- Issuing the requirements of the land division and housing construction regulations

- Issuing permits for construction, demolition, restoration, street excavations and checking plans

- Real estate registration.

Consequently, it is apparent that the Ministry of Municipal and Rural Affairs is the one responsible for the organisation and implementation of all matters related to housing. Therefore, the Ministry of Housing (2016f) must build a strategic relationship with this Ministry and they must work together to ensure that they:

1- Achieve urban planning for unified national housing objectives

2- Work to raise the efficiency and standards of housing quality through activation of the approved building codes

3- Support affordable housing by coordinating and organising comprehensive development projects

4- Ensure that the land allocated for housing is converted into actual housing, by facilitating the construction of infrastructure and services in those territories.

It is essential to understand that not all these strategies have been implemented, and the aim of the research is to investigate if this government department and other departments are achieving their stated goals. The Ministry of Municipal and Rural Affairs and the Real Estate Development Fund (REDF) are not fully empowered to perform their responsibilities in the field of housing. People may wait a long time until they receive support or access to housing loans, and there is no link between the system of granting land within the Ministry of Municipal and Rural Affairs and the funding system in the Real Estate Development Fund (REDF) to build a house (SMOH, 2016f). In addition, the old system of granting land was unsuccessful. Even with new Royal orders, which raised the capital of the REDF and the volume of loans it provided (from 300,000 SR (£60,000) up to 500,000 SR (£100,000), the fund could not eliminate these waiting lists or create sustainable support for housing (GIZ, 2013). However, now the SMOH alongside the REDF has shifted these interest-free real estate loans to private banks to reduce the waiting time from 15-20 years to 5 years (REDF, 2019; SMOH, 2019a; SMOH, 2019f). These new housing policies introduced by the SMOH were discussed in more detail in Chapter 3 of this thesis.

4.3.3 Ministry of Finance

The Ministry of Finance is responsible for the finance sector in SA. In theory, this government department should regulate loans and other finance solutions with both the private sector (banks), the REDF, and the SMOH. Tasks include developing finance solutions to boost individual ownership and enabling affordable housing development through certain types of financing programmes to all members of the society, including middle-income groups. Therefore, by working with the Ministry of Finance, the Ministry of Housing has been able to launch multiple financing programmes, in some cases guaranteed by the state (SMOH, 2016f). However, the Ministry of Finance's role in regulating the banks is not fully clear, despite all of its promises and, more importantly, it does not have any creative housing finance solutions. It needs to develop a prominent role in supporting the housing finance industry in SA to help citizens with acquiring housing units (SMOH, 2016f).

Nevertheless, the Ministry of Finance, through the Saudi Arabian Monetary Authority (SAMA) and some special programmes, e.g. the real estate finance sector in SA, is considered one of the most important stakeholders in the housing sector. Therefore, the SMOH should have a first-class partnership with the Ministry of Finance (SMOH, 2016f). This research aims to interview the private finance sector and clarify whether the Ministry of Finance's policies are helpful, creative, and incorporate different housing finance options targeting different population groups.

4.3.4 Principalities and regional councils

The principalities and regional councils are the sole representatives of the government in some areas, especially in the most remote locations of the country, and the different government departments and ministries look toward these councils when requesting assistance in accessing or requesting information on areas and people, or monitoring the implementation of regulations (SMOH, 2016f). Whether the Ministry of Housing is building strong partnerships with principalities and regional councils to offer housing support and services is open to debate. Recently, Awliya (2017) found that the bureaucracy of different government departments was a significant barrier to affordable housing policy, clearly affecting citizens, including middle-income groups within the population.

Indeed, one objective of this research is to ask different departments, as well as other stakeholders, about housing policy and cooperation between different departments. In theory at least, the Ministry of Housing is keen to be involved in operations such as planning, implementation, and monitoring projects, and the organisation of informal housing that arises in those areas. Therefore, as per government literature, the tasks and activities of the principalities and regional councils can be summarised as follows (SMOH, 2016f):

- Working on the organisation of informal housing;
- Working on providing all services to citizens, including housing services in the region, by cooperation and coordination with government agencies and participation in the planning stages for all services; and
- Ensuring the efficiency and effectiveness of the services provided for citizens of the region and working on improving and developing the provision of such services.

Therefore, the coordination between the Ministry of Housing, the principalities and regional councils should support the housing ministry's programmes. Additionally, it needs local support from regional councils to ensure the existence of services necessary for these programmes. The Ministry of Housing (2016f), summarized the relationship between the different government authorities in Table 4.1 and the relationship between these different partners in Table 4.2. It is clear that the SMOH refers to some departments as key partners, meaning that cooperation between the Ministry of Housing and these departments is essential for a healthy housing market. There is, however, little research on the effectiveness of this framework.

It is also noted that the Ministry of Housing does not regard charitable organisations as strong partners. This governmental approach to categorising certain relationships is a perfect example of a bureaucratic process that has accumulated throughout the years. It is characterised by the lack of a common vision (GIZ, 2013). Thus, the contribution of charitable institutions toward the development of the housing sector has been negligible in comparison with the contribution of the private and the public sectors. In fact, only 1% of the total housing stock has been provided through charitable institutions over the past 20 years (GIZ, 2013).

Table 4.1 SMOH relationships and concerned authorities

	Name	Type of relationship	Nature of relationship
	A- Government Sectors (Government Ministries, Government Authorities)		
1	Ministry of Economic and Planning	Key	Partnership
2	Ministry of Municipal and Rural Affairs	Key	Partnership
3	Ministry of Finance	Key	Partnership
4	principalities and regional councils	Key	Partnership
5	General Authority for Statistics	Not key	Support
6	Ministry of Justice	Support	Not key
7	Ministry of Social Affairs	Not key	Support
8	Royal Commission for Jubail and Yanbu	Not key	Support
9	Supreme Commission for the Development of Riyadh City	Key	Support
10	Supreme Commission for the Development Makkah City	Key	Support
11	Supreme Commission for the development of Hail City	Key	Support
12	Semi-government companies (provides ownership programs for their employees)	Not key	Support
13	Semi - governmental companies in service sector	Not key	Support
14	Ministry of Commerce and Industry (Commercial Chambers)	Not key	Awareness
15	Real Estate Development Fund	Not key	Support
16	SIMAH, the Saudi Credit Bureau	Not key	Support
	B- Private Sectors		
1	Real estate development and construction companies	Not key	Partnership
2	Banks and mortgage companies	Not key	Partnership
3	Construction and maintenance companies	Not key	Support
4	Real Estate Agents / Valuation	Not key	Support
	C- Charitable organizations and non-profit organizations		

Adapted by the researcher from information provided by the Saudi Ministry of Housing (2016f),

(translated from Arabic to English)

Table 4.2 Type of relationship between the SMOH and concerned authorities.

Type of relationship	Definition
Key relationship	Between the Ministry and the main concerned parties. These key actors may influence decisions or the Ministry's policies through approval or demand to amend the future housing programs of the Ministry.
Not key relationship	Between the Ministry and the concerned parties other than the main ones. These non-principals have no influence to the decisions or policies of the ministry, but may be affected by the policies or programs of the ministry
Nature of relationship	**Definition**
Partnership	Between the ministry and the main bodies who may affect the decisions or policies of the ministry during the approval or the demand to amend the future housing programs of the Ministry, so it is important to build A partnership relationship between the Ministry and these parties.
Support	Between the ministry and the concerned authorities that can support the ministry by providing information on previous housing experiences that may benefit the ministry in its current or future programs.
Awareness	Between the Ministry and the concerned authorities which have no effect or may not be affected by great and direct impact by the Ministry's decisions and policies, but have an interest and relationship with the housing sector; so these parties needs to be aware and clear about its tasks by the Ministry by informing them about their programs or making an awareness seminars, to open channels of communication and prepare for any possible future coordination.

Adapted by the researcher from information provided by the Saudi Ministry of Housing (2016f),

(translated from Arabic to English)

As seen in the previous Tables (4.1 & 4.2), there are four main stakeholders in terms of their key relationship and partnership with the Ministry of Housing (SMOH, 2016f). These are the Ministry of the Economy and Planning, the Ministry of Municipal and Rural Affairs, the Ministry of Finance, and the Principalities and Regional Councils. Table 4.1 also shows other stakeholders who collaborate with the Ministry of Housing in the housing sector. Additionally, Table 4.2 defines the type of relationship between the Ministry of Housing and the concerned authorities.

4.4 Public/Private Production and Financing

End-user stakeholders show a strong relationship with public and private production and financing systems. The role of public and private partnerships has been identified as instrumental in developing a successful functioning system, which is needed for affordable housing (Al-Ghamdi, 1995; Mubarak, 2007; Sidawi & Meeran, 2011; GIZ, 2013; Jeddah Economic Forum, 2013; SMOH, 2016f; SMOH, 2019a). The predominant role of the private sector is to manage the construction of housing units, including those designated to be affordable housing.

The Saudi Ministry of Planning highlighted the fact that, between 1970-1975, the private sector faced difficulties because of a significant increase in prices for building materials, labour, and most importantly land (MOP, 1975). For many years, the private sector was not involved in many sectors including the development of housing. Recently, SMOH (2019a), has recognised the importance of the private sector and it is now transferring the development of housing and its financing to the private sector and adopting the role of regulator of the SA housing market. However, this is not the only area where the private sector has failed to carry out its role effectively, particularly in the context of affordable housing. Research shows that a significant percentage of housing development projects in recent years have been focused on the building of luxury houses, villas and apartments (Jeddah Economic Forum, 2013). While some affordable homes have been included in these developments, the overall effect is an increase in housing prices to a level where only the higher income groups in the community can afford to purchase or rent (Jeddah Economic Forum, 2013), thus forcing middle-income developments to be moved further away from city centres and towns.

In contrast, "the financial institutions in the Kingdom of Saudi Arabia have not yet developed a feasible strategy or a flexible mechanism with which to deal with such a

situation, taking into account the religious and cultural backgrounds of the population"
(Sidawi & Meeran, 2011:138), and yet these issues still exist (GIZ, 2013). However, as
discussed earlier, more recently in 2019, the SMOH, in collaboration with the REDF, is
working on new policies with financial institutions aimed at providing SA citizens with
new financial solutions (REDF, 2019; SMOH, 2019a; SMOH, 2019f). However, it is
important to mention that the banking sector in Saudi Arabia is more constrained than in
the UK and US, not least because of the focus of financial legislation and regulations on
compliance with the fundamentals of Islamic law (Sidawi & Meeran, 2011), which does
not allow for interest-bearing financial products to be developed as discussed in more
detail in Chapter 3 of this thesis.

Over recent decades, the Saudi Arabian government has been putting into place several
financing mechanisms aimed at the development and sustainability of its affordable
housing strategy. However, in the early 1980s, due to a "drop in oil prices" the
government "has cut back on its commitment to housing" which mainly means its
commitments on financing the housing sector (Mubarak 2007:1). The REDF project
discussed earlier in Chapter 3 also benefitted the sector by assisting in the development
of over half a million residential units (Al-Kadi, 2004; REDF, 2019). However, more
recently, the government has recognised the need for further private investment to
improve the performance and objectives of the affordable housing sector as discussed in
the introduction section of Chapter 3.

4.5 The conceptual framework

To sum up, the literature review has shown that understanding the three elements of socio-
cultural considerations, public policy and regulations and public/private production and
financing and the relationship between them is crucial to reaching clear answers to the
research questions and understanding the main issues which the Saudi government needs
to acknowledge in the future regarding affordable housing. It is also important to point
out that there is a strong global and regional influence on these elements. This knowledge
has helped the researcher to conduct the analysis and ask the right set of questions to
different targeted stakeholders involved in the housing process in Saudi Arabia.

Based on this foundation, from the review and analysis conducted in the previous chapters
and the conclusions that were drawn, the following conceptual framework was developed

for the study (Figure 4.1) and will be used as a roadmap for the study and provides the foundation for the methodology and research design in the next chapter (Chapter 5).
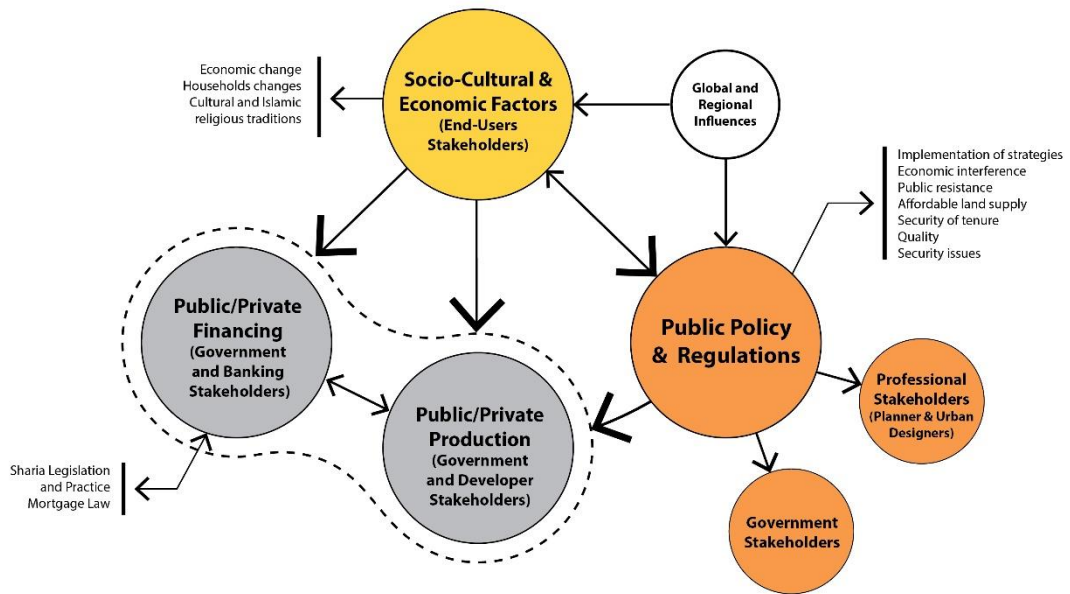
Figure 4.1 Conceptual Framework

In this framework, the three main elements are represented by larger circles and the different stakeholders are also identified. The interrelationship between the different elements and the stakeholders are shown by arrows. The larger arrows suggest greater impact according to the literature. For example, socio-cultural and economic factors feed into financing solutions, and mortgage law (which is not implemented yet in SA) and Sharia solutions affect some of the finance regulations (Sidawi & Meeran, 2011; GIZ, 2013; SMOH, 2016g). This is very important in SA as the literature shows that imported financial solutions may not be suitable to all end-users due to their religious beliefs and their reluctance to accept interest-based loans ("Kingdom Needs", 2009; Roberts, 2010). It is also clear that when potential homebuyers need a large down payment or, in some cases, large payments to buy a home, the finance sector should respond by finding an appropriate solution as it could take many families about 15 years to save the money needed in order to buy a house (Assaad & Roudi-Fahimi, 2007; Singerman, 2007; Dhillon & Yousef, 2009).

This conceptual framework will be used to identify the critical drivers of affordable housing policy in Saudi Arabia. By considering professionals such as planners and developers and acknowledging their fundamental role in addressing housing issues, these two stakeholder groups are key actors in the process and will be interviewed in the data collection process outlined in Chapter 5.

4.6 Summary

Three major elements, multiple factors and associated stakeholders were identified from the literature in Chapters 2 and 3 and the interrelationship between them helped to design a conceptual framework to inform the methodology (Chapter 5) and subsequent chapters (the analysis in Chapters 6 and 7). It was clear that these different stakeholders do not communicate effectively with each other and many reports have explored the gap between government sectors and have highlighted the absence of transparent and reliable housing data (GIZ, 2013; SMOH, 2016a). One of the main reasons for establishing the Ministry of Housing in 2011, government sources argued, was to regulate and control the Saudi housing market, and to organise the market by unifying all the different housing sector stakeholders under one umbrella to save effort and produce the best for the housing market.

The conceptual framework also identified a secondary element that contributes to the dynamics of the relationship between the three major components. Global factors, such as the cost of building materials, can play a significant role in the delivery and prices of housing units as well as the different financial products available for use in Saudi Arabia. The framework also incorporated economic, cultural and social changes which in particular impact on the end-user stakeholders. In Chapter 5, which looks at the research methodology underpinning this thesis, the different stakeholders' views on relevant policies will be examined.

Chapter 5: Research Methodology

5.1 Introduction

The discussion presented in the literature review in Chapters 2 and 3, and the conceptual framework in Chapter 4, have served to identify the key elements that form the foundation for understanding the structure and aims of affordable housing policy in Saudi Arabia. The discussion has also provided insight into the connections and interactions between different stakeholder groups involved in the development of affordable housing as well as the factors that are likely to influence new policy in the country. Collectively, these elements and factors provide the basis for further study into how this housing policy translates into the practical environment.

The central aim of this study is to explore the challenges of affordable housing policy in Saudi Arabia to aid the development of the conceptual framework that can help scholars and stakeholders to understand the needs of middle-income households in Saudi Arabia. This will be achieved by identifying the critical drivers that influence the development of affordable housing solutions from both a planning policy and socio-cultural perspective. In addition, the study aims to identify challenges and opportunities for middle-income households who face difficulties in owning their first home.

Therefore, the objective of this chapter is to identify and discuss the methods and tools adopted to collect this information. In addition, the scientific background and rationale behind the study are critically appraised to justify the methods used. This chapter also describes the data sources and how study participants were selected, and other stages of the research including the management and analysis of data. Using this approach, this chapter attempts to justify the methodology that was adopted for the study and explores its effectiveness in answering the research questions. It further provides an appropriate foundation for the examination of critical factors that have adversely affected the development of affordable housing policy in Saudi Arabia.

The conceptual framework developed by the researcher for this study (see Chapter 4) was used to develop a mixed-method approach that was felt to be appropriate to answer the research questions. This mixed-method approach combined two processes designed to gather the data needed to meet the objectives of this PhD research. The first method was a quantitative approach, where questionnaires were distributed to a sample of university teaching staff working in SA. The data were then analysed to help answer the first two

research questions. This was followed by a second research method using a qualitative approach, comprising 40 interviews conducted with major stakeholders in housing and other related sectors. These stakeholder groups were identified through the conceptual framework (see Chapter 4), and were as follows:

1. End-users (a sample of teaching staff at King Abdul-Aziz University). This comprised two subgroups:
   a) End-users with a planning background.
   b) End-users without a planning background.
2. Government officials (this included the SA Ministry of Housing)
3. Planners (this included planners at the municipality of Jeddah)
4. Developers and housing contractors.
5. Employees of financial institutions (banks).

These stakeholders represent those connected with the practical implementation of affordable housing policy in the country. Not surprisingly, all the previously mentioned stakeholders have been considered by the newly established SMOH, and their roles have been discussed in more detail in the literature review in Chapter 3.

The analysis of the results and its discussion will be outlined in detail in Chapter 6 (quantitative data analysis) and Chapter 7 (qualitative data analysis). Therefore, the research questions that formed the basis for the research outcomes are:

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

2. What are the causes of these issues and who are the main actors involved?

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?

4. How do these current policies address the problem of middle-income affordable housing?

5. How can these policies be developed further to address existing or future issues?

6. Which other policies can be introduced to contribute to a solution?

5.1.1 Rationale for adopting a single case study method and its selection

The purpose of a case study approach is to enable the researcher to conduct an in-depth analysis and evaluation of an event or activity that is occurring within a specific environment, including those that occur within a specific social context (Creswell, 2014). The use of a case study approach also allows the researcher to gather detailed data using a range of collection methods (Stake, 1995; Yin, 2009), including the survey and semi-structured interviews outlined in the next subsection. Thus, it can be argued that the use of a case study method was appropriate for collecting data related to affordability in the housing sector in Saudi Arabia.

When investigating issues related to a specific topic, the geographical location of the chosen case study is very important (Yin, 2009). In this context, as the author Robert Yin indicates, although the use of multiple case studies is often advised for research purposes, he also argued that, "the single-case study is an appropriate design under several circumstances" (Yin, 2009:47). According to Yin (2009), this type of study design should test a well-formulated theory and the case study has to be unique and representative of a larger sample.

Yin (2009) also confirms that the use of a single case study design is not uncommon and is regarded as sufficient for the development of theory. This is especially evident where the study is focused on a geographically specific subject matter as in this case, where the research focus is affordable housing policy in urban areas of Saudi Arabia and the impact on middle-income population groups. As there are only three main urban areas in the country, Riyadh, Jeddah, and Khobar/Dammam, all of which follow the same set of policies, there is only a slight difference between them from this perspective. Given that housing policy in Saudi Arabia is developed and implemented at a national level, each of these urban centres will have similar policies to the other two, making it logical to focus on one area, which would therefore provide a representative case study. In this respect, while one case study might limit the generalisation of the findings and the research outcomes (Yin, 2009), the intention of the study presented here is to evaluate affordable housing policy and practices in one major urban location in Saudi Arabia where, by inference, the findings may be representative of policies in other major Saudi cities as well as policies adopted by other Gulf states, such as Bahrain, Kuwait, Oman, Qatar and United Arab Emirates, as they exhibit similar governance structures, cultures, policy initiatives, and urban housing needs.

The city of Jeddah was specifically selected for two reasons. The first was the economic, social, and global Islamic importance of the city to Saudi Arabia. The second was that it was easier for the researcher to gain access to relevant information there and to the stakeholders needed to provide the primary data for the research as he is originally from and works in the city. Therefore, to further support why Jeddah was chosen as a single representative case study, Saunders *et al.* (2009:146) argues that "the case study strategy also has considerable ability to generate answers to the question 'why?' as well as the 'what?' and 'how?' questions" (Saunders *et al.,* 2009:146). The adoption of the case study approach for the current thesis concurs with this argument by seeking to resolve the questions of why housing affordability has become such a problem for the middle-income population in Jeddah, which factors have contributed to this problem and how these can be resolved. In the context of the 'how' question, the outcome of the thesis is to provide recommendations in the form of strategies that can be developed.

5.1.2 Rationale for selecting the sample

The majority of the teaching staff in Saudi Arabian universities, due to their income, are readily identifiable as part of the middle-income group in the country. This group comprises a large number of individuals of the right age, salary, and family size to own their own home and qualify for affordable housing benefits. Another advantage of having this group as participants in the study is the principal researcher's relative ease of access to this audience and the increased likelihood of their cooperation in the research due to the levels of education and familiarity with online questionnaires which they exhibit. More importantly, the researcher has targeted members of the teaching staff at King Abdul-Aziz University (KAU) in Jeddah due to his relationship with the institution. The University staff also fulfils the definition of the middle-income group as defined by the SMOH which is: employees of the public or private sector, and private self-employed business owners with a monthly household income of 13,000-20,000 SR (£2,600-£4,000) (SMOH, 2016b). This household income, due to cultural factors related to the role of women, is only based on the husband's salary and is not a composite of the income of all the working members of the household. This is set to change soon as many women are currently working and earning a monthly salary so they can contribute to the future repayment of loans. Certainly, there is a political appetite in SA to revolutionize the role of women in Saudi society. One recent, heavily-publicised initiative was the removal of the driving and travel ban on women which will eventually empower women to seek financial independence.

5.2 Scientific background of the research methods

A mixed-method approach means research that generates both quantitative and qualitative data (Bryman, 2012). As Bryman (2012) discussed, there is a debate as to whether one should combine quantitative and qualitative research or not. Indeed, some researchers have argued that, based on "epistemological principles", the combined approach adopted in "mixed methods research is not possible" (Bryman, 2012:631). This argument is founded on the view that although there may be some connections between the two approaches (Bryman, 2012), combining data from the two approaches can be challenging.

However, proponents of the mixed method approach counter-argue that it enables the researcher to be able to study a specific issue from two perspectives (Bryman, 2012). Indeed, as Creswell (2014:32) confirms, the "combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone". Generally, studies based on a mixed-method approach tend to commence in the first instance with the collection of broad data through a questionnaire (Bryman, 2012; Creswell, 2014). The benefit of this data collection method is that it enables the research "to generalise the results to a particular population" (Creswell, 2014:48), which for the current study will be middle-income groups located in Jeddah. It is therefore apparent from this discussion that the adoption of the mixed-method approach not only provides the researcher with the opportunity to test the effectiveness of existing theories, but also enables the development of new theories, based on the findings from each strand of the study (Creswell, 2014). However, a mixed method approach is time-consuming and requires multiple resources which puts pressure on the researcher to acquire more skills. It also needs skilful and in-depth presentation and triangulation of results from the two branches of the research (Bergman, 2008).

As noted in the introduction to this section, this research has used a mixed-method approach comprising online quantitative questionnaires and qualitative semi-structured interviews. Therefore, the study uses an exploratory rather than an empirical approach (Saunders *et al.,* 2009). This should allow the researcher to focus on identifying insights related to the issues being examined (Saunders *et al.,* 2009). Mixed-method research is becoming increasingly popular where views and opinions are collected and linked to other numerical data such as the participants' demographics and earnings. In addition, answers to closed questions (requiring only a 'yes' or 'no' response) or questions using a Likert scale can be regarded as numerical data and are therefore categorised as quantitative data.

These two types of data can be triangulated to answer the research questions. Indeed, mixed method approaches are now accepted as a robust methodology because data of different types are included (Moore *et al.,* 2016).

In the research presented here, stakeholders represent those connected with the practical implementation or use of affordable housing policy in Jeddah and they form the main case study for this research. This approach has allowed the researcher to identify key themes, which can lead to the development of a new theory (Bryman, 2012). As this is an exploratory methodology, it has also provided the researcher with the ability to examine the relationships that may exist between the phenomena and the concepts which has been identified (Saunders *et al.,* 2009). Furthermore, an inductive approach was adopted for this study, defined simply as "a theory building process, starting with observations of specific instances, and seeking to establish generalisations about the phenomenon under investigation" (Hyde, 2000:82). This is different from the deductive approach which starts with an established theory and examines if the findings fit the theory.

Therefore, the inductive approach enabled the researcher to better examine and explore how people individually, and as groups, are likely to behave (Bryman, 2012).

5.2.1 Sources of primary and secondary data

The aim of this research is to identify and examine the main drivers of the housing market in Saudi Arabia. The actions of stakeholders who influence affordable housing policy and practices in Jeddah will be analysed from both a planning and socio-cultural perspective. For these reasons, both secondary and primary data collection processes formed an intrinsic part of the research design.

The literature review was predominantly used to critically examine the existing published research focused on the study of the affordable housing concept. This approach enabled the researcher to explore how this research have been incorporated in the affordable housing policies of various nations, and specifically Saudi Arabia.

It has been confirmed in the literature that this research design not only improves the validity of the study, but may also address concerns related to the subjectivity and reliability of the research methods and findings (Yin, 2009; Bryman, 2012). However, as an integral part of the research design process, it was also important to include a testing process to improve the reliability of the study, and the inclusion of the interviews partly facilitated this element of the design process.

Therefore, the quantitative and qualitative primary data which were collected first-hand will be supported by secondary data from multiple sources, which should improve the strength of the research findings and conclusions. However, data sources on affordable housing in Saudi Arabia such as government reports and press releases will only be used to identify and analyse existing affordable housing policies in Saudi Arabia. It is clear, though, that the primary data collected from the quantitative and qualitative studies will be the core data that is used to identify the main themes. To summarise, the research stages are as follows:

- An extensive literature review;
- A review of the existing affordable housing policies in Saudi Arabia;
- Data collection and analysis using both quantitative questionnaires and qualitative semi-structured interviews targeting key stakeholders in Jeddah;
- Testing the findings from both methods; and
- Triangulating the results.

The following sections will examine both the quantitative and qualitative research approaches employed in this thesis.

5.3   Quantitative method

The literature has confirmed that the basis of quantitative research is a focus on a "postpositivist worldview, experimental design, and pre-test and post-test measures of attitudes" (Creswell, 2014:48). This means that quantitative methods are founded on examining existing social rules and structures for reliability (Bryman, 2012). In other words, in this scenario, the researcher tests a theory by investigating the validity of a specific hypothesis (Bryman, 2012; Creswell, 2014). For example, in the context of the current study, this method focuses on assessing whether or not current housing affordability policies in Saudi Arabia are being effectively implemented. As Creswell (2014) discussed, for this purpose it is important to analyse relevant (quantitative) data that explores affordability issues as they present themselves prior to government policy intervention. Then, there can be an analysis of the effects of post-policy intervention on the selected population group in terms of addressing their housing affordability problems. In addition to the practicality of collecting data through questionnaires from a large number of people in a short amount of time, the quantitative data can be analysed more

objectively than qualitative data. If this type of data is quantified (for example, by using Likert scales) it will be easier to contrast and compare with other research outputs (Ackroyd & Hughes, 1981). However, questionnaires are not the best method for capturing emotions and behaviour in detail. In addition, there is no way to measure the truthfulness of the data collected and there may be errors in the recollection of events. Also, people understand questions differently and the role of the researcher in posing the questions is vital to the type of response he or she may receive from interviewees.

5.3.1 Analysis of Quantitative data

To analyse the data, the researcher has chosen an appropriate statistical approach in terms of data type and the goal of the analysis. Since the data collected during this PhD programme can be continuous, categorical, ordinal (e.g. ranks or levels) or nominal (e.g. males versus females, etc.), non-parametric methods were used (Corder *et al.,* 2014). To examine the relationship between two variables, the researcher used two methods. Using cross-tabulation, the Chi-square test was used to test whether there was any relationship between two nominal variables. Chapter 6 will discuss the main results from the questionnaires.

Since the aim of this research is to investigate the housing affordability of middle-income academic staff, comparisons with different levels of income were deemed essential. Participants from three income categories (low, middle and high) were recruited. Comparisons between these three categories in terms of characteristics and opinions were tested using the Chi-square test. By adopting this approach, the characteristics of the middle-income group can be better understood, and factors affecting their affordability can be explored.

Quantitative research is, as noted by some in the literature, a traditional "approach that has been the dominant strategy for conducting social research" (Bryman, 2012:160). In this respect, the focus of this approach is to build on the existing theories to examine and explain particular social phenomena and issues surrounding particular social factors. However, unlike qualitative data, quantitative data have to be able to be statistically measured. The reason for this, as suggested by Bryman (2012) is so that the researcher gains a more detailed view of the relationship between different variables. In this case, the author wanted to gain a detailed understanding of the impact that affordability issues have on people within the social fabric of their national environment.

As Creswell (2014:48) confirmed, one of the benefits of the use of quantitative data in this context is that the information accessed can be "analysed using statistical procedures and hypothesis testing". Therefore, in terms of measurements that can be applied to the quantitative data, this applies to the findings and the extent to which certain factors can be statistically counted, which as Bryman (2012) indicates, would include salary, total income and data on levels of education. For example, in the context of the current study, the results of the survey questionnaire can be measured statistically to identify the percentage of middle-income respondents who have been adversely affected by the increase in housing affordability issues, and which age group of respondents have been most affected by this factor.

As previously discussed, notwithstanding the perceived benefits of quantitative measurement, the literature has confirmed that statistics, particularly those presented as percentages, tend to be focused on the mean or average opinions. Thus, they do not take into account the human impact of the issues being discussed. In other words, it has been argued that the adoption of a quantitative approach in isolation does not sufficiently consider the opinion of citizen groups and the institutions who are intimately involved with, or affected by the issues being discussed in terms of *why* they feel the way they do (Bryman, 2012). Therefore, many different research approaches attempt to use different indicators to overcome this problem (Mulliner *et al.,* 2013).

5.4   Qualitative method

The quantitative approach seeks to determine whether existing theories, in this case the affordable housing policies adopted by Saudi governments, can be proven effective. In contrast, the qualitative approach seeks to develop new theories, which are based on observations of and discussions with stakeholders who are most directly involved with and affected by the issues being examined (Bryman, 2012; Creswell, 2014) which, for this study, are issues of housing affordability among the middle-income populace in the city of Jeddah, Saudi Arabia. Thus, for this purpose, as indicated by Creswell (2014:48), one of the best ways to achieve this outcome is by interviewing these stakeholders "at some length to determine how they have personally experienced" the issues and changes in housing affordability within the Saudi urban environment.

The benefits of conducting interviews include accurate screening of different issues as they are based on face-to-face interaction. Additionally, the interviewer can capture both verbal and non-verbal cues, observe emotions and behaviours, and focus on the important questions. There is also sufficient time in this situation for the interviewees to reflect on issues (DeFranzo, 2014). However, interviews incur more time and resources and often involve traveling (DeFranzo, 2014). In addition, the quality of the data revealed will depend on the interviewer's skills. Fortunately, in this research, the questionnaire findings will inform the qualitative stage and will help the researcher to focus on the most significant issues in the interviews. Another disadvantage of interviews is the manual entry of data (e.g. transcribing the interviews and in some cases translating them) (DeFranzo, 2014). Finally, because of the time-consuming nature of interviews, the number of participants to be interviewed has to be limited and therefore the method of selection is critical. In this research, the selection of interviewees was based on purposeful sampling (Palinkas *et al.,* 2015), and careful planning was devoted to the selection process to reflect the stakeholders identified through the literature review and the conceptual framework.

In this PhD project, different stakeholders were interviewed, and the data generated are their opinions on different aspects of affordable housing in SA. The main category of stakeholders interviewed were individuals (end-users) from the middle-income bracket who are looking to purchase their first home. The analysis of qualitative data is a crucial part of this study which aims to identify significant views of stakeholders about affordable housing policies, and in particular, the challenges and opportunities involved in making recommendations on strategies to provide affordable housing to the growing population in the country. The focus of this study was on professional employees who are categorised as being part of the middle-income bracket. The sample included members of the teaching staff at KAU in Jeddah, SA who all fall within the target middle-income group.

Data collection and the questions asked during the interviews were informed by the conceptual framework developed for this research in Chapter 4. The selection of interviewees also reflected various elements in this framework. For example, Sharia legislation and housing finance law were discussed with both the end-users and the participants from financial institutions. This, in turn, linked to socio-cultural factors that affect end-user's choice of type of real estate loan according to their beliefs and religious practices as discussed in detail in Chapter 3.

That said, one of the main goals of the analysis of these data was to test the conceptual framework developed for this research. Therefore, the relationship between housing market regulations, the development of affordable housing and the factors affecting end-users have all been investigated in the interviews and have guided the analysis of the data to understand how all these key themes and factors interact. The following section will explore the characteristics of the interviewees in more depth.

5.4.1 Analysis of qualitative data

In the context of social research, many scholars agree that the most widely used approach for analysing data is thematic analysis (Braun & Clarke, 2006; Bryman, 2012; Guest *et al.*, 2012). As the term indicates, the purpose of this analysis model is to find common themes that can be analysed and examined throughout the data. In terms of qualitative data, Braun and Clarke (2006:78) confirmed thematic analysis as being a "foundational method for qualitative analysis" as it is helpful in terms of "identifying, analysing and reporting patterns (themes) within data". This can be achieved by identifying the themes that emanate from the data, coding them in an appropriate manner, and refining the themes so that an analytical outcome can be extracted (Braun & Clarke, 2006). There are two methods of carrying out thematic analysis, either inductive ('driven by data') or deductive (theoretical), as in 'driven by the researcher's own observations' (Braun & Clarke 2006). However, as the current study was based on a mixed method format, it can be argued that a combination of the inductive and deductive approaches was used. The former was predominantly used for the thematic analysis process as the coding was driven by the outcome of the primary data and therefore served to develop new theories rather than those that had been preconceived. In contrast, the deductive approach was used for the purpose of analysing the secondary (quantitative) data, for example, that which has been analysed in the literature review.

The qualitative software used in this research to analyse and code the data collected from the interviews is 'Dedoose' (Dedoose, 2018), which is an online coding programme with similar features to 'Nvivo', but which is more intuitive and visual in nature. Despite the potential disadvantages of the thematic analysis approach, which are mainly related to its subjective nature, it provides the research with a more in-depth understanding of the issues being addressed, and therefore improves the validity of the findings (Guest *et al.*, 2012).

As mentioned above, to understand the interviewees' views on different aspects of this topic it was essential to follow a thematic analysis plan based on the principles laid out by Braun and Clarke (2006). Therefore, in this analysis the following steps were applied:

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┌─────────────────────────────────────┐
│   1 – Familiarisation with Data      │
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┌─────────────────────────────────────┐
│   2 – Generating Initial Codes       │
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┌─────────────────────────────────────┐
│   3 – Redefine Codes & Searching for │
│               Themes                 │
└─────────────────────────────────────┘
                  ↓
┌─────────────────────────────────────┐
│   4 – Reviewing Themes               │
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│   5 – Defining & Naming Themes       │
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│   6 – Producing the Report           │
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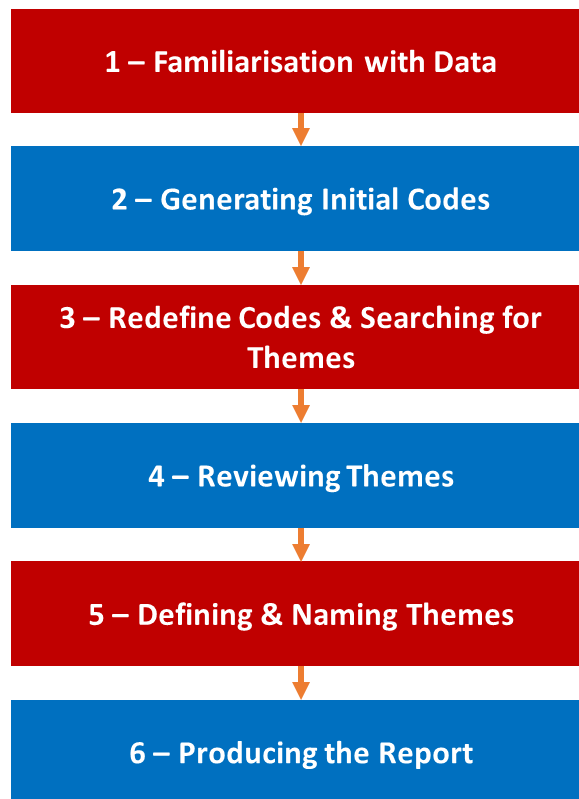
Figure 5.1 Thematic analysis steps (adapted from Braun & Clarke, 2006)

Each step in this process will be detailed further in the following section:

1- Familiarisation with the data

Through full immersion in and engagement with the transcripts and listening to the recordings, initial ideas and codes were introduced. All the interviews were semi-structured in nature, meaning that the main topics (questions) were pre-prepared but there was time for the interviewees to elaborate and in some cases raise further topics. All the interviews were later transcribed, translated from Arabic to English and then proofread. The English transcripts were then entered as media items into Dedoose.

2- Generating the initial codes

In Dedoose, it was possible to manage all the transcripts and to start the first step of coding to identify the preliminary codes attached to the data that appeared interesting and

meaningful. These codes are more numerous and specific than themes, but provide an indication of the context of the conversation. In this initial coding, parts of the transcripts were highlighted and then an initial code (usually one word) was linked to it. In this way it was possible to search for parts of the transcript for subsequent (or secondary) coding. These secondary codes are considered refined codes and they were intended to be meaningful, so that they could be arranged into themes later (see Table 5.1 for a sample). The subthemes then aligned to the themes informed by the conceptual framework developed by the researcher in Chapter 4.

Table 5.1 - Examples of codes, sub-themes and themes which emerged from the thematic analysis of interviews.

Initial codes	Refined codes	Sub-themes	Main Theme
Land	Land is expensive within the city	Negative: Land is scarce and expensive Positive: Land on the outskirts of the city may be affordable	Opportunity: the land problem can be resolved partly by developing transportation from the outskirts of the city where land is cheaper
Government	There is not enough land available within the city		
Transport	Transport from outside the city is not developed		
Developers	There are many white land areas* outside the city		

* *Undeveloped lands that were allocated – within the urban area of the city - for residential or commercial usage (SMOH, 2016d).*

3- Redefining codes and searching for themes

Relevant data extracts were sorted according to the redefined codes which were created to reflect both the initial code and its weight and quality. For example, if the code was 'Government', then the redefined code should reflect what the interviewee said about it, whether it was negative or positive and to what extent the Government is reflected in his or her answer (weight). Similar codes were grouped together to create sub-themes which in turn fed into a theme or a concept based on the research question.

4- Reviewing themes

The themes were based on what was present in the data and linked to the conceptual framework developed in Chapter 4. Specifically, the purpose of the themes was to answer the research questions and, in particular, the question of affordability and how this impact middle-income interviewees trying to acquire a house. At this stage, careful reconsideration of the relationship between the codes and sub-themes took place and this relationship was cross-examined through the media (transcripts). A thematic 'map' was generated from this step.

5- Defining and naming themes

Refining and defining the final themes should yield a narrative that is supported by vivid quotes from the interviews. The final themes reflected concepts and views around the three main elements (socio-cultural considerations, regulations, and finance) and other interlinked elements present in the conceptual framework. Each theme was informed by the data from the interviews and enabled a narrative that helped to answer the research questions centred on the concept of affordability. At this stage, the main themes were named and linked to each other in the overall narrative.

6- Producing the report

This stage involved the interpretation and final write-up of the identified themes in order to answer the research questions. Further comparison between different groups of interviewees were presented. A final simplified thematic map and an overall conclusion were used to summarize the findings.

5.5 Data merging and outcomes

5.5.1 Data source

For the current study, a combination of questionnaires (survey) and semi-structured interviews were selected as the main sources of data. This was further augmented by an archival review and analysis of local housing policy in Saudi Arabia, and a translation of government reports from Arabic to English. The semi-structured interviews were especially beneficial as they allowed the interviewer to encourage further discussion of issues which may not have been included in the original question list (Saunders *et al.,* 2009; Bryman, 2012).

Saunders *et al.* (2009:355) believe that "the use of personal interviews, where appropriate, may [..] achieve a higher response rate than using questionnaires". However, it is equally apparent that conducting personal interviews is a costlier and more time-consuming form of data collection than the use of a survey questionnaire (Saunders *et al.,* 2009), as a survey is usually easier to conduct and less expensive to manage. Nonetheless, the use of a questionnaire also has disadvantages, among the most important of which is that it does not provide a method of gathering in-depth information related to the issues being explored for the research (Saunders *et al.,* 2009; Bryman, 2012; Creswell, 2014). It is for this reason that, as Saunders *et al.* (2009) state, "it may be better to link them [questionnaires] with other methods in a multiple-methods research design" (Saunders *et al.,* 2009:393). Therefore, to achieve the most beneficial outcome in terms of data collected, the mixed method approach of both semi-structured interviews and a survey questionnaire was adopted for use in this study. These methods will be outlined further in the next section.

5.5.2: Data collection merging

As a single case study approach has been adopted for the current study (Yin, 2009), completion of the second stage of the research process was reliant on the outcome of the questionnaires and semi-structured interviews and their analysis. For this study, 40 interviews were conducted with different stakeholder groups as identified in the conceptual framework (see Chapter 4) and earlier in this methodology chapter. Additionally, an end-user survey was prepared, and data were collected from 244 participants. The questionnaire explored the socio-cultural and economic factors that affect participants' understanding of and ability to acquire affordable housing units. By using two methods of data collection and a combination of qualitative and quantitative data, the study triangulated the data, thus strengthening the results.

As Saudi Arabia's culture is conservative by nature, the interview process was designed to conform to the country's religious and cultural norms. For example, special consideration was given to the format of interviews conducted with female participants as some were hesitant to meet a male researcher in public and preferred to be interviewed at their place of work. Nonetheless, based on the researcher's knowledge of Saudi Arabia, it was found that the interviewees, irrespective of gender, openly responded to the issues being discussed as they related to improving the growth of the country and the subject matter did not include criticism of its religious and/or political policies and practices.

The researcher's field trip took place between 1ˢᵗ March and 31ˢᵗ May 2017 (a period of three months) in Jeddah, Saudi Arabia. The researcher began by requesting and receiving permission from KAU's main IT department to distribute the survey questionnaire to members of the teaching staff. The online survey was distributed to 6,938 academic employees in total. For the quantitative study, the researcher set a target of 100 respondents, based on his sample size calculation, but successfully received 244 responses.

5.6 Summary of the Stages of the Research Design in this thesis

As Yin (2009:26) indicates, "a research design is a logical plan for getting from here to there". The plan commences by developing the initial research questions and structuring an appropriate methodology to meet the research aim. In this case and as Figure 5.2 illustrates, the four main stages were: a review of existing housing policies (Chapter 3), the collection of data through questionnaires (Chapter 6) and conducting face-to-face interviews (Chapter 7).
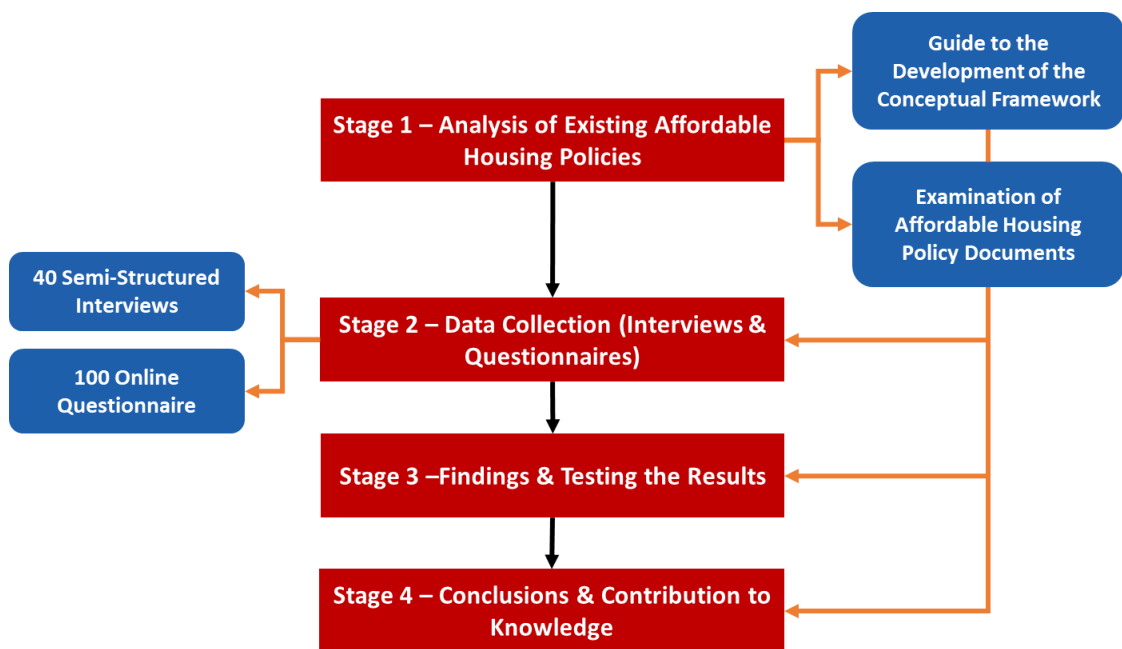
Figure 5.2 Research Design Plan

Considering the content of the research process as indicated in the above diagram, the following discussion explains in more depth the stages of research. It is apparent from

this diagram and the discussion presented in this chapter that the development of the research process, and more importantly the conceptual framework developed for this research (see Chapter 4), were highly dependent on the extent to which the previous stage had been completed by the researcher.

5.6.1 Stage one: Secondary data collection - review of affordable housing policies

The objective of the first stage was the collection, examination, and critical review of relevant affordable housing policy documents in Saudi Arabia. A critical review of the policies was incorporated into the literature review and provided a guide to the development of the conceptual framework, which was introduced in the review of local literature in Chapter 3 and then developed in Chapter 4. This was combined with the outcome of the primary research conducted by the researcher in stage two of the research process, as explained below.

5.6.2 Stage two: Primary data collection and analysis

Data for the literature review were initially extracted from the literature, research reports, and electronic sources. To ensure that the research yielded strong findings and conclusions, multiple techniques were used in the data collection and analysis process. To this end, data were collected in the field from government organisations, residents, and real estate professionals, through questionnaires and semi-structured interviews, which allowed the study to focus in-depth on the issues under review.

As Saudi Arabia is a large and diverse country, socio-cultural networks also differ from one area of the country to another. Therefore, a case study research methodology based on one representative case, namely the city of Jeddah, was used in the research process.

As previously discussed, this approach encompassed the use of quantitative questionnaires and qualitative semi-structured interviews with the main stakeholders. Each will be further described in the following sub-sections.

Questionnaires

For this study, data for the end-user group (academics at KAU) were collected through an online questionnaire targeting 100 responses. This sample size was calculated using an online calculator (Dhand & Khatkar, 2014). In this calculation, the logic was that by assuming that 90% of the end-users in the selected population (University academic staff) have an interest in the housing issue, the study would require a sample size of 98 for estimating the expected proportion with 5% absolute precision and 90% confidence

(Dhand & Khatkar, 2014). In other words, if a random sample of 98 people from this population was selected, the confidence level in the results would be between 85% and 95%.

The number of responses received totalled 244 by the end of the field trip in May 2017. However, as the aim of this research was to develop an affordable housing model that is applicable to middle-income households in Saudi Arabia, the number of responses used within the data analysis process was limited to responses that fitted within this category. For reference purposes, the selection process was based, from a financial perspective, on middle-incomes as defined by the Saudi Ministry of Housing in 2016, which indicates that this relates to employees of the public or private sector, and private self-employed business owners with a monthly household income between 13,000-20,000 SR (£2,600-£4,000) (SMOH, 2016b). This household income reflects the man's income as, due to cultural considerations, calculations such are this are only based on the husband's salary, rather than the total income of all the working members of the household. Only Saudi middle-income individuals within this income range were targeted for the study. To facilitate this approach, as mentioned earlier, members of the teaching staff at KAU were targeted as a category of the middle-income group. Therefore, the researcher distributed his online questionnaire to 6,938 academic employees throughout the university's public domain network.

Furthermore, for home ownership, currently the Saudi government is helping all income groups, including the middle-income groups, in their affordable housing schemes. In some instances, the lower income groups cannot meet the minimum requirements for home ownership even with government assistance, and so they primarily depend on the public welfare system to assist in their housing needs (SMEP, 2014). In addition, middle-income households are the dominant category within the Saudi population as they form 52% of the population while the lower income population only represents 20% (SMOH, 2016a).

The literature around old housing policies in Saudi Arabia confirmed that the middle-income group can barely enter the housing ladder (i.e. to buy their first property) or afford to purchase and own a house directly from the market because most policies are directed at low-income groups, leaving the middle-income category with almost no support (SMEP, 2014). However, this has changed recently as the SMOH is providing some support based on an income of 14,000 SR (£2,800) or less (REDF, 2019; SMOH, 2019a;

SMOH, 2019f) as discussed in more detail in Chapter 3. That said, employees in the public sector, such as those employed by public universities are considered a part of the middle-income group and they were targeted by the researcher in the end-user category and in the quantitative survey due to the ease of access.

To summarise the questionnaire process, the online questionnaire survey was distributed to a sample of academics and employees (members of the teaching staff at KAU in Jeddah, Saudi Arabia) to answer the first two key research questions, which are:

> 1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?
> 2. What are the causes of these issues and who are the main actors involved?

The online questionnaire was divided into two parts. The main questions were for all participants and a more specific set of questions were adapted depending on their answers regarding their main residence, which differed as follows:

1. They fully own their main house/residence
2. They own their house but have a property loan on it
3. They rent their main house/residence
4. They live with their family (parents' house)
5. They live in KAU accommodation (which is provided by the university to all staff who carry a PhD degree. This needs to be applied for, and the turnaround time from application to being assigned accommodation can take up to seven years).

The questionnaire also gathered information about income and other demographic characteristics such as gender, age, and family size. The main reasons behind targeting members of the teaching staff in a public university, besides being considered representative of the middle-income group, can be summarized as follows:

1. Accessibility issues, as they are easy to reach through the university's digital network.
2. The response rate was expected to be high as they are from an academic environment that supports research initiatives.
3. They are known to be very interested in affordable housing.

Thus, they represent the highest educated segment of the middle-income category in SA. This is an important segment of the country's population which needs affordable housing policies that support them and their expanding families (SMOH, 2016a). Historically, being an academic had the appeal of job and financial stability. While there were 244 respondents which was more than the target, this number only represented a 3.5% response rate which suggested either apathy on the part of the university staff toward research into the housing market or their unwillingness to waste time online. However, as there was no way to know how many people had seen the survey on the university platform, it is possible that this response rate does not reflect reality. There is a need to re-emphasise here that as a mixed-method approach was used for this research, the quantitative chapter only attempted to answer the first two key research questions.

Subsequently, the qualitative analysis findings (Chapter 7) aimed to answer the remaining key research questions through 40 semi-structured interviews conducted with five (5) different stakeholder groups. The interviews were more formulated and focused on Saudi housing policies and their implications for the society and the country's economy as a whole.

According to the research objectives (Chapter 1) and the conceptual framework (Chapter 4), the focus is on Saudi Arabian middle-income individuals only, and hence income was a significant indicator. Participants were categorized according to their income into three groups (low, middle, and high).

Semi-structured interviews

Qualitative methods such as interviews, observations, case studies, and document analysis were expected to provide in-depth insight into the development of affordable housing policy in Saudi Arabia and its use in Saudi society. Therefore, data from the remaining stakeholder groups were collected through 40 qualitative semi-structured interviews. This sample size was purposefully selected to obtain rich data. The sample represents different stakeholders and was calculated and selected in accordance with the guidance from Bryman (2012) that what is needed in interviews is to reach saturation point. All interviews were completed by the end of May 2017.

The rationale for this multiple stakeholder group approach to the interview process is that each group, as described later in this section, have an influence on either the supply or

demand side of affordable housing policies and their outcomes in the targeted case study area.

All the interviews were conducted in Arabic and were then translated into English and transcribed. The interviews lasted approximately 30 minutes on average. Permission to audio record the interviews was requested, but unfortunately this was not granted by all interviewees, therefore, a combination of note-taking and audio recording was used.

In total, based on the examination and outcome of the literature reviews presented in Chapters 2 and 3 of this study, three dominant themes were used to shape the conceptual framework (see Chapter 4) and applied to the primary research process, which helped to construct the semi-structured interview questions. These three major elements consisted of:

1- Sociocultural Considerations;
2- Public Policy and Regulations; and
3- Public/Private Production and Financing.

In the specific context of this research, the conceptual framework developed in Chapter 4 was used to develop a mixed-method approach that focused on answering the following questions. To provide a focus for the study, the following research questions formed the foundation for the research outcomes:

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

2. What are the causes of these issues and who are the main actors involved?

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?

4. How do these current policies address the problem of middle-income affordable housing?

5. How can these policies be developed further to address existing or future issues?

6. Which other policies can be introduced to contribute to a solution?

The main questions set for the interview were based on the five different stakeholder groups that have been identified previously. However, to further clarify the direct effect of the national affordable housing policy, and its impact on members of the chosen stakeholder groups being interviewed, additional stakeholder-specific questions were also included in the interview.

5.6.3 Stage Three: Consolidating the findings and testing the results

Following on from the analysis of the findings presented in the critical review of the literature and the results of the interviews and questionnaire process, a triangulation process was attempted for the purpose of consolidating the findings. A triangulation comparative analysis approach was adopted, as recommended and discussed by both Saunders *et al.* (2009), and Bryman (2012), as this method is particularly beneficial in evaluating the outcome of the findings from the various tools used within the mixed methodology approach. The triangulation process serves to compare and combine multiple sources of data (quantitative and qualitative) and different data collection techniques (Saunders *et al.,* 2009; Bryman, 2012). Saunders *et al.* (2009:633) define the term triangulation as "the use of two or more independent sources of data or data-collection methods within one study in order to help ensure that the data are telling you what you think they are telling you". In his research, Bryman (2012:633) echoes this definition, adding that the outcome of the triangulation process is to assess whether the findings can be "mutually corroborated". Therefore, it is apparent that both definitions and explanations show the importance and strength of the triangulation method in validating the data gathered from different sources as is the case in the current study. Thus, this will allow the researcher to compare the findings from the secondary and primary sources examined and to reach reliable conclusions, the results of which will be discussed in detail in Chapters 6 and 7.

5.6.4 Stage four: Adjusting the framework, conclusions and the contribution to knowledge

In this stage, the final results were mapped according to the conceptual framework (see Chapter 4) and a range of theoretical and practical implications from the study were developed leading to practical recommendations.

5.7 Ethical issues

The literature indicates that "ethical issues arise at a variety of stages in social research" (Bryman, 2012:130), and that these have become an area of increasing consideration for any research study (Creswell, 2014). Thus, Saunders *et al.*, (2009) confirm the importance of ensuring that any academic research project is approached and conducted in an ethical manner. This is particularly relevant in studies that have used primary data collection (Saunders *et al.,* 2009), for example, to examine the views and perceptions of key stakeholder groups. Indeed, this is reiterated by Bryman (2012), who also adds that where these data collection methods include the involvement of human actors, as is the case with questionnaires and semi-structured interviews, it is important that these actors voluntarily give their consent to participate in the research process. In other words, the chosen data collection processes must be voluntary and people should not be forced into participating or put at risk as a result of their involvement. Additionally, they need to be made aware of the ethical approach adopted by the researcher, so that participants will not be subject to any kind of "embarrassment, harm or any other material disadvantage" (Saunders *et al.,* 2009:160). Furthermore, ethical issues also need to be considered during the data analysis and reporting stages of the research (Creswell, 2014).

In order to address the ethical considerations likely to arise in the current study, a number of actions were taken by the researcher, which related specifically to the following:

- *Permissions and consent*

  In the first instance, permission to conduct the research was sought from the University by submitting a proposal for approval by the University Ethics committee (Saunders *et al.,* 2009), which was subsequently granted by the research committee of Heriot Watt University. Additionally, permission was sought from the relevant organisations to conduct interviews with key employees. This ensured no harm would be caused to participants engaging with the project. Furthermore, a statement identifying the purpose of the project, the use of the data provided, and other ethical issues was provided for all participants, including end-users, together with a consent form that needed to be signed and dated prior to their participation (Bryman, 2012). In addition, interviewees were informed that consent would be sought to audio record the interviews for transcription to ensure accurate interpretation by the researcher (Bryman, 2012).

- *Privacy protection*

   Concerning the protection of privacy, the interviewees were informed that no data or information would be used that could lead to the identification of their personal details. In addition, those who agreed to do the interview would have the right to decide whether or not to answer each question, without the need to give a reason for choosing not to answer (Bryman, 2012). Thus, the study would not include the participants' names, replacing these with identifiers, as is noted in the appendices.

- *Data protection*

   As with all other projects involving human participants, the research project was conducted in accordance with the regulations contained in the Data Protection Act (HM Gov., 1998). In this respect, the interviews were conducted in a private location with only the researcher and participant present. The information and data collected and recorded were downloaded onto a password-protected computer to which only the researcher has access. Furthermore, on completion of the project, the data will be erased in accordance with the requirements set out in the Act and the Heriot Watt University Code of Ethics.

Given the ethical approach mentioned above, it was considered that the study did not pose a significant risk of harm to any of the individuals who agreed to participate in the research project.

5.8 Limitations of the research

It is recognised that all research projects and all research techniques have their limitations (Saunders *et al.,* 2009; Bryman, 2012). These limitations vary and differ from one research method to another and are generally linked to sampling biases related to the populations selected for participation, the location(s) chosen for the research study and/or "the restriction to one geographical area of an organisation" (Saunders *et al.,* 2009:538). Other limitations include bias in the selection of the literature to review, although in the case of this study, careful attention was paid to this process. It is worth noting that there is limited literature and information related to affordable housing policies in Saudi Arabia. Thus, the researcher considers that the literature reviewed was a representative sample of the most current research available.

Other limitations regarding the quantitative and qualitative studies used for this research were discussed previously in this chapter.

5.9 Validation

Bryman (2012) recommends validating the content and outcome of any social research project. Lincoln and Guba (1985) suggest that, to be valid, a research project must be credible and trustworthy, which means that the methods used must be appropriate and the data must be seen to have been gathered from reputable sources.

To ensure validity, Creswell (2014) identified six important strategies that the researcher should adopt, three of which were adopted for the current study as displayed in Figure 5.3 (Adapted from Creswell, 2014:259):

1. Data triangulation: The data were collected from multiple sources, which included questionnaires, interviews, researcher observations, and analysis of documentation.
2. Observations at research sites: A field trip to Jeddah and subsequent discussions with stakeholders ensured the quality of the onsite observation process.
3. Participatory research: The researcher was involved in every stage of the research, from the design of the project to checking interpretations and conclusions.
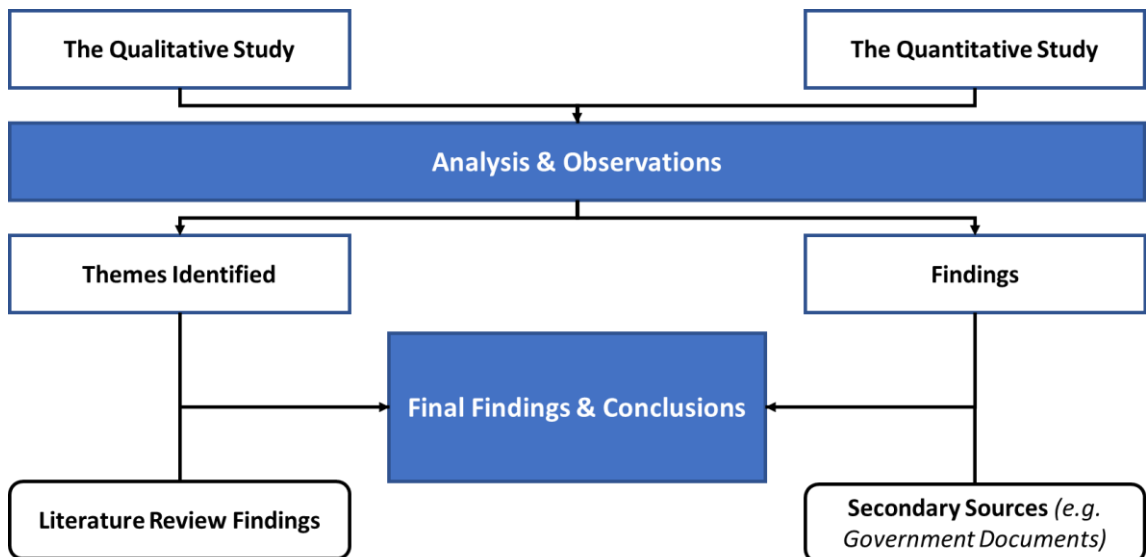
Figure 5.3 The triangulation process

5.10 Conclusion

To summarise, the content of this chapter has focused on identifying and justifying the methods and tools adopted to create an appropriate research strategy based on the conceptual framework which has been developed (Chapter 4). The methodology has been designed to enable the researcher to understand the key drivers of developing an affordable housing policy and strategy for middle-income households in Saudi Arabia, and to identify the effectiveness of these polices and strategies. As noted, a mixed-method approach was adopted. This included online questionnaires and the use of semi-structured interviews. Qualitative and quantitative analysis approaches were implemented to examine the findings in more depth. Both sets of results were then triangulated to ensure the validity of the findings.

Both methodological approaches were designed to capture data that could be analysed according to the conceptual framework. The questionnaire, for example, contains numerous questions on socio-cultural factors in order to clarify how significant these factors are in shaping views of housing needs. The open questions in the interviews were also designed to allow stakeholders to express their opinions on different housing policies. For example, the government official was guided to reflect on whether or not they think their policies are fit for purpose.

The chapter also identified how ethical factors have been considered in this process. The privacy of participants and their voluntary consent have been addressed. While there are some limitations, it is considered that the methodologies and tools adopted for the study have provided an appropriate foundation to meet the aim of this PhD research programme.

The analysis of the primary data, findings and outcomes of the research are presented and discussed in the following chapters of this thesis. Chapters 6 and 7 respectively will provide an analysis of the quantitative and qualitative data collected, which will address the research questions and serve to strengthen the triangulation process.

In summary, it is anticipated that the data generated from the questionnaire and the interviews will be rich and representative of the characteristics and views of the middle-income group in Saudi Arabia. The data will be analysed and discussed in relation to the conceptual framework developed earlier (Chapter 4), after which detailed conclusions and recommendations will be made about the challenges and opportunities in affordable housing for this category of end-users.

Chapter 6: Household Perspective (Quantitative Data Analysis)

6.1 Introduction

In this chapter, data generated from the questionnaire will be described, and different variables will be compared across the three income groups. Additionally, the findings will be discussed and linked to the conceptual framework where appropriate. The focus of the discussions as per the aim of the thesis will be the middle-income group's perspective on housing affordability.

To recap, the conceptual framework is presented here again (Figure 6.1), and the three main elements are:

1- Socio-cultural and economic factors affecting the end-users.
2- Public policy and regulations: the data here represent the views of the end-users only because no other stakeholders were asked to fill in the questionnaires in this study.
3- The views of end-users on public and private finance and housing production.
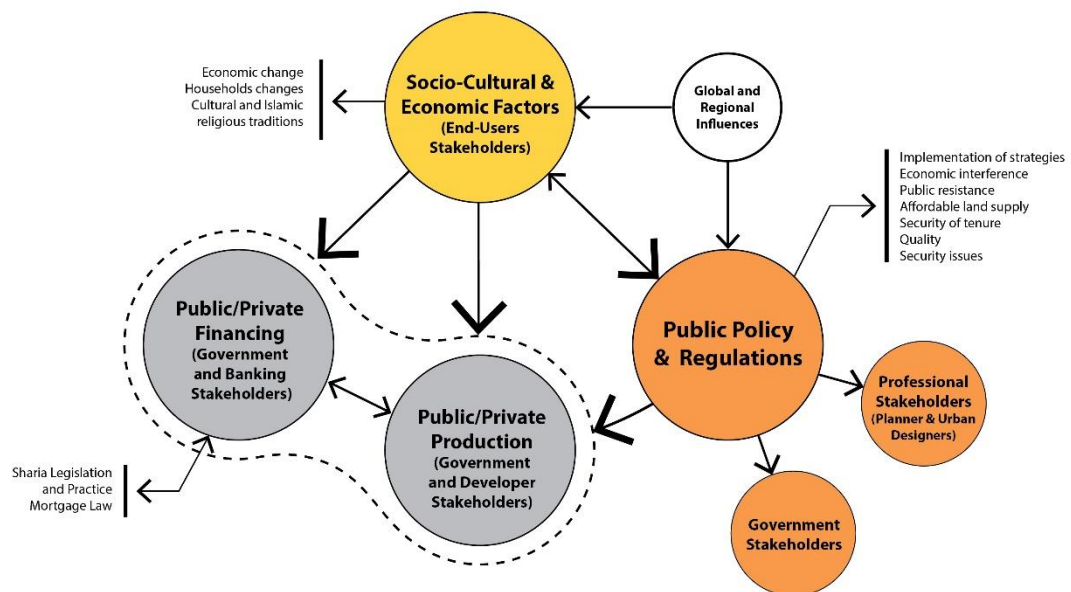
Figure 6.1 The conceptual framework.

From this dataset, it was found that just under half of the sample were categorized as middle-income (115 out of 244, equivalent to 47.1%). Additionally, the overwhelming

majority (91%) of participants were Saudi nationals and, because this study is only focused on Saudi nationals, a total of 22 expatriates (9.3%) were excluded from the data set as their salaries differ from the salaries of Saudi nationals, and they are not eligible for support to buy houses as they are not Saudi citizens. Therefore, a total of 107 participants were excluded from the study as they did not meet the requirements of the research.

This leaves a net total of 115 middle-income participants. However, some correlations with low and high-income categories will be made in order to shed light on the housing difficulties they face such as finance and social considerations.

6.2 General participant data

General information collected from the members of the KAU teaching staff, such as gender, age, and their current position are presented in Table 6.1 for all income categories (222 in total). The clear majority (n=179, 80.6%) were married. The participants were highly educated (participants with a PhD: n=94, 42.3% and participants with an MSc or equivalent degree n=104, 46.8%). Due to there being a high number of participants with an MSc, the most common current position was represented by lecturers (n=78, 35.1%), then assistant professors (n=60, 27%) for those holding a PhD. The sample of interest included more than twice as many women as men (68% vs 32% respectively). In terms of age, approaching half of the sample was aged between 31 to 40 years old (46.8%), with one in five aged between 41 to 50 years old (19.8%) and slightly fewer aged between 26 to 30 years old (17.6%). The family size lay most commonly between 3-4 people (n=76, 34.2%), or 5-6 people (n=75, 33.8%). This concurs with the census estimate in SA which states that the average household size is 5.5. These statistics suggest that the family size of the respondents is relatively large and that they may have reached the stage in their lives where they are looking for a larger house and therefore the demand to own a house increases for several reasons, which the subsequent data will show.

Table 6.1 General characteristics of the total sample including low, middle and high income.

		Number	% of total
Age	From 21 to 25 years	5	2.3
	From 26 to 30 years	39	17.6
	From 31 to 40 years	104	46.8
	From 41 to 50 years	44	19.8
	From 51 to 60 years	23	10.4
	61 Years and Above	7	3.2
Gender	Female	151	68.0
	Male	71	32.0
Marital status	Divorced	8	3.6
	Married	179	80.6
	Single	32	14.4
	Widow	3	1.4
Household size	1 to 2	34	15.3
	3 to 4	76	34.2
	5 to 6	75	33.8
	7 to 8	25	11.3
	9 to 10	12	5.4
Qualification	Bachelor	24	10.8
	Master	104	46.8
	PhD	94	42.3
Current position	Administrator	42	18.9
	Assistant Professor	60	27.0
	Co-professor	22	9.9
	Lecturer	78	35.1
	Professor	6	2.7
	Scholarship	14	6.3

Table 6.1 clearly shows the relatively large family size and age of respondents, and the social status of academics with higher qualifications.

6.3 Income and living situation

The data show that most of the academic staff in the sample, across all income categories, either live with family (n=73, 32.9%), or in a rented house (n=69, 31.1%). The proportion of middle-income participants living with family was less than the lower-income group by approximately 25%, but was higher than among the high-income group by 7.6%. Table 6.2. shows that most middle-income participants either rent a house (n=44, 38.3%) or are living with family (n=29, 25.2%), while most high-income participants either fully own a house (n=13, 38.2%) or own one with a loan (n=9, 26.5%). The data provided in Table 6.2 suggests that a large number of the middle-income participants are either renting or living with parents. The preference for renting among the middle-income group could be because they find it more suitable and convenient to them at this stage of their life. It is also an indirect indication of their capability to own a house.

Table 6.2 Distribution of accommodation and monthly income across the three groups of participants.

			Salary			Total
			From £1500 to £2599 Low income	From £2600 to £4000 Middle income	From £4001 to £10,000 High income	
What is your main residence?	Living with family (parents)	Count	38	29	6	73
		%	52.1	25.2	17.6	32.9%
	Owned fully	Count	11	16	13	40
		%	15.1	13.9	38.2	18.0%
	Owned with loan	Count	3	20	9	32
		%	4.1	17.4	26.5	14.4%
	Rented	Count	21	44	4	69
		%	28.8	38.3	11.8	31.1%
	University accommodation	Count	0	6	2	8
		%	0.0	5.2	5.9	3.6%
Total		Count	73	115	34	222
		Total %	100.0%	100.0	100.0	100.0

*All numbers were converted to £ - GBP - British Pound Sterling according to the exchange rate at the time of data collection of GBP1=5 Saudi Riyal (SR)

6.3.1 How participants own or rent their main residence

The respondents were asked about their current residence and whether they rent, are living with family, or own it. As Table 6.3 shows, the majority of middle-income participants were either living with family (n=27, 23.5%) or renting a house (n=44, 38.3%), whilst only about a quarter fully owned their house (n=16, 13.9%) or owned the house but are still paying back a loan (n=20, 17.4%) (Table 6.3). On the other hand, most staff earning a high income either fully own their home (n=13, 38.2%) or own it with a loan (n=9, 26.5%). These data indicate that the middle-income group is indeed in need of a housing policy to support their housing needs.

Table 6.3 How the participants own their house.

			main residence								
			Do not own house, living with family	Help from my father	I live in a place that is owned by my husband's work	Living in the apartment of my husband's family	Owned fully	Owned with loan	Owned with non-housing loan	Rented	University accommodation
	Low income	Count	36	1	1	0	10	3	1	21	0
		%	49.3	1.4	1.4	0.0	13.7	4.1	1.4	28.8	0.0
	Middle income	Count	27	0	0	2	16	20	0	44	6
		%	23.5	0.0	0.0	1.7	13.9	17.4	0.0	38.3	5.2
	High income	Count	6	0	0	0	13	9	0	4	2
		%	17.6	0.0	0.0	0.0	38.2	26.5	0.0	11.8	5.9
Total		Count	69	1	1	2	39	32	1	69	8
		%	31.1	0.5	0.5	0.9	17.6	14.4	0.5	31.1	3.6

6.3.2 Sources of income

Figure 6.2 shows higher percentages in the low and middle-income groups (84.5% in the two groups) having no other source of income apart from their university salary to support their families, compared to 61% of those in the high-income group who have at least one other source of income (Chi-square=9.149, p-value=0.01). As it is a locally sensitive issue to ask about the additional income, the categorization into 'low', 'middle' and 'high' only considers university salaries.
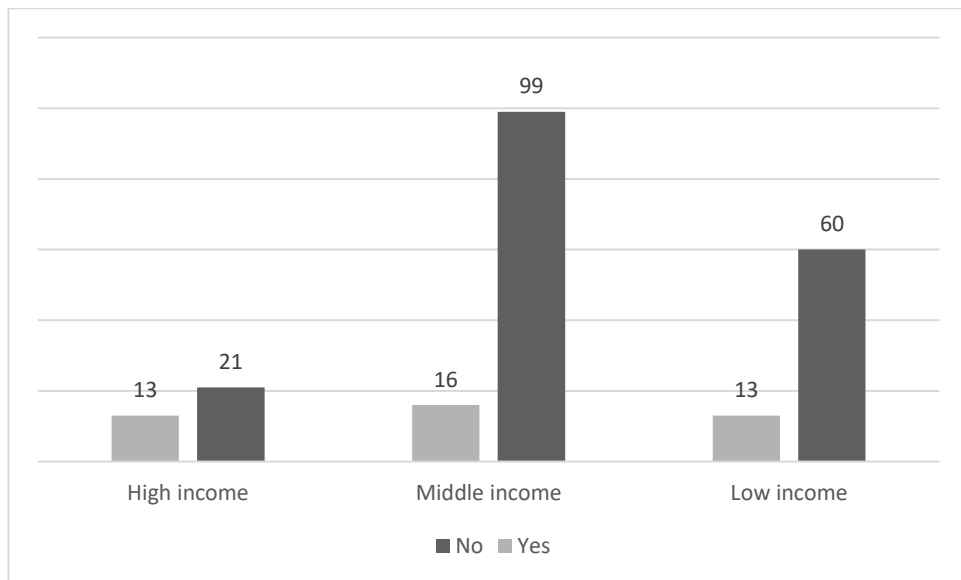
Figure 6.2 Sources of income of participants (n=222).

The two findings – of the relatively large family sizes and the frequency of living with parents - are two major characteristics that could come under the umbrella of socio-cultural factors affecting the end-user stakeholders in the conceptual framework for this research. These two elements are postulated to have a major impact on the expectations of what a future house would look like: having a large family and expecting to be able to accommodate your children even when they are adults and married. This would lead to their seeking a large house as a starting point. The middle-income group were also seen to be more willing to rent a house (38.3%) than both other income groups. This could be an example of global and regional influences and the economic changes that are evident in Saudi Arabia. Traditionally, renting was not so prevalent in the country and it was seen as socially less acceptable (GIZ, 2013; Jeddah Economic Forum, 2013).

In addition, when participants were asked to provide more details about the type of residence they live in, it was confirmed that renting a house or living with family were the most typical answers. Unsurprisingly, there were more high-income participants living in houses acquired through loans than among the middle-income group. However, approximately 17% of the middle-income group own a house through a loan. This finding, though low, implies that the impact of religious factors is not as dominant as was identified in the conceptual framework. In the conceptual framework, it was anticipated that Sharia laws may affect people's decision to take out a long-term loan with interest attached. Indeed, there were more people taking out loans from all income groups than

anticipated, making the influence of Sharia law appear secondary to other factors. An improvement to this framework would be that Sharia law is either marginalized or shown as having a two-way relationship with the main domain of financing as shown in Figure 6.3. This is because banks are claiming that they sell Islamic-compliant loans. Additionally, a large section of the population does not regard acquiring a loan from a bank as non-Islamic. Indeed, for many people the interest prohibited by Islam is the interest accumulated over time on a borrowed amount between individuals, rather than banks (Rowey *et al.,* 2006; Kingdom Needs, 2009; Roberts, 2010; Sidawi & Meeran, 2011).
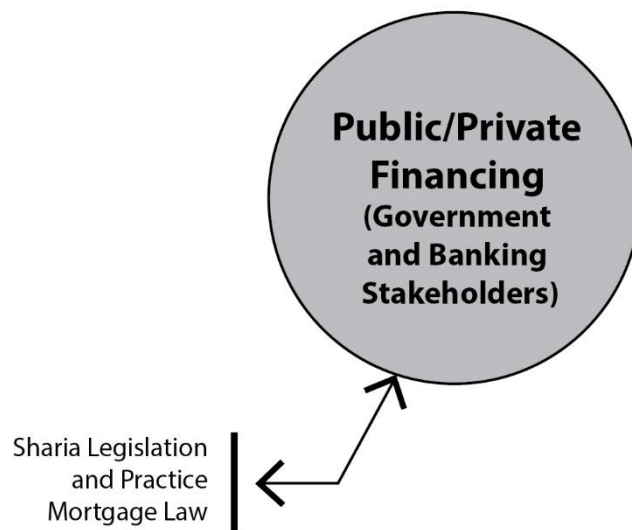
Figure 6.3 The relationship between Sharia legislation and the public and private sector.

6.3.3 The type of main residence

For the type of main residence, more than half of respondents from the middle-income group (n=66, 57.9%) live in apartments, which was a similar proportion to that of the low-income group (n=39, 54.2%) (see Table 6.4). However, these two proportions differed from that of the high-income segment in which less than a third (n=10, 29.4%) lived in apartments. The percentage of middle-income participants who live in a villa/duplex house (n=33, 28.9%) was much lower than the corresponding percentage of

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high-income participants (n=22, 64.7%). Around one in ten of middle-income participants lived with their parents (n=15, 13.2%). Therefore, overall, the data suggests that middle and low-income participants are less likely to live in a villa or duplex compared to high-income participants. There was a highly significant difference in distribution (Chi-square=54.24, p-value<.001) of house types across income categories suggesting these differences are not due to sampling error or other biases and are in fact a true reflection of reality, that both the low and middle-income property types are of a lower value than that of the high-income properties. This is a very significant factor that places pressure on middle-income respondents to seek a better house to live in.

Table 6.4 Type of main residence.

			Type of main house			
			Apartment	Duplex	Villa	With family
Low income	Count		39	3	2	28
	%		54.2	4.2	2.8	38.9%
Middle income	Count		66	8	25	15
	%		57.9	7.0	21.9	13.2%
High income	Count		10	4	18	2
	%		29.4	11.8	52.9	5.9%
Total	Count		115	15	45	45
	%		52.3%	6.8	20.5	20.5
Chi-square =54.24, p-value<.001						

6.3.4 Affordability of spending on rent or housing loan repayment

The majority of middle-income staff report spending a proportion of their monthly salary on a real estate loan payment, where 32 (27.8%) of them spend between 1-13% of their salary, 44 (38.3%) spend between 14-23% and 23 (20%) spend 24-33% (Table 6.5). This result was somewhat similar among the high-income respondents. Using the Chi-square test, middle-income staff were not different from other income levels in terms of their monthly bank loan payments (Chi-sqaure6.20, p-value=.840). However, spending a third of one's total income will affect the low and middle-income respondents more as the value of their remaining income could affect their living standards. This was clearly discussed at the Jeddah Economic Forum (2013) when it was pointed out that the majority of low and middle-income citizens cannot afford home ownership until they are 50 years of age or older. While loan repayments are generally below the definition of affordability discussed in Chapters 2 and 3 (30%), for some of the middle and low-income groups it

poses a real challenge as it affects their expenditure on other items (food, travel and health) as their salaries are generally lower.

Additionally, despite the literature suggesting that the threshold of 30% is generally accepted as the upper limit of affordability for the proportion of income dedicated to housing loan repayment if earning a middle-income (Salbak *et al.,* 2015), this threshold has been surpassed among 14% of this study's middle-income respondents.

Table 6.5 The percentage of total household monthly income spent on rent or loan.

			1-13%	14-23%	24-33%	34-43%	44-53%	54-More %
Low income	Count		24	21	11	7	7	3
	%		32.9	28.8	15.1	9.6	9.6	4.1%
Middle income	Count		32	44	23	7	5	4
	%		27.8	38.3	20.0	6.1	4.3	3.5%
High income	Count		10	12	7	3	2	0
	%		29.4	35.3	20.6	8.8	5.9	0.0%
Total	Count		66	77	41	41	14	7
	%		29.7 %	34.7	18.5	18.5	6.3	3.2
Chi-square =6.20, p-value=.840								

The ability of middle-income staff to pay for and access housing due to having savings from their monthly salary seemed to be higher (n=106, 92.2%) than that of low- and high-income staff (n=64, 87.7% and n=30, 88.2%, respectively) (Table 6.6). However, these differences were statistically insignificant (Chi-square=1.37, p-value=.480).

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Table 6.6 Ability to afford to own a house due to savings from salary.

			No	Yes
	Low income	Count	9	64
		%	12.3	87.7%
	Middle income	Count	9	106
		%	7.8	92.2%
	High income	Count	4	30
		%	11.8	88.2%
Total		Count	22	200
		%	9.9%	90.1
Chi-square =1.37, p-value=.480				

It is clear that all respondents are willing to save money from their salaries in order to own a house. However, in reality, how much this saving will be is the question in need of an answer. It was suggested in the literature that, globally, for a house to be affordable, a third of one's salary, or less, should be set aside for loan payments (Chatfield *et al.,* 2000; Stone, 2006b). This was reflected in Saudi Arabia (Chapter 3) and is different from country to country as discussed in the broad literature review (Chapter 2). The statistics provided here suggest that, if this is the case, then at least 86% (27.8+38.3+20 in Table 6.5) of the middle-income respondents could afford a real estate loan if the repayment were less than or equal to a third of their salary. However, this data indirectly suggests that 66% (27.8+38.3 in Table 6.5) of the middle-income respondents rent at a rate below 23% of their salary. Therefore, the 30% threshold may be above their affordability level, suggesting there is a need for further research on whether this threshold is viable for the Saudi Arabian housing market.

All of the factors mentioned here are represented in the domain of 'economic factors' in the conceptual framework. In fact, economic factors have more influence on the ability to own a house than socio-cultural factors. It is probably more appropriate to either re-structure the conceptual framework to reflect this or separate the two factors and show the relationship between the two as shown in Figure 6.4. In this figure, the significance of economic factors is shown by a larger circle and the relationship with socio-cultural factors remains strong as represented by a double-sided arrow. An example of interaction between the two is the expectation of having a large house which is affected by social and cultural factors, but which certainly leads to a higher loan and is only possible if end-users can afford this size of house.
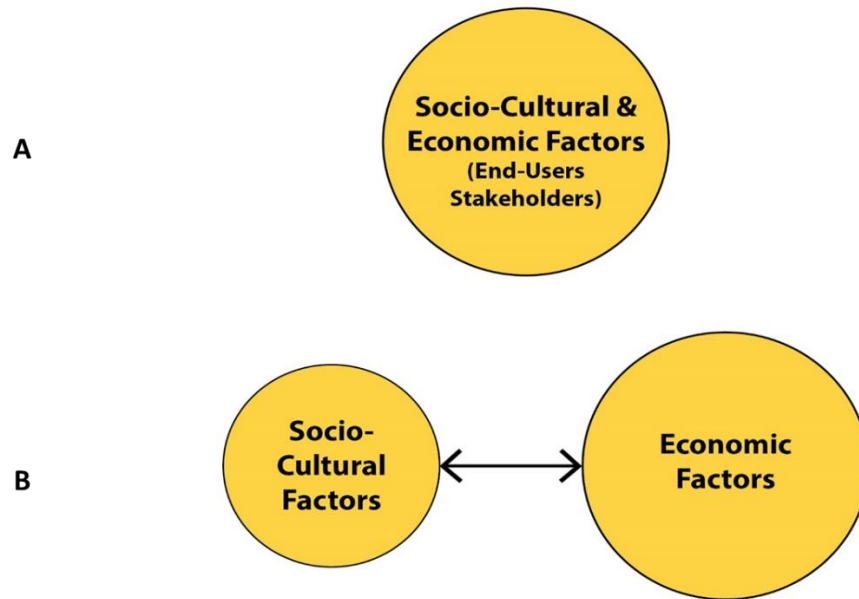
Figure 6.4 Original socio-cultural and economic domain (A) and the proposed separation of these highly inter-related categories of factors (B).

6.3.5 Owning a second house

Other data show discrepancies between the three income groups confirming that economic characteristics are more dominant in the decision to buy and affordability of owning a house as discussed above. For example, less than a quarter of middle-income staff (n=15, 13%) owned a second home somewhere else (i.e. in another location or another city), while the percentage was much higher for high-income staff (n=13, 38.2%) (Figure 6.5), with low-income participants reporting the lowest percentage (n=4, 5.5%) of owning a second home. The Chi-square test confirmed that owning a second home somewhere else for the middle-income group was significantly lower than for the high-income group (chi-square=17.57, p-value<.001). Owning a property somewhere else has a direct impact on the ability and eligibility of respondents to purchase another house as it is an indirect indicator of their financial ability.
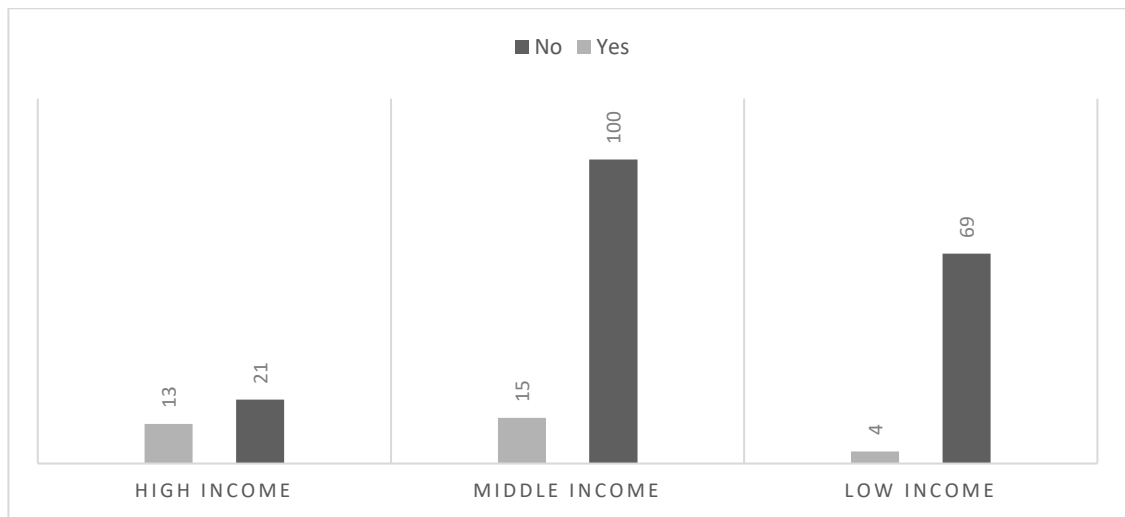
Figure 6.5 Owning another house (n=222). Numbers are counts of responses.

6.3.6 Owning a plot of land

The middle-income group also struggle to own land. When respondents were asked if they had purchased or inherited a plot of land for future development, only a quarter of respondents from the middle-income group said 'yes' (24.3%) compared to a much larger percentage (44.1%) of the high-income group who own land (Figure 6.6). The Chi-square test confirmed that the likelihood of owning a piece of land for future development for middle income participants was significantly different to other groups (Chi-square=7.23, p-value=.025). Despite this, owning a plot of land and then applying for a loan to build a house is still the preferred option for house ownership in Saudi Arabia as highlighted in Chapter 3.

6.3.7 Type of the main residence

The respondents were asked about their current residence and whether they rent, are living with family, or own it. The majority of middle-income participants were either living with family (n=27, 23.5%) or renting a house (n=44, 38.3%), whilst only about a quarter owned their house fully (n=16, 13.9%) or owned the house but are still paying the real estate loan (n=20, 17.4%) (Table 6.7). On the other hand, high-income staff either fully own (n=13, 38.2%) or own with a loan (n=9, 26.5%). These data indicate that the middle-income group is indeed in need of a housing policy to support their housing needs.

Table 6.7 Types of the main residence of participants.

			main residence								
			Living with family	Help from my father	I live in a place that is owned by my husband's work	Living in apartment of my husband's family	Owned fully	Owned with loan	Owned with non-housing loan	Rented	University accommodation
	Low income	Count	36	1	1	0	10	3	1	21	0
		%	49.3	1.4	1.4	0.0	13.7	4.1	1.4	28.8	0.0
	Middle income	Count	27	0	0	2	16	20	0	44	6
		%	23.5	0.0	0.0	1.7	13.9	17.4	0.0	38.3	5.2
	High income	Count	6	0	0	0	13	9	0	4	2
		%	17.6	0.0	0.0	0.0	38.2	26.5	0.0	11.8	5.9
Total		Count	69	1	1	2	39	32	1	69	8
		%	31.1	0.5	0.5	0.9	17.6	14.4	0.5	31.1	3.6

Ownership of land is a reflection of the impact of both economic and socio-cultural factors already identified in the conceptual framework. It is culturally-bound because this is the most acceptable model in Saudi Arabia, whilst it is also economic because land is incredibly expensive, and so it is a challenge to be able to afford it. Affordable land supply represents a factor that affects public policy and regulation (Figure 6.7). People prefer to own land and build a house to their own specifications, rather than buying a ready-built house (GIZ, 2013; Jeddah Economic Forum, 2013; SMOH, 2016d). Land issues were a recurring talking point in the research, as will be discussed in the next section where participants answered questions about the challenges of affordability.
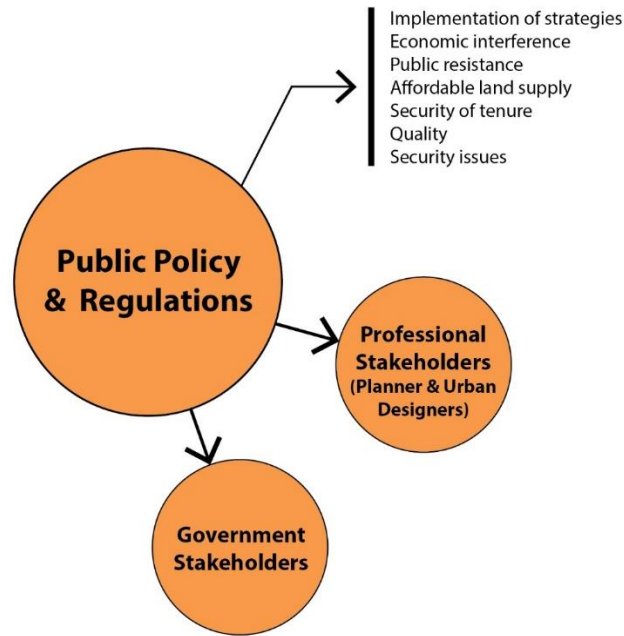
Figure 6.7 Affordable land supply as a factor related to public policy and regulation.

6.3.8 Challenges of affording a house

Six main challenges emerged which may hinder a person's ability to purchase a house (Table 6.8). These were as follows:

1- **The high price of land** was the main challenge for participants from the middle-income (n=104, 90%) and the low-income groups (n=69, 94.5%), but it was less of an obstacle for the high-income group (n=29, 85.3%). However, statistically, these were not significantly different (Chi-square=2.49, p-value=.273), suggesting the price of land is a major issue affecting all income groups. This is, therefore, the main challenge to owning a house as owning land and obtaining a loan to build on it is the most common practice in the country. Internationally, half or more of the cost of new homes is attributed to the price of land and this was found to be the case in Saudi Arabia and more specifically in Jeddah (Batrawy, 2014; Fattah, 2013; Oxford Business Group, 2013).

2- **The high price of ready built houses** was another major challenge for the middle-income group (n=96, 83.5%), the low-income group (n=59, 80.8%), and the high-income group (n=27, 79.4%). Statistically, no significant difference between the groups

was found (Chi-square=.39, p-value=.882). As mentioned above, the high price of land means that the price of newly built houses (Batrawy, 2014) will be high and therefore these two challenges are the major factors affecting owning a house for the respondents in this study.

3- **The high cost of construction** was also a key challenge for middle-income (n=84, 73%) and low-income groups (n=60, 82.2%), but it seemed to be less of an issue for high-income participants (n=22, 64.7%) compared to other income categories. Using the Chi-square statistical test, no significant difference was found (Chi-square=4.13, p-value=.125) between the groups. This is an issue which is not only found in Saudi Arabia (Assaf *et al.,* 2010), but also in other GCC countries (Almunajjed, 2012).

4- **Difficulties in finding suitable loans** was also an issue for middle-income (n=62, 53.9%), low-income (n=49, 67.1%), and high-income groups (n=17, 50%), but no statistical difference between the groups was found (Chi-square=4.15, p-value=.125).

5- **Difficulty in obtaining accommodation that suits the family needs** was also an obstacle for the middle income (n=51, 44.3%), low income (n=38, 52.1%), and high income groups (n=16, 47.1%) but no statistical difference was found between the groups (Chi-square=1.06, p-value=.596).

6- **Low supply of houses** was another challenge but there were no statistically significant differences between the groups in relation to this concern (Chi-square=4.15, p-value=.125).

Table 6.8 The main challenges facing the decision to own/buy a house. Responses of less than 2 are not shown.

Challenges to own a house	Low income	Middle income	High income	Chi square (P value)
High price of land	69	104	29	2.49 (.273)
	94.5%	90.4%	85.3%	
High price of construction	60	84	22	4.13 (.125)
	82.2%	73.0%	64.7%	
High price of ready built houses	59	96	27	.39 (.822)
	80.8%	83.5%	79.4%	
Difficulties in finding a suitable loan	49	62	17	4.15 (.125)
	67.1%	53.9%	50.0%	
Low supply of houses	30	37	10	2.06 (.365)
	41.1%	32.2%	29.4%	
Difficulty in obtaining accommodation that suits your needs	38	51	16	1.06 (.596)
	52.1%	44.3%	47.1%	
Weak monthly salary	1	1	0	.747 (1.00)
	1.4%	0.9%	0.0%	
Low quality of the available affordable housing units on the market	3	0	1	4.19 (.058)
	4.1%	0.0%	2.9%	

Responses of less than 2 are not shown.

These challenges were not entirely reflected in the conceptual framework and some of the identified challenges were hidden under the main domains. For example; the price of homes was not reflected in the conceptual framework. Figure 6.8 shows the original factors and the suggested new factors.
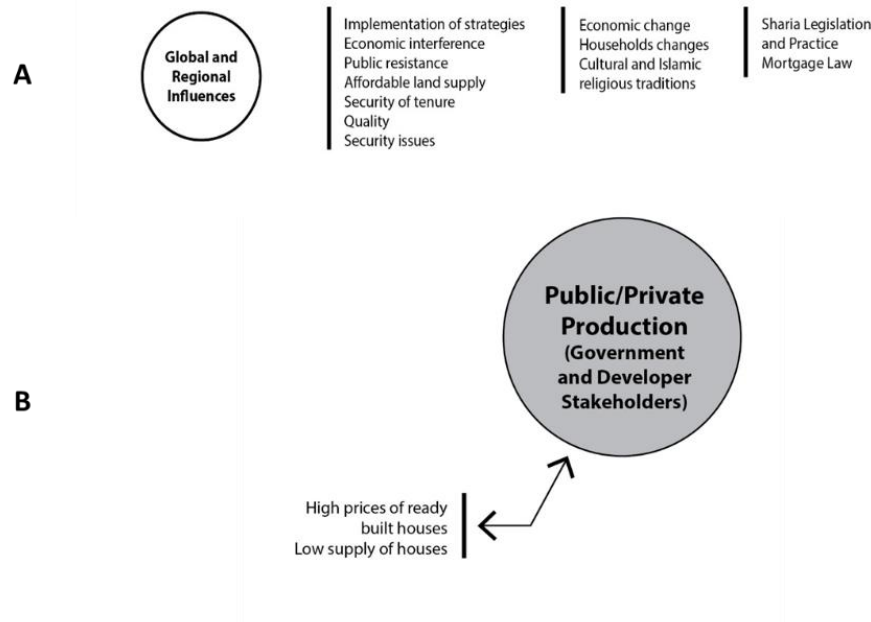
Figure 6.8 Shows the already identified factors in the conceptual framework (A) and the new addition based on the findings regarding ready-built houses (B).

6.3.9 Duration of living in the main residence

The distribution of years living in one's main residence seemed to be unequal between the income categories, where participants living in their main residence between 1-4 years seemed to be higher for the middle-income (n=54, 47%) and low income groups (n=31, 42.5%), compared to the high income group (n=11, 32.4%) (Table 6.9). For the response 'Living in the main residence for 10-14 years', the middle-income group (n=26, 22.6%) was similar to the high-income group (n=8, 23.5%). However, overall, the number of years living in the main residence was significantly related to the income group (Chi-square=20.16, p-value=.010) with the middle and low-income groups having lived longer in their current main residences, i.e. rented or with family, before they can afford to move to a newly owned home.

Table 6.9 Duration of living in current main residence.

			Low income	Middle income	High income	total
11- How long have you lived in your main residence?	1 - 4 years	Count	31	54	11	96
		%	42.5	47.0	32.4	43.2
	5 - 9 years	Count	20	19	5	44
		%	27.4	16.5	14.7	19.8
	10 - 14 years	Count	8	26	8	42
		%	11.0	22.6	23.5	18.9
	15 - 19 years	Count	8	3	7	18
		%	11.0	2.6	20.6	8.1
	20 years or more	Count	6	13	3	22
		%	8.2	11.3	8.8	9.9
Chi=20.16 p-value=.010						

6.3.10 Travel time between residence and work place

The time needed to arrive at King Abdul Aziz University in the morning was classified into three time-groups (Table 6.10). However, there were no significant differences between the three groups (Chi-square=2.23, p-value=.693). This data was added to investigate whether some groups were more likely to live further from their place of work than others, but the data indicated that all groups live at a similar distance from the university.

Table 6.10 Time needed to reach place of work.

			Low income	Middle income	High income	Total
By car, how far away do you live from the university (time of travel only in the morning during working day)?	1-15 minutes	Count	20	23	6	49
		%	27.4	20.0	17.6	22.1
	16-30 minutes	Count	21	34	12	67
		%	28.8	29.6	35.3	30.2
	>30 minutes	Count	32	58	16	106
		%	43.8	50.4	47.1	47.7
Chi-square= 2.23, p-value=.693						

These data indicate that there are challenges for the affordable housing model based on the ability of end-users to spend 30% of their salary for a long-term loan as the model of choice. The literature review in Chapter 3 concluded that the three main challenges for affordable housing were:

- The financial availability of loans,
- Issues associated with housing finance in general and

- Housing market volatility.

This is in line with data identified here as participants from the middle-income group complained about long waiting times for specific loans and the high prices of both land and ready-built houses. The data also highlighted the fact that affordable housing regulations do not reflect cultural considerations during the design stage of building new houses as a large proportion of participants showed a dislike for this type of housing. This was in accordance with earlier literature (Salama, 2006; Sidawi, 2008).

6.4 Middle-income group statistics

In the following section, affordability challenges and opportunities to afford a house are explored for middle-income participants who are the focus of this research. Comparisons with other income groups will only be reported using a correlation matrix to check if income group is the main factor in the different criteria presented. This is important in order to highlight the different characteristics of the middle-income group. Analysing the data for this group showed that a fifth of participants (n=23) complained that their main residence was unsuitable because it is located in a dense and crowded area (Figure 6.9), while more than half (n=69, 60%) stated that their present accommodation is too small for their family size compared to four in ten who said their current accommodation is too large (n=46, 40%). Two fifths complained that they live far away from work (n=46).
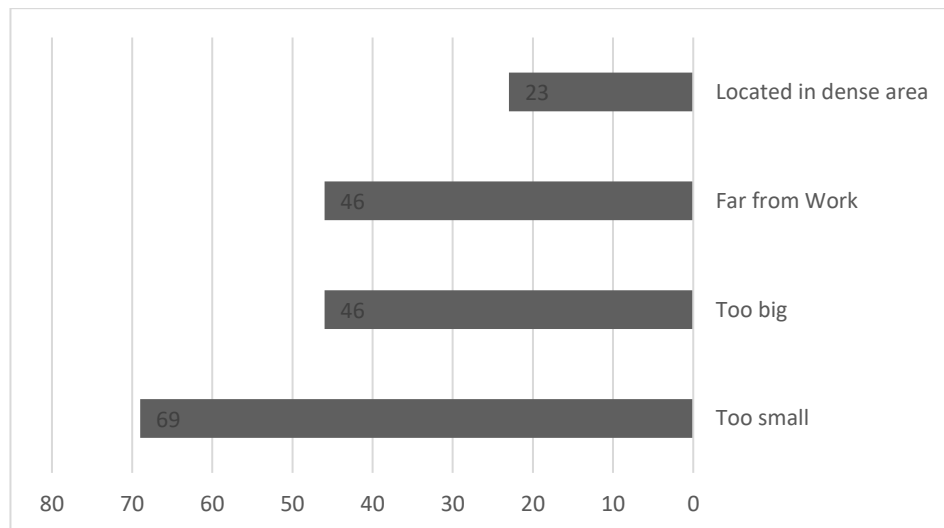
Figure 6.9 Middle income participants' main complaints about their current house (n=115). Some participants may have chosen more than one answer.

Living in a good environment (n=77, 67%) was the main reason for living in their current housing, followed by the response that their current housing suits the needs of the family (n=48, 42%) (Figure 6.10). The data suggests that the expectations of the middle-income group are high. This was similar to the findings of the earlier research on affordability in Saudi Arabia (Awliya, 2017). The author concluded that the desire to own large houses (villas) is a challenge for the provision of affordable housing. In the research presented here, the main complaint by more than half of the middle-income group was that their current homes were too small. This is a major cultural issue as discussed in Chapter 3. People in the country are likely to desire larger houses to accommodate guests, as well as their extended families on important occasions such as weddings and Islamic holidays. Saudi Arabians are less likely to use function rooms and halls outside their homes for large social gatherings. It is also a sign of prestige to have a large house with large reception areas.
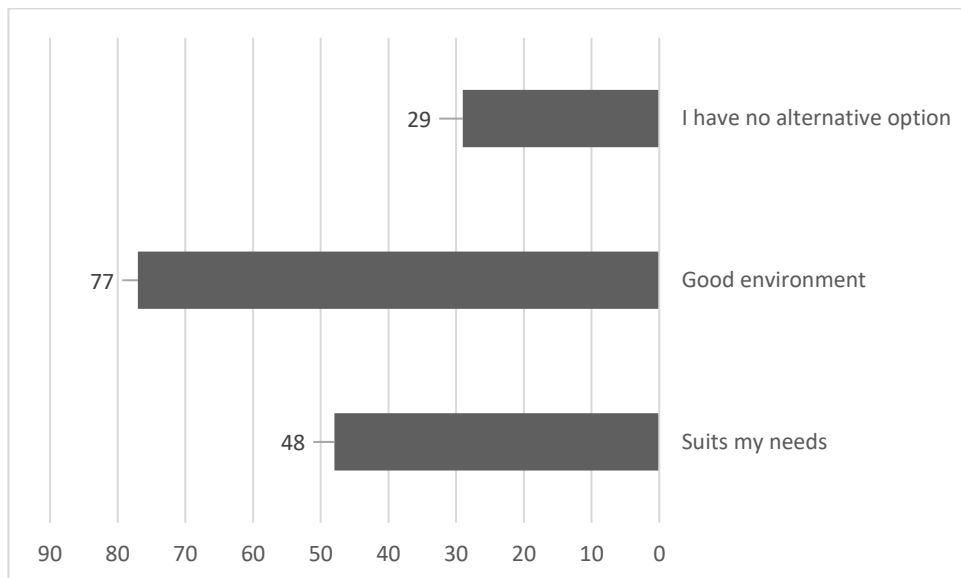
Figure 6.10 Reasons for living in current house. (n=115).

It was also found that owning a suitable house that meets participant needs was significantly correlated to staff with higher income (r=0.375, p-value=0.045). This is because the high-income group can afford a house that suits their family size and which enables them to have guests to stay and offers them a nice environment. This culturally suitable accommodation is indeed the dream of all Saudi Arabians as smaller homes were the main reason behind the middle-income group stating they disliked their current accommodation. Awliya (2017) concluded that Saudi Arabians need to change their

expectations about how large their future houses should be in order to accept an affordable house. So far, the data presented here suggests that having a large house that suits their cultural and social needs is still a requirement that is prevalent among potential buyers.

In summary, views on the suitability of a house conform to expectations which are shaped by socio-cultural factors and guided by economic considerations. This seems to be in line with the conceptual framework and is also reflected in the literature (Chapter 3).

6.5 Methods of owning a house

6.5.1 Views on fully owned houses

When asked for more details about how they own their house, only 28 out of 36 middle-income homeowners (16 who fully own their home plus 20 who own their home with a loan, from Table 6.2) responded. Their responses were varied and are shown in Figure 6.11. Just over a quarter (28%) relied on personal bank loans and savings, and slightly fewer on family gifts (21%). Also, some of them used other means such as their own savings (14%) and borrowing from relatives (14%). Few relied on a house loan/finance from a bank (7%). The main reason most people aim to avoid this option is because of high interest rates and the longer period needed to repay the bank. On the other hand, higher income staff tended to use a combination of the Real Estate Development Fund and personal bank loans (r=0.408, p-value=.012), or the Real Estate Development Fund alone (r=.328, p-value=.047). The different methods used to own a house among the Saudi Arabian community suggest that:

1- Potential buyers are willing to take out personal loans but prefer to support this with savings and they try not to make house loans the only financial method used to purchase a house. This is one way to avoid high interest rates and to follow Sharia law by avoiding variable interest as mentioned in Chapter 3.

2- A large proportion of participants in this sample prefer not to take out bank loans for a variety of reasons but mainly because of Islamic teachings which classify interest as religiously forbidden.
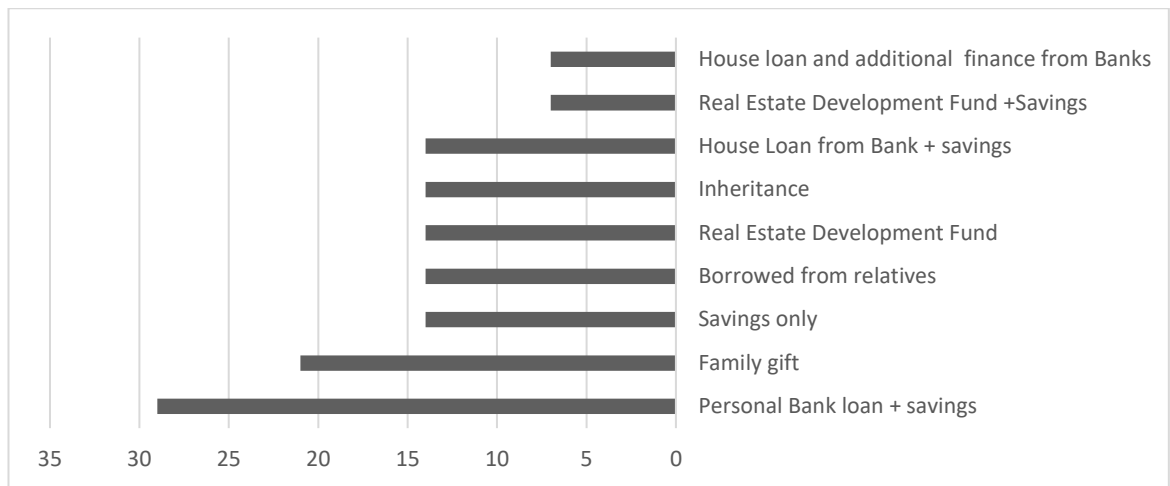
Figure 6.11 Methods of acquiring a house (% out of n=28).

The second point is highly important as it was pointed out in the literature that Saudi Arabian citizens are reluctant, for religious reasons, to take long-term loans because of the interest they incur (Kingdom Needs, 2009; Roberts, 2010). This has a direct effect on developers, the government, and the finance sector as they are not encouraged to offer these products because of the lack of clients as the interest rates are usually high. However, as data here shows, there is a segment of the society which is willing to take out loans. This will be investigated further in the qualitative study (Chapter 7) and in the final chapter (Chapter 8).

Nearly three-quarters of middle-income staff (71.8%) are not looking for new accommodation (Figure 6.12). The data suggests that potential buyers are struggling to achieve their dream home because of their high expectations of the type of house they want, as discussed earlier. The model available so far in Saudi Arabia needs developing to meet the demand from a large proportion of the society.
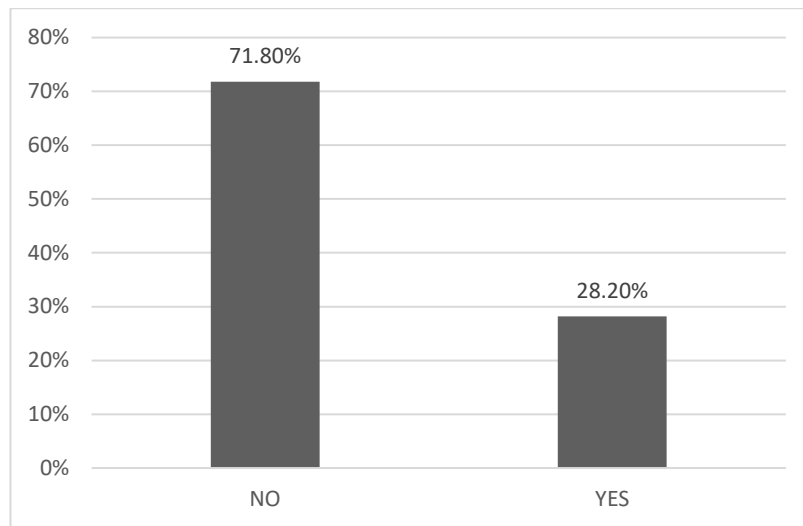
Figure 6.12 Proportion seeking to move accommodation (n=115).

6.5.2 Views on a house owned through a loan

Nearly one in five of the middle-income sample own their house with a loan (20 in total out of 115) (Table 6.2). Among middle income participants, 65% (of these 20 participants) were satisfied with the suitability of their current house to meet their needs (Figure 6.13). No significant correlation was seen between the income groups and house suitability. Looking for reasons for '*house suitability*', more than half of middle-income participants (57%) attributed this factor to having '*no alternative option*' and this was the likely stated reason for thinking the house is suitable as salary decreased (r=-.472, p-value=.027). In addition, 29% of middle-income participants attributed the suitability of their house to it being in a good neighbourhood. Again, no relationship was found between the income group and these reasons. These findings mirror assumptions gained from the literature and were included in the conceptual framework which found that sociocultural factors specific to Saudi Arabians take a central role in deciding their housing choices. Considering an environment to be 'good' usually reflects a preference for areas where Saudi social life is observed and include having a central mosque, supermarkets, shops, and proximity to their extended family.
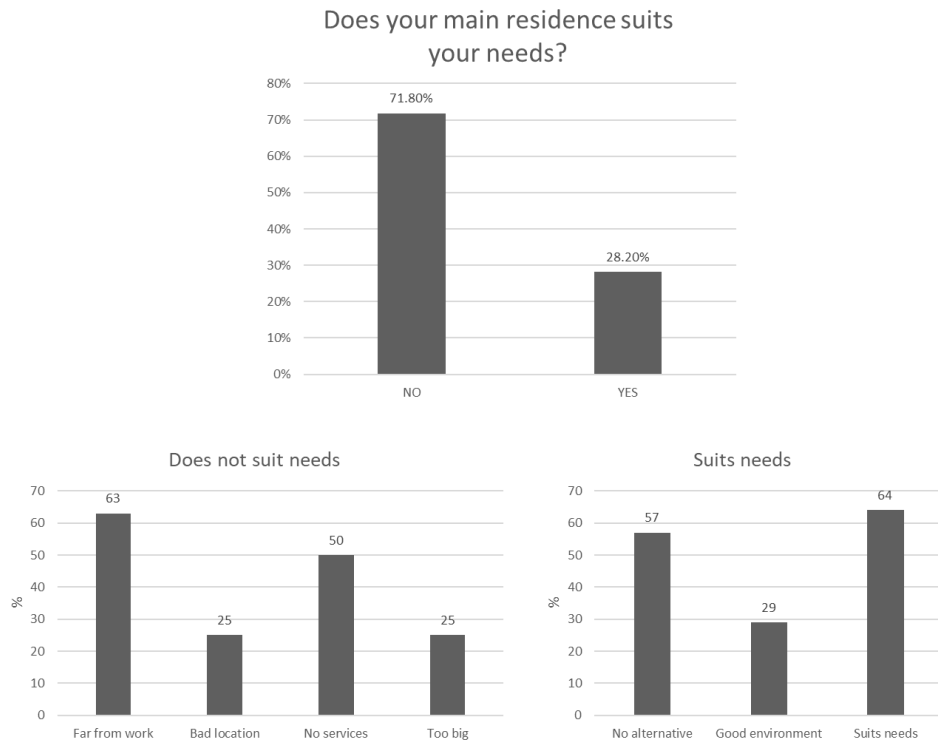
Figure 6.13 Views of participants on the house they own with a loan (total n=20).

Four reasons were given by participants for finding their current home unsuitable (Figure 6.13). The main reasons reported were that the house is far from work (63%) and that the location of the house is in an area with no services such as shopping outlets, hospitals or schools (50%). A significant relationship between the salary groups and views on this issue was found to connect to how far the location was from work (r=-.615, p-value=-.025) (Table 6.11), as members of staff with lower incomes tend to live in less desirable locations compared to the higher income group. It was not clear what a less desirable location meant in relation to the responses of the participants, but as highlighted above, a good location is an area that supports Saudi Arabian social life. This relates to the supply and demand forces that affect the prices of accommodation, as crowded areas with less attractive small properties tend to be inexpensive, while large houses in affluent areas are expensive.

Table 6.11 Correlation between income (low, medium and high) and the perceived suitability of the house.

		Main residence suits your needs?	Reasons for suiting				Reasons for not suiting			
			No alternative	Good environment	Suits your needs	Near workplace	Far from work	Bad location	Located in area with no services	too big
Monthly Average Income from university job (in GBP)	r	.127	-.472[*]	.289	.240	.324	-.142	-.615[*]	-.119	-.066
	p	.490	.027	.191	.282	.142	.643	.025	.700	.832

The questions also focused on financial options and incentives to buy a house through bank loans. However, no significant relationship was found between income (low, medium and high) and these incentives (Table 6.12). The most used product by the middle-income group was a direct 'house loan' (n=8, 40%), followed by a 'personal bank loan' with savings and borrowing from relatives (n=7, 35%). The lowest proportion was through the Real Estate Development Fund (n=2, 10%). Despite the fact that the Real Estate Development Fund is an interest-free real estate loan and fully compliant with Islamic religious practices, many people opt not to apply due to the long delay in receiving the loan (GIZ, 2013). The history of the Real Estate Development Fund (REDF) was discussed briefly in Chapter 3. Given the challenges of the old model, new policies under the same scheme were implemented by the SMOH and included reducing the waiting time from 20 to 5 years (Al-Hoiti, 2017). Additionally, the SMOH has now adopted a new financial model and shifted its role to private banks and registered/approved financial institutions to provide eligible citizens with loans with a small amount of fixed interest (Al-Hoiti, 2017); a decision which is still not fully accepted by society. However, this government funding model only fully supports people with salaries of less than SR14000 (£2800). This unfortunately excludes almost all the middle-income group and only covers a third of the interest from their loans.

Table 6.12 Correlation between income and financial methods used to buy a house

		Real Estate Development Fund only	Real Estate Development Fund only + Personal Bank Loan	Real Estate Development Fund only + savings	House Loan/Finance from Banks	Borrowed from relatives	Savings	House loan from company	Personal Bank Loan + Savings	House Loan from banks + savings	Family gift
Income 8-Monthly Average Income from university job (in GBP)	r	-.131	-.081	-.286	-.033	.16	-.163	.075	.115	-.164	-.068
	p	.476	.658	.113	.859	.53	.372	.685	.530	.369	.711

6.5.3 Renting a House

The members of academic staff who rent their home represented 38.3% (44 in total out of 115, Table 6.2) of the middle-income participant sample. Among this group, the vast majority (70.5%) considers their home to be suitable for their housing needs. Using correlation, no relationship was found between income (low, medium, and high) and perceptions of the suitability of their rented accommodation (Table 6.13).

Looking for the reasons for perceived suitability, 56% (out of 44) feel they have no alternative option and less than half of staff (44%) reported that their rented houses were suitable for their needs. Additionally, a number of participants attributed suitability to a good neighbourhood environment (19%). No statistically significant relationship was found between income and these reasons. 'A good environment' is a broad description which may refer to the fact that the house itself is nice and situated within a developed district near all necessary services. Equally, for some respondents, this description could reflect the fact that their house is not far from their relatives' houses. This is a very

important social-cultural aspect as Saudi women, in particular, prefer to live near their extended family.

The proportion of participants who are renting is 44 (Figure 6.14), which is considered high. Reasons which may make rented houses unsuitable were presented previously. It was obvious for middle-income participants that one of the main reasons was that their apartment is too small (80% out of 44). Also, a poor location (27%) and living in an old house (27%) were considered to be important factors which make participants' current housing unsuitable for their needs. No significant relationship was found between income (low, medium and high) and the perceived unsuitability of participants' current rental homes (Table 6.13 & 6.14).
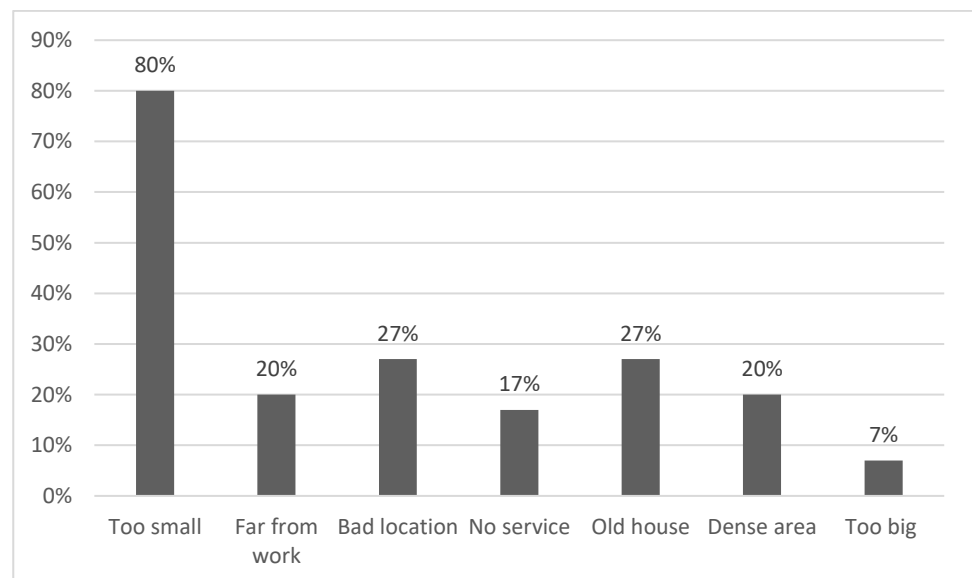
Figure 6.14 Lack of suitability of current rented housing (n=44).

Table 6.13 Correlation between income and suitability of current rental home.

		z0 1 - Does your main residence suit your needs?	z11 No alternative	z12 Good environment	z13 Suits your needs	z14 Good price	z21 too small	z22 Far from work	z23 Bad location	z24 Located in area with no services	z25 high rent and bad design	z26 Old house	z27 Located in dense area	z28 doesn't suit me and no security because I don't own it	z29 too big	z210 doesn't suit my needs
income 8- Monthly Average Income from university job (in GBP)	Correlation Coefficient	.213	-.052	-.028	.052	.050	.229	.005	-.004	-.209	-.211	.161	-.034	-.211	.132	.092
	p-value	.079	.804	.894	.804	.813	.125	.975	.978	.159	.155	.278	.821	.155	.377	.538

In addition, it was worth investigating reasons for renting and these are shown in Figure 6.15. There were six reasons which encouraged staff to rent rather than buy a house. The clear majority of middle-income participants reported that they can only afford to rent (70% out of 44). Additionally, many reported that saving money to buy their dream home (36%) was a reason for currently living in a rental apartment. There were no differences between the three groups in terms of reasons for renting ($P>0.05$). These data clearly suggest that the main reason for renting is affordability compared to owning a house. This was reflected in the literature review in Chapter 3.
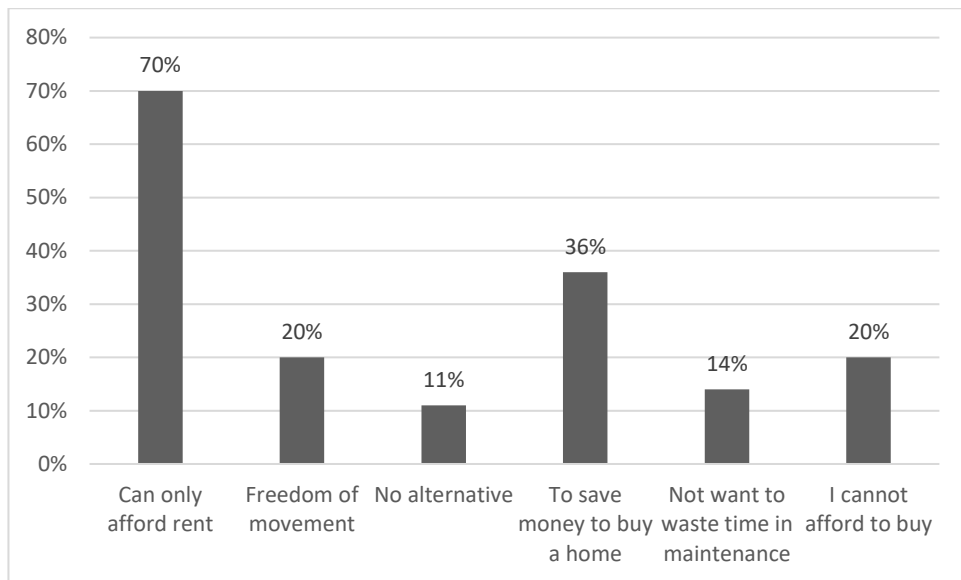
Figure 6.15 Reasons for renting a house (n=44), (participants were allowed to choose more than one answer).

Table 6.14 Correlation between income and reasons for renting.

		z31 Can afford rental costs	z32 Freedom of movement	z33 No alternative	z34 Saving money to buy a suitable home in the future	z35 Not want to waste time and money in maintenance and restoration	z36 I cannot afford to buy
income 8- Monthly Average Income from university job (in GBP)	Correlation	.176	-.221	-.006	-.065	-.101	-.081
	p-value	.149	.070	.962	.601	.412	.512

Very few middle-income staff are satisfied with rental prices (9%), and just 16% of the staff intend to rent a house instead of an apartment. This slightly contradicts an earlier finding that 70% of the middle-income group rent because they cannot afford to buy a house at this time. The annual rent for middle income groups usually ranges between £5000-7000 (40.9%) and £7000-9000 (34.1%) (Figure 6.16).

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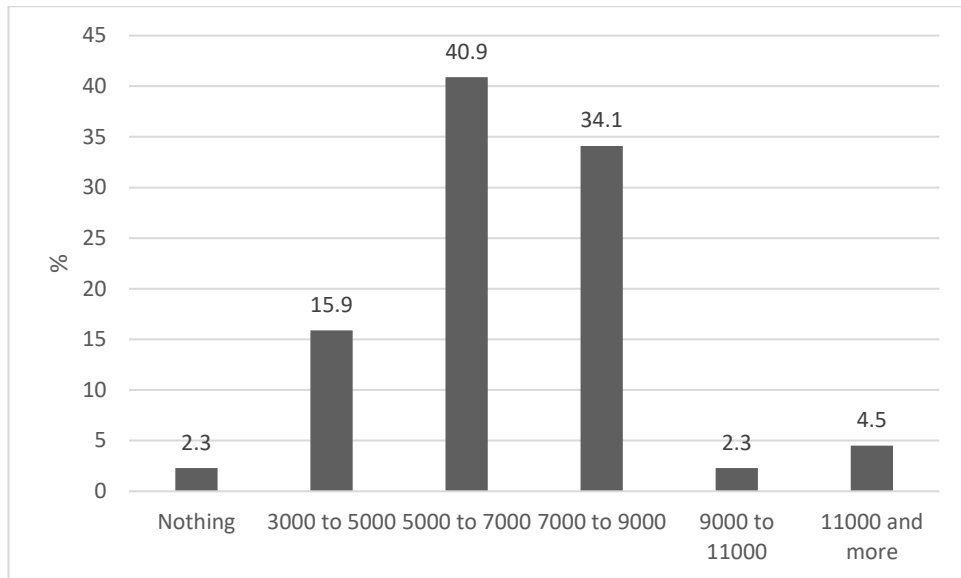
Figure 6.16 Rent prices (in GBP).

6.5.4 Plans to buy a house in the future

Buying a house in the future can be achieved through a number of approaches. When middle-income participants were asked about future preferences for buying a new house, around a third said they would consider a house loan from a bank (37%) or the Real Estate Development Fund with a personal bank loan (35%). No significant relationship was found between the income (low, medium and high) and expected methods used to buy a house in the future (Table 6.15).

Table 6.15 Correlation between income (low, medium and high) and expected methods used to buy a house in the future

		z_{41} Real Estate Development Fund only	z_{42} Real Estate Development Fund only + Personal Bank Loan	z_{43} Savings	z_{44} House Loan from banks + savings	z_{45} Real Estate Development Fund only + savings	z_{46} Personal Bank Loan + Savings	z_{47} House Loan/Finance from Banks	z_{48} Borrowed from relatives	z_{49} Family gift
income 8- Monthly Average Income from university job (in GBP)	Correlation Coefficient	-.100	-.155	-.211	-.264*	-.048	.027	.234	-.125	.046
	p-value	.421	.206	.089	.032	.703	.828	.057	.317	.712

6.5.5 Waiting time to buy a house

The length of time that staff have waited to buy a house is crucial since it gives a good indication of their financial ability (Figure 6.17). The longest waiting time for middle-income participants was more than 15 years (29.5%), followed by 8-11 years (27.3%) and

finally, 4-7 years (22.7%). Almost a third of this group (n=44) were waiting for long periods to be able to afford a house or to receive a REDF house loan (chapter 3). No relationship was found between income (low, medium and high) and waiting period for buying a house, indicating that all income categories had similar waiting times. The new REDF policies were discussed in detail in Chapter 3.
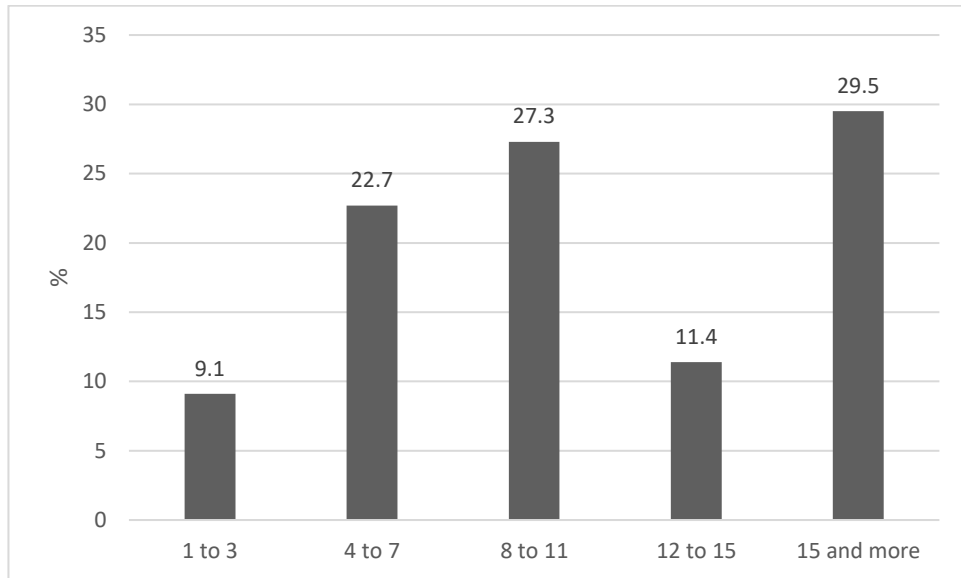
Figure 6.17 Waiting time (in years) to buy a house.

More than half of middle-income staff did not receive any kind of support from the government (60.9%) (Figure 6.18). For those who were waiting for support (39.1%), half of them had waited between 11-15 years, while the other half had waited for more than 21 years.
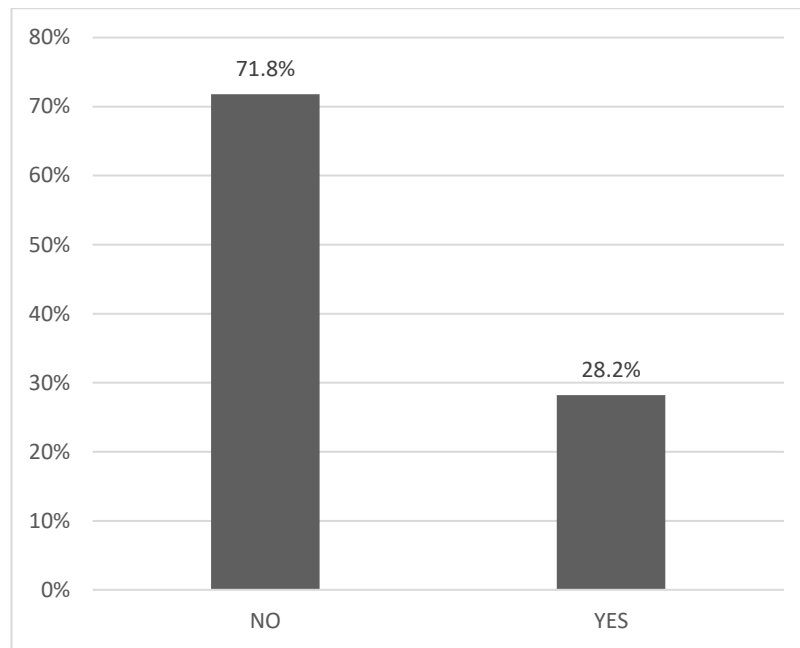
Figure 6.18 Proportion of people in the waiting list to buy property using government housing support.

6.5.6 Living with Family

Respondents who lived with family represented 25.2% (29 in total out of 115, table 6.2) of the middle-income sample. Among those who lived with family, about half (51.5%) found that the situation was suitable for their needs (Figure 6.19). The main reasons for living with family were that there was no alternative place to live (69%), and that there is a good environment in and around the family house (56%). For those who did not find that living with family suited their needs (48.5%), some of the reasons given were that the family house is too small (67%), it is located in a densely populated area (42%) or that it is an old house (33%). No significant relationship was found between income and reasons for not finding living with family suitable, suggesting similar trends apply to all the KAU staff and that, regardless of their income, they value similar criteria in an ideal home. However, this finding should be treated with caution as it may result from sampling bias as all the participants are academics, and therefore are likely share the same career trajectory and ambitions.
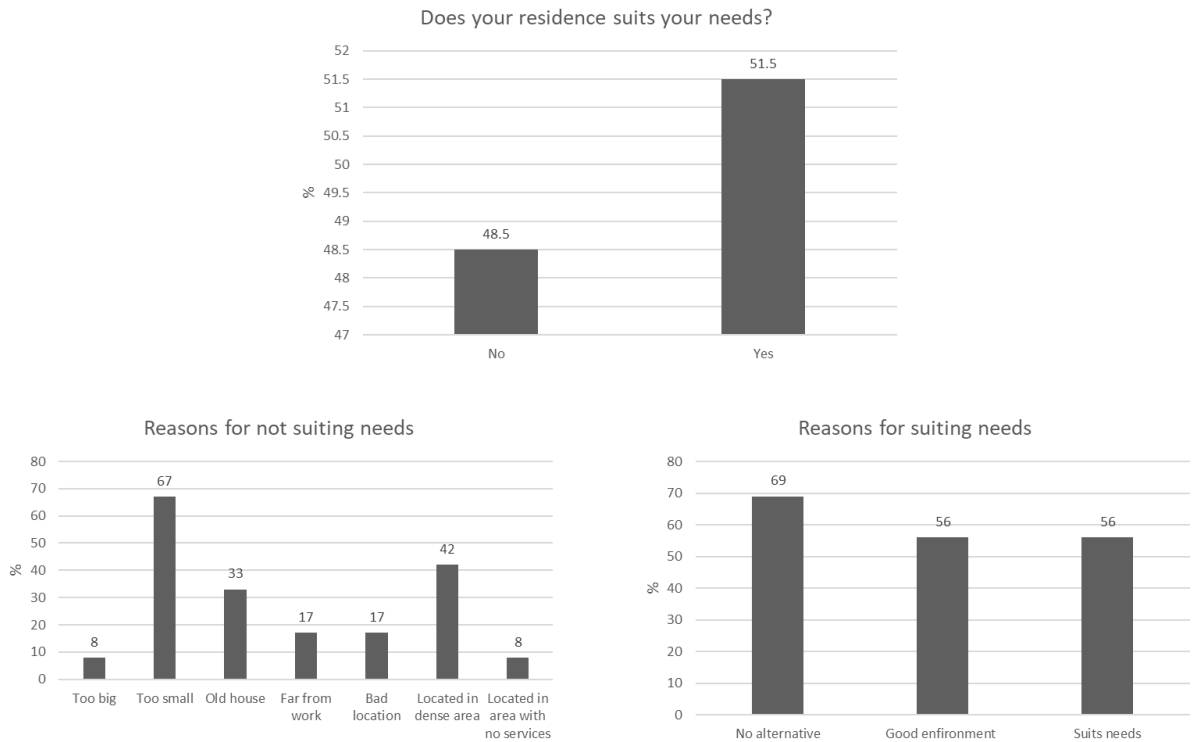
Figure 6.19 Reasons for living with family (n=29).

Additionally, a number of circumstances could lead to participants from the middle-income group living with their immediate family, rather than in their own home. The reasons for this are shown in Figure 6.20. One major factor was the unaffordability of accommodation (70%). This proportion is exactly the same as the proportion who rent their home because it is the only option they can afford, but it is worth noting that some middle-income staff cannot afford to rent (44%). Some staff also prefer to live with family as they have lived in a separate section of the house which means they have some privacy (56%). The inability to find an appropriate house elsewhere (37%) was also a reason for living with family. No significant relationship was found between income (low, medium, and high) and reasons for living with family (Table 6.16).

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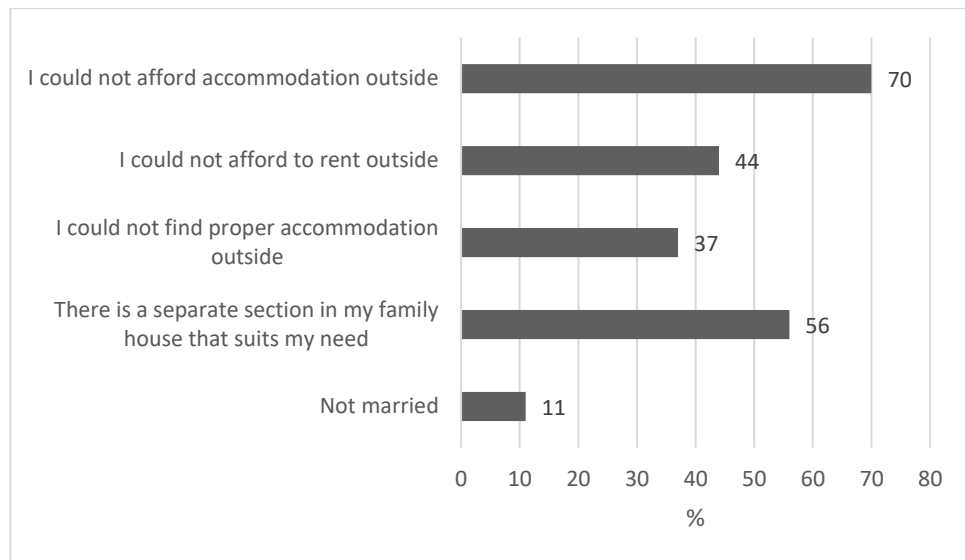
Figure 6.20 Reasons for living with family.

Table 6.16 Correlation between income and reasons for living with family

			q41 I could not afford to buy accommodation outside	q42 I could not afford to rent outside	q43 I could not find proper accommodation outside	q44 There is a separate section in my family house suits my needs	q45 Not married
Spearman's rho	income 8-Monthly Average Income from university job (in GBP)	Correlation Coefficient	.030	-.215	.025	.168	-.114
		Sig. (2-tailed)	.809	.082	.841	.177	.362

Finally, there are a number of possibilities for financing to consider when leaving the family home to buy a new house (Figure 6.21). Most commonly, middle-income respondents who live with family reported that their first choice would be to save the money they require (37%). The second and third most popular choices were to use the Real Estate Development Fund with a personal bank loan (33%) or the Real Estate Development Fund with savings (30%). There were no differences here between the different income groups.

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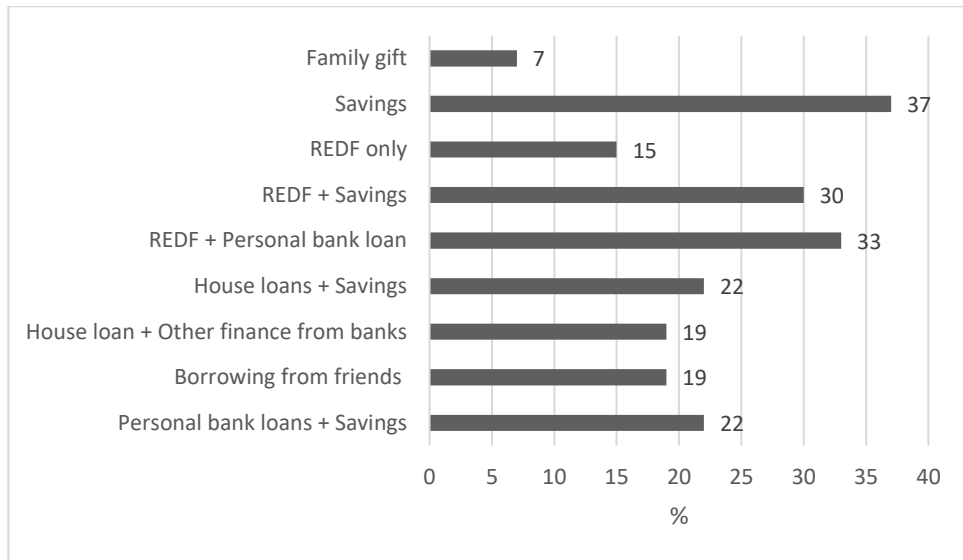
Figure 6.21 Paying for accommodation when deciding to move from the family home.

Two-thirds of middle-income staff (66.7%) who live with their family are not on a waiting list for any kind of government housing support programme, while the remaining third of people living with their family (33.3%) are currently waiting for government housing support to buy a house. Among those who are waiting for support (33.3%), less than half (38.9%) have waited between 1-5 years, while some have waited between 6-10 years (33.3%) (Figure 6.22).
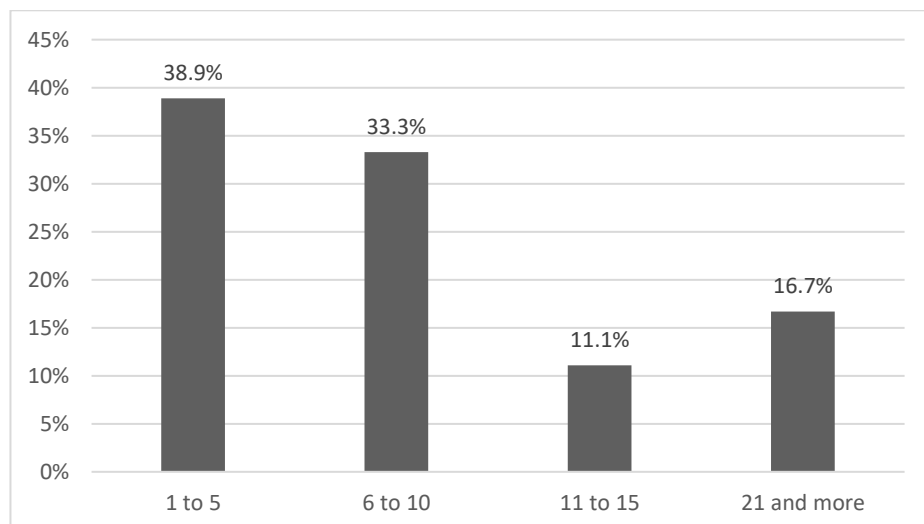
Figure 6.22 Waiting time (in years) to buy a house using government support (n=29).

6.5.7 Living in University Accommodation

A small number of middle-income staff (6 out of 115 or 5.2%) live in KAU accommodation. For those who live in university accommodation, there was about 3 who found that it was suitable for their needs. The most important reason for living in University accommodation was that they do not have an alternative place to live (n=3 out of 6). For the respondents who did not find their accommodation suited their needs, they gave their reasons as living in an old house (n=3, 50%), the accommodation being located in a dense area (n=3, 50%) and the house being too large (n=3, 50%).

When members of staff apply for university accommodation, they need to wait for an extended period of time before being allocated a place. Based on the feedback from the six respondents, three (50%) waited between 3-4 years and two waited for more than five years. Four of these six respondents reported that they would use a house loan from a bank with savings (67%) to buy a house if they were to leave university accommodation.

6.6 Initial findings and challenges

The middle-income group of respondents were more likely to live with family or in a rented home compared with the high-income group. Interestingly, a lower proportion of respondents from the low-income group live in rented accommodation than those from the middle-income group. This could be due to not being able to afford the high rents which is also an initial finding from the quantitative data analysis. Another reason could be that the low-income group, as this study shows, are more likely to live with family, as half of the low-income respondents lived with family, or receive some support from relatives.

The data on owning a house presented in this chapter are indirectly in accordance with the latest statistics on home ownership in Saudi Arabia. As in the recent Saudi Vision 2030 report, it was estimated that only 47% of Saudis own their house (Kingdom of Saudi Arabia, 2016), compared to 66% in the UK (Austin *et al.,* 2014), 70% in the US (Buckley & Schwartz, 2011) and 89% in China (CHFS, 2014). Additionally, affordability issues and homeownership ratios in other Gulf states are considerably better than those in Saudi Arabia (Smith & Freeman, 2014). This finding is a reflection of general salary levels, as the more income you have the more likely you are to rent (in the case of the middle-income group) or own a house (in the case of the high-income group). This finding also illustrates that living with immediate family is very common in SA, particularly if you cannot afford to rent or buy or are trying to save money to buy in the future. This is an

important socio-cultural aspect in Saudi Arabia as well as in other similar culturally-oriented Arab countries like the United Arab Emirates and Kuwait.

This is a major cultural difference between Saudi Arabia and the UK and USA as, historically, living together has its roots in both the Bedouin culture and in major urban centres in the Arabic peninsula. The Bedouin culture and the religion of Islam are the two major cultural dimensions that affect all aspects of life in Saudi Arabia including housing (Rice, 2004). This socio-cultural factor was identified in the conceptual framework presented in Chapter 4 and was expected to have a major impact on housing issues despite Saudi Arabia currently experiencing a great urbanization boom (Chapter 3). Indeed, the data presented here has consolidated the idea that these cultural factors are influencing many aspects of housing.

This is also a reflection of the age group of respondents of all categories as almost two-thirds of all respondents were younger than 40 years old. This is again a reflection of a socio-cultural element as most of these academics would have recently returned from abroad after finishing their degrees and they will be supported by their extended families until they can find appropriate accommodation, if they can afford it, or live in university accommodation which also has a long waiting list. This is a continuation of a long tradition in Arab societies in general where parents, especially fathers, support their children for a longer time than in the UK or USA. In summary, socio-cultural and economic factors, rather than the regulations of the housing policies, are the most important determinants of owning a house in Jeddah.

Those who do not live with family are more likely to live in apartments compared to those with a high income who mostly live either in villas or a duplex (semi-detached house). This is again a reflection of the salaries and ages of respondents. These two findings, surrounding living with family and renting, are a strong indicator of the level of affordability in the middle-income group. This is despite the fact that the house price-to-income ratio is very low (at 3.02%) compared with other nations such as China (at 40.3%) (Towergate Insurance, 2019). This cannot be explained by the rising costs of living in Jeddah, for example, as it is less expensive than many other places, with a cost of living index of 50.83% and it is ranked almost in the middle of 374 cities (Numbeo, 2019). This is instead likely due to the high expectations of house ownership in terms of size and location, and people's reluctance to accept interest-bearing loans as discussed in Chapter

3. One other reason is that there are fewer houses on the market in Saudi Arabia as the housing sector is less developed than in other countries (Al-Halaj *et al.,* 2013; GIZ, 2013).

The respondents from the middle-income group were willing to spend around a third (30%) of their salary on rent or a real estate loan. All groups were also willing to put aside savings from their salary to own their own house. This finding suggests that there is a great demand and willingness to own a house, if the opportunity arises. This is according to the most acceptable percentage of housing cost to income, at 30%, as it is an acceptable indicator of affordability (Lund, 2017; Salbak *et al.,* 2015; Whitehead *et al.,* 2008; Sidawi, 2009; Stone, 2006b; Kutty, 2005). However, when asked about the rent they pay, a large proportion of middle-income participants confirmed they pay much less than a third of their income on rent.

Another challenge identified in this study was the lack of suitable land for development as 53.9% of the middle-income group mentioned this issue. This is because the housing policies and finance/loans available are rarely enough to cover the whole cost of a new house and end-users will still have to contribute a large amount of money to cover the difference. For example, the SMOH reported that, in 2016, the highest loan possible was SR750,000 (£150,000) for the middle-income group (SMOH, 2016b), while in reality house prices are probably 10% to 20% above that for a three-bedroom apartment. This is an important issue as most end-users desire a large apartment or villa which is probably double the loan value.

Respondents from the middle-income group also noted that their current main residence is either too small or too large, far away from work or located in a very crowded area. However, at the same time, more than 70% said that their current main residence was acceptable because of its good environment. This most likely suggests that the location of the house is in a good neighbourhood in relation to being adjacent to the main services and shops and easy to commute to from within the city. However, the structure of the question was a little ambiguous and it is difficult to know for certain what the respondents meant by 'a good environment'.

Another important initial finding from this study was the answer to the question about the methods of owning a house. While there is an opportunity to own a house through loans from banks (REDF, 2019; SMOH, 2019a; SMOH, 2019f) or other similar financial

products, it was clear that not all respondents would benefit from this for multiple reasons which include their reluctance to take out a loan because of religious objections (Sidawi & Meeran, 2011; Kingdom Needs, 2009; Sidawi, 2008; Roberts, 2010), the need to wait for a long period of time to receive the money as was the case with the REDF (REDF, 2019; SMOH, 2019a; SMOH, 2019f; Oxford Business Group, 2015b), and the lack of robust government support schemes (GIZ, 2013). All these issues were discussed in more detail in Chapter 3 of this thesis. This challenge is recognized in the new housing policy by the SMOH and it is aiming, according to recently published reports and studies, to reduce this waiting time to less than five years (REFD, 2019; SMOH, 2019a; SMOH, 2019f). However, to do so, the SMOH has removed the interest-free long-term real estate loan from the REDF which was popular with end-users despite its longer waiting list, because of lenient repayment schemes and large accumulated numbers on the waiting list. Therefore, currently all potential buyers have to seek loans from private financial banks which has led to more organized payment schemes but higher interest rates. This point is a good indication that the authorities in Saudi Arabia are learning from financial products in other countries such as the UK and the USA as outlined in Chapter 2.

As far as the conceptual framework presented earlier in this thesis (see Chapter 4) is concerned, the data presented in this chapter suggest that the socio-cultural and economic factors which are specific to Saudi Arabia (i.e. having high expectation of houses in terms of size, having large families, and showing great reluctance to take loans with interest) have had little effect on the public and private production of suitable housing and financial products (Figure 6.23). This is because middle income participants wait for years for support, mostly while renting or living with family. They are also not able to own a house despite their willingness to spend a third of their salaries on a real estate loan, mainly because land is expensive. In addition, ready-built houses are expensive due to the cost of private and public housing construction. The relationship between the different domains in the conceptual framework must reflect these findings, for example, the relationship between the socio-cultural and economic factors alongside house building is not as dynamic or interactive as expected. For example, ready-built houses which are not popular are still the main affordable housing product because of the market economy rather than end-users' preferences.
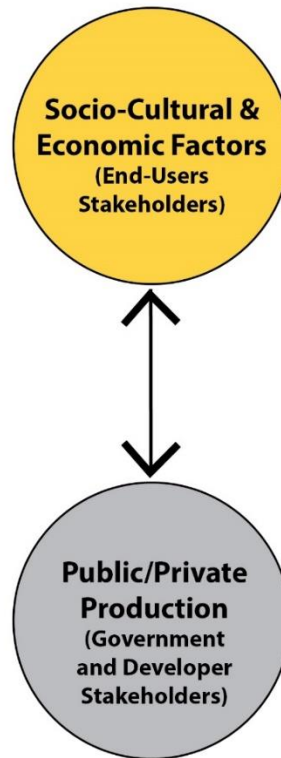
Figure 6.23 Relationship between socio-cultural/economic factors and public/ private production.

According to the conceptual framework, global and regional factors should, at least slightly, shape the behaviour of the end-user stakeholders towards using new financial products and lowering their expectations of the new houses they want to own. However, the data presented here does not show these effects; though with time this may still occur as the population changes and adapts to new realities and space requirements.

In conclusion, these results shed some doubt on the 30% threshold of affordability. Despite 66% of participants stating they were willing to spend a third of their salary on real estate loan payments, many respondents were still renting or living with family because they struggle to pay even 20% of their salary on rent or home loan repayment.

The results indirectly reflect that the SMOH's new housing policies, such as the REDF, the 'Sakani' initiative and others discussed in Chapter 3, have not yet impacted on the views of the respondents as many still struggle to buy a house, specifically the middle-

income participants. This is probably because the SMOH policies are still evolving and in time, they should aim to become more widespread and effective.

6.7 Links to the conceptual framework

A few points were identified in the previous sections about the suitability of the conceptual framework to this study. In other words, do the findings of this study validate the conceptual framework which was based on the literature and the critical discussion of the first few chapters of this PhD project?

It is clear that the extensive literature review is directly and indirectly reflected in the conceptual framework. Data on affordable housing models are clearly linked to socio-cultural factors. Data on incomes and housing preferences are shaped by economic considerations. The land issue, however, was only slightly captured in the conceptual framework. Data on the middle-income group demonstrating their differing characteristics and preferences when it comes to choosing a financial product were, unfortunately, not very well suited to this framework. The conceptual framework, then, can be amended to reflect these findings. Figure 6.24 shows that the characteristics and preferences of end-user stakeholders are dynamically associated with socio-cultural factors and affected directly by economic factors. However, the adherence of the data to the conceptual framework and a resultant new framework based on the data will only be possible when the interview data is fully analysed.
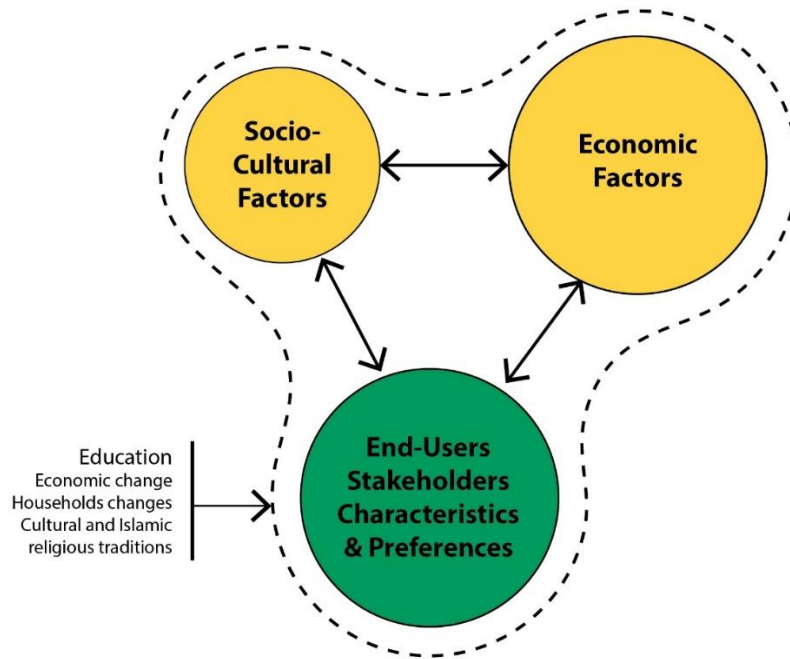
Figure 6.24 Showing changes to a part of the conceptual framework to reflect the relationship between the factors and end-user characteristics and preferences.

This chapter's findings were an account of the middle-income group's perspective on affordable housing in Saudi Arabia. The main findings showed that this group of stakeholders struggle to own a house of their own and that there are many challenges in the rental market and in acquiring land. In the following chapter, the views of the other stakeholders such as government officials, members of the finance sector, and other relevant stakeholders will be sought. This is in addition to further interviews with the main end-user stakeholders. This hopefully will inform an update of the conceptual framework and fine-tune the findings from this survey.

Chapter 7: Stakeholders' Views (Qualitative Data Analysis)

7.1 Introduction

In this chapter, an analysis of the qualitative data collected from 40 interviews with six different key stakeholders in the housing market in Jeddah, Saudi Arabia, will be presented and the findings discussed in light of the conceptual framework developed earlier and presented again below (Figure 7.1). In the following sections, the major and interconnected elements are highlighted within each section to illustrate the relationships between the conceptual framework, the analysis steps and the findings.
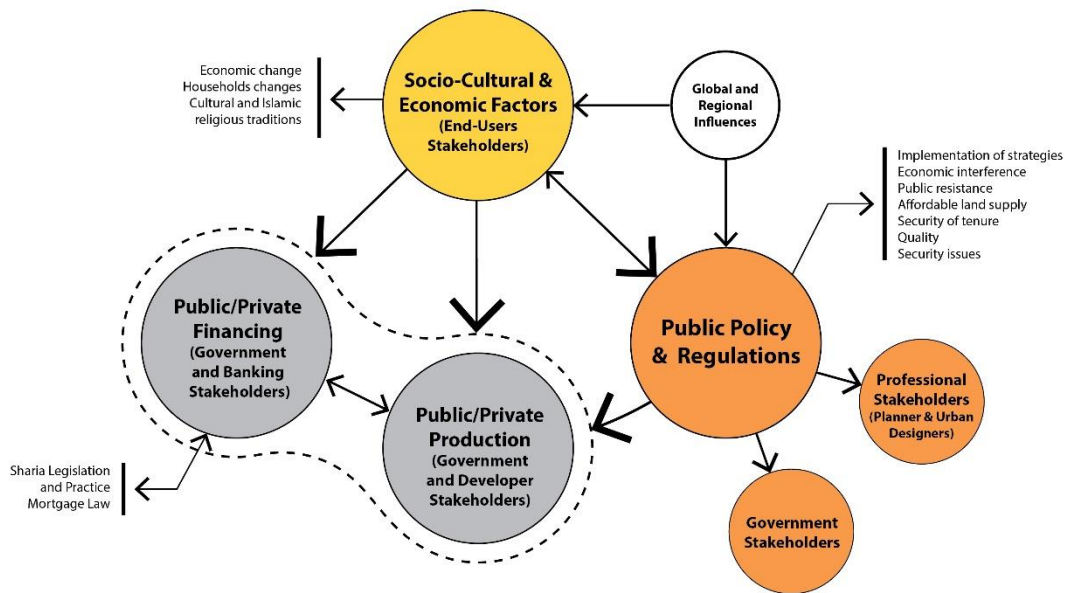
Figure 7.1 The original conceptual framework.

7.2 Characteristics of the interviewees

Six key stakeholder groups were identified according to the conceptual framework developed in Chapter 4, and those who are directly involved with the housing sector in Jeddah were targeted for the qualitative data collection. From these groups, 40 individuals were then selected for interviews based on their informed consent. The most important stakeholders of the selected sample were university lecturers (end-users) who are considered by the SMOH as belonging to the middle-income group and who are currently struggling with acquiring and owning their first home. The other stakeholder groups were identified in the conceptual framework and include individuals from sectors who are involved in the development or financing of affordable housing. The assumption prior to

the interviews was that the participants were aware of affordable housing policies in the country, either as clients, developers, planners, policy makers, or financing professionals involved in the process. This method of sampling is often called 'purposive' or 'purposeful' sampling (Etikan *et al.*, 2016) and though it is not random, it guarantees that the researcher can collect the required data to answer the research questions identified in the study. There was no need to recruit individuals from higher or lower income brackets as they were not targeted in this research. In addition, because of the nature of Saudi Arabian society, the majority of participants were men as they are religiously and culturally responsible for providing for the family.

The interviewees comprised six groups as follows (see Appendix 2):

1- EU-P (Teaching staff at KAU with a planning background) – 9 interviews

(Element in the conceptual framework - End-user stakeholders)

This first stakeholder group includes end-users with a planning background. All participants in this group are members of the teaching staff at KAU in Jeddah. All of them are considered, based on their socio-economic status, to belong to the middle-income category (SMOH, 2016b). Additionally, these stakeholders are members of the teaching staff in the Faculty of Environmental Design in the Planning Department which also includes architecture, landscape architecture, and geomatics. The reason that these participants were recruited was that, besides being representatives of the middle-income bracket, they could also provide rich data based on their planning background and their familiarity with the housing market. However, another group without a planning background was also recruited.

2- EU-NP (Teaching staff at KAU with a non-planning background) – 10 interviews

(Element in the conceptual framework - End-user stakeholders)

The second stakeholder group is similar to the first group but they do not come from a planning background because, of course, it is important to look at the research problem from different points of view. Individuals under this category discussed affordable housing issues/policies from a non-professional point of view and are possibly more representative of the general potential buyer population.

Figure 7.2 below shows the number and percentage of these two groups of participants who are either renting/living with parents or who own a house. This is a major distinction

of this group as it shows that a large number (more than half) of these participants still do not own a house.
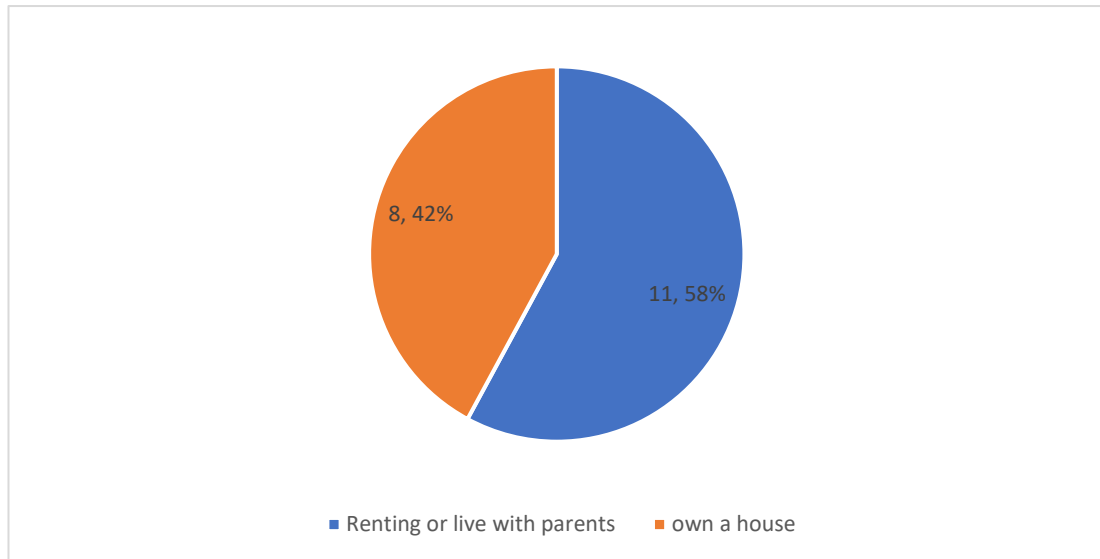
Figure 7.2 Number and % of respondents from the first two groups (end-users) classified according to their housing criteria.

3- F (Finance institutions) – 5 interviews

(Element in the conceptual framework - Government and banking stakeholders)

This group of stakeholders is crucial in providing information that can help answer the research questions. Financial institutions play an extremely important role (SMOH, 2016a) in the development cycle of affordable housing provision in the country and thus during the analysis of this chapter, their policies and suggestions should be carefully explored. Banks and the Saudi Real Estate Development Fund (REDF) are the main financial institutions related to housing in Saudi Arabia. However, with the new policies implemented by the SMOH which shift responsibilities from the public sector (REDF) to the private sector, private banks are now directly responsible for housing loans. These new policies were discussed in detail in Chapter 3.

4- G (Government officials responsible for housing projects) – 5 interviews

(Element in the conceptual framework - Government stakeholders)

This stakeholder group includes the main governmental authorities involved in the development of the housing market such as the Saudi Ministry of Housing (SMOH) and

the Jeddah municipality. Nonetheless, it is important to state that the SMOH is now the main entity responsible for housing issues and policies in the country, creating a more centralized system to administrate and organize the national housing market.

5- D (Developers) – 5 interviews

(Element in the conceptual framework - Government and developer stakeholders)

These stakeholders are private sector players who build houses for the market. They form an important category which the SMOH must work with, support, and incentivize in order to boost the housing market and reach its goals. Understanding the needs of private developers and their perspective is essential for the housing development cycle.

6- P (Planners) – 6 interviews

(Element in the conceptual framework - Planners and urban designers stakeholders)

These stakeholders are involved in both day-to-day and long-term planning issues related to housing. Their job is mainly to develop land to be used for building new houses within a city. Their expertise and the amount of data and information they have are crucial to a healthy housing market.

7.3 Initial codes

The online software 'Dedoose' was used to analyse the qualitative data through the identification of codes. It was also used to create a cloud map (Figure 7.3) for the most recurring initial codes to compare across groups of interviewees in terms of the most common codes and main themes. Figure 7.4 below shows an example of the initial codes co-occurrence for the Government code. As mentioned in the methodology chapter (Chapter 5), these initial codes consist of one or two words used to identify relevant topics in the interviews. Using this method of initial coding makes it easier to follow the text and then create more refined codes that eventually lead to themes.

According to the conceptual framework, the focus was on elements that affect the affordable housing policy in Saudi Arabia. These elements were:

1- Socio-cultural Considerations: Reflected mainly in the initial code of 'Socio-cultural'.

2- Public Policy and Regulations: Reflected in the initial codes of 'Regulations', 'Planning', 'Construction policy' and similar codes.

3- Public/Private Production and Financing: Reflected in the initial codes of 'Finance policy', 'Economic', 'Affordability' and 'Real Estate/Mortgage law'.

Other elements which are interconnected with these three major elements of the conceptual framework include global and regional influences and Islamic traditions.

From the cloud map below (Figure 7.3), it is clear from the font size of the different codes on the map and their central position that they were mentioned more often. 'Regulations', 'land', 'finance policy', and 'government' are the most frequently coded texts. 'Affordability' was also a prominent code. On the other hand, 'global factors' and Saudi Arabia's government transformation plans of 2020 and Vision 2030 were mentioned less frequently.

Therefore, the cloud map below (Figure 7.3), which uses a frequency calculation based on how many times each code was mentioned in the interviews, reveals that codes related to sociocultural factors were less dominant than codes referring to both regulations and finance policies. Public policy and regulations, on the other hand, showed a weaker relationship with, and influence on, the socio-cultural considerations of end-user stakeholders. The cloud map was thus dominated by the initial codes of regulations, policy, and finance and the reference to socio-cultural factors was either subtle or seldom referred to by interviewees despite the assumption in the literature that it might play a large part in shaping housing policy.

Figure 7.3 Cloud map of the most frequent initial codes.

Figure 7.4 Initial codes co-occurrence for the Government code

	Individuals	Institution	Profession	Developer	Finance Pr	Global Fac	Socio-Cult	Economic	Transform	Regulation	Planning	Affordabil	Supply and	Income gr	Housing Is	Land Polic	Land Plann	Land Gran	Land Price	Constructi	Public dev	Private de	Finance Po	Mortgage
Individuals		23	32	41	35	1	42	22	7	100	49	58	48	47	67	68	50	6	1	68	10		67	35
Institution	23		26	22	26		2	4	2	32	16	6	6	5	22	20	12		2	19	4		22	7
Profession	32	26		45	31		26	20	2	132	104	33	33	24	71	94	70	14		85	18		54	12
Developer	41	22	45		27		15	13	3	84	48	36	27	22	39	67	45	3		68	18		48	14
Finance Pr	35	26	31	27			17	16	1	58	27	30	18	19	33	34	20	4	9	31	9	9	56	34
Global Fac	1									1										1				
Socio-Cult	42	2	26	15	17			26	4	62	42	49	45	45	53	38	25	5	5	38	7		42	24
Economic	22	4	20	13	16		26		5	40	30	29	20	23	31	26	19	6	12	23	6		28	14
Transform	7	2	2	3	1	1	4	5		9	6	5	4	4	7	4	4			5	2		6	1
Regulation	100	32	132	84	58	1	62	40	9		151	100	77	70	129	171	116	21	46	162	26	29	129	47
Planning	49	16	104	48	27		42	30	5	151		56	54	45	81	122	94	18	3	113	24		71	24
Affordabil	58	6	33	36	30		49	29	5	100	56		66	74	72	78	50	10	3	76	11		80	39
Supply and	48	6	33	27	18		45	20	4	77	54	66		66	61	63	43	11	22	62	14	16	49	25
Income gr	47	5	24	22	19		45	23	4	70	45	74	66		54	57	36	10	1	55	9		55	32
Housing Is	67	22	71	39	33		53	31	7	129	81	72	61	54		94	64	8	7	89	16	30	85	31
Land Polic	68	20	94	67	34		38	26	4	171	122	78	63	57	94		119	21	3	152	25		105	35
Land Plann	50	12	70	45	20		25	19	4	116	94	50	43	36	64	119		19		97	21		59	25
Land Gran	6		14	3	4		5	6		21	18	10	11	10	8	21	19		9	15	5	5	10	8
Land Price	24	2	23	19	9		15	12	1	46	32	38	22	23	27	46	39	9		42	6		34	17
Constructi	68	19	85	68	31	1	38	23	5	162	111	76	62	55	89	152	97	15			24		98	32
Public dev	10	4	18	18	9		7	6	2	26	24	11	14	9	16	25	21	5		24		22	18	8
Private de	13	4	16	20	9		8	6	2	29	23	16	16	12	20	27	24	5	3	25	22		20	8
Finance Po	67	22	54	48	56		42	28	1	129	71	80	49	55	85	105	59	10	34	98	18			55
Mortgage	35	7	12	14	34		24	14		47	24	39	25	32	31	35	25	8		32	8		55	
Governme	50	15	37	44	30	1	28	18	6	102	57	45	38	33	45	68	45	14	7	70	16		67	33

Housing Policy   **Land Policy**   **Construction Policy**   **Finance Policy**

Figure 7.4 above is an example of a code co-occurrence table for the main stakeholders involved. It shows a high co-occurrence of 'regulations' alongside 'affordability' and 'planning', at 100 and 151 counts respectively. The highest code co-occurrences were those of 'regulations' and 'land'. However, in general, the co-occurrences table showed the following:

1- For the Government codes associated with the Public Policy and Regulations element in the Conceptual Framework:

- Main co-occurrence is across housing, land, construction and finance policy.
- Government shows high interest in all housing issues.
- Land grants is a weak government interest.
- Weak focus on end-users' needs and weak implementation of policies.

2- For the Finance codes associated with the Public and Private Financing element in the Conceptual Framework:

- Main co-occurrence is with finance policy.
- Finance professionals are mainly interested in government and finance policy.
- Finance showed a weak relationship with housing issues such as affordability.
- Poor link with other stakeholders such as end-users and developers.

3- For the Developers codes associated with the Public and Private Production element in the Conceptual Framework:

- Developers are not satisfied with planners as they showed a weak relationship to planners and the planning system (this might reflect the weaknesses of the planning system in Saudi Arabia).
- They complained about the lack of support they receive from the government.
- Weak consideration of income groups (mainly targeting high-income housing).
- A strong awareness of finance policy.

4- For Specialised Faculty Members (EU-P: planners/with planning background), associated with the Socio-Cultural and Economic Factors element in the Conceptual Framework:

- Surprisingly, they did not focus on the problem of land prices.

- Moderate focus on planning.

- They feel that there is low government support.

- They blame government housing policy/regulations, land policy and finance policy.

5- For Non-Specialised Faculty Members (EU-NP: non-planners/without planning background), associated with the Socio-Cultural and Economic Factors element in the Conceptual Framework:

- They showed a high interest in finance policy.

- Low effects from socio-cultural factors.

- They reflect on affordability issues.

6- For Planners (professionals in the municipality of Jeddah), associated with the Public Policy and Regulations element in the Conceptual Framework:

- Planners showed almost no interest in land prices.

- Planners were also not keen on affordability and the supply and demand of new houses.

- No interest in different income groups.

In summary, the major differences between the stakeholder groups are shown in the following figure (7.5), displaying how often each group refers to certain codes. It is clear from this table that government and end-users with planning groups refer to the term 'regulations' more than any other term in the interviews suggesting that regulations have a major impact on affordability. This is also a reflection of the initial findings in Chapter 6. Planners and developers were the least likely group to speak about finance.

Descriptor			Code count				
			Housing policy/Regulations	Government	Affordability	Finance policy	Finance professionals
	1	EU.P	200	178	170	147	63
	2	EU.NP	143	103	92	116	50
	3	Finance	89	93	81	174	151
	4	Government	266	214	110	142	65
	5	Developer	179	133	121	130	58
	6	Planner	142	116	54	88	32
Total			1019	837	628	797	419
			1-100 Low	101-200 Medium		201-300 High	

Figure 7.5 Descriptor* code count across the stakeholder groups, developed by the researcher from 'Dedoose'

Figure 7.5 also shows a major difference between two groups of end-users. Participants with a planning background were more likely to mention regulations, government and affordability than participants without a planning background. This finding suggests that education and access to knowledge about housing issues and policies are not available to all end-users. This finding triangulates subtly with some findings of the quantitative study such as difficulty in finding the best financial product (e.g. real estate loan). It also reflects the lack of transparency which was identified in the literature (Chapter 3). Education and freedom of information must, therefore, be a factor in the conceptual framework. It is essential that the qualitative data be analysed thematically before finalizing the new conceptual framework. This is discussed in the next section.

7.4 Thematic maps

The thematic maps presented in this chapter are based on themes that have been formulated through the process of thematic analysis. The thematic maps are the final refinement to identifying the major themes that summarize what the interviewees said and is guided by the conceptual framework to answer specific research questions. The map also shows the relationship between different themes and their convergence to form a meaningful concept. These themes or concepts were used to answer the following research questions:

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

2. What are the causes of these issues and who are the main actors involved?

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?

4. How do these current policies address the problem of middle-income affordable housing?

5. How can these policies be developed further to address existing or future issues?

6. Which other policies can be introduced to contribute to a solution?

7.4.1 Thematic maps: The challenges and opportunities of affordable housing

A thematic map in this context is a schematic drawing that summarizes the main themes identified in the thematic analysis (Braun & Clarke, 2006). Thematic map 1 (Figure 7.6) is a summary of the themes that were identified to help answer research questions 1 and 2:

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

2. What are the causes of these issues and who are the main actors involved?

The survey (questionnaire) data (in Chapter 6) previously contributed to answering these two questions. In this chapter, the findings from Chapter 6 will be consolidated in accordance with the perceived relationship between the socio-cultural and economic factor domains and both the regulations and finance domains.

Not all participants identified the same problems, but overall, the problems and challenges of affordable housing in Jeddah were presented. Sometimes a problem was identified, but the cause was not identified. Almost all participants seemed to be unclear on why the private sector is not regulated. This is an important point as data from the quantitative analysis chapter showed that more middle-income participants are renting, and the amount of rent is affecting their plans to save to buy their own house in the future.

Thematic map 2 (Figure 7.7) is a summary of themes to answer the questions:

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?

4. How do these current policies address the problem of middle-income affordable housing?

5. How can these policies be developed further to address existing or future issues?

6. Which other policies can be introduced to contribute to a solution?

To answer question 3, the prominence of the public policy and regulations domain in the conceptual framework will be examined. Furthermore, answers to questions 4, 5 and 6 will inform the accuracy of the relationships in the conceptual framework. A narrative approach is adopted later using themes arising from thematic map 2.

Figure 7.6 below is a summary of the most repeated challenges to the housing policy used currently in Saudi Arabia. These are the most recurrent subthemes that were identified from the initial codes and the most frequent codes. These subthemes reflect the statements of different stakeholders. For example, the codes 'land' and 'development' were used to identify frequent texts speaking about the fact that much of the land is not developed as well as speaking about white land which in Saudi Arabia is "undeveloped lands that were allocated – within the urban area of the city - for residential or commercial usage" (SMOH, 2016d). This was subsequently identified as a subtheme that pointed to a challenge. In some other instances, the subtheme emerged from totally unrelated codes. The most notable example is that the code 'socio-cultural' leads to the subtheme of an unsuitable housing policy model in the housing market which does not accurately meet the society's cultural needs.
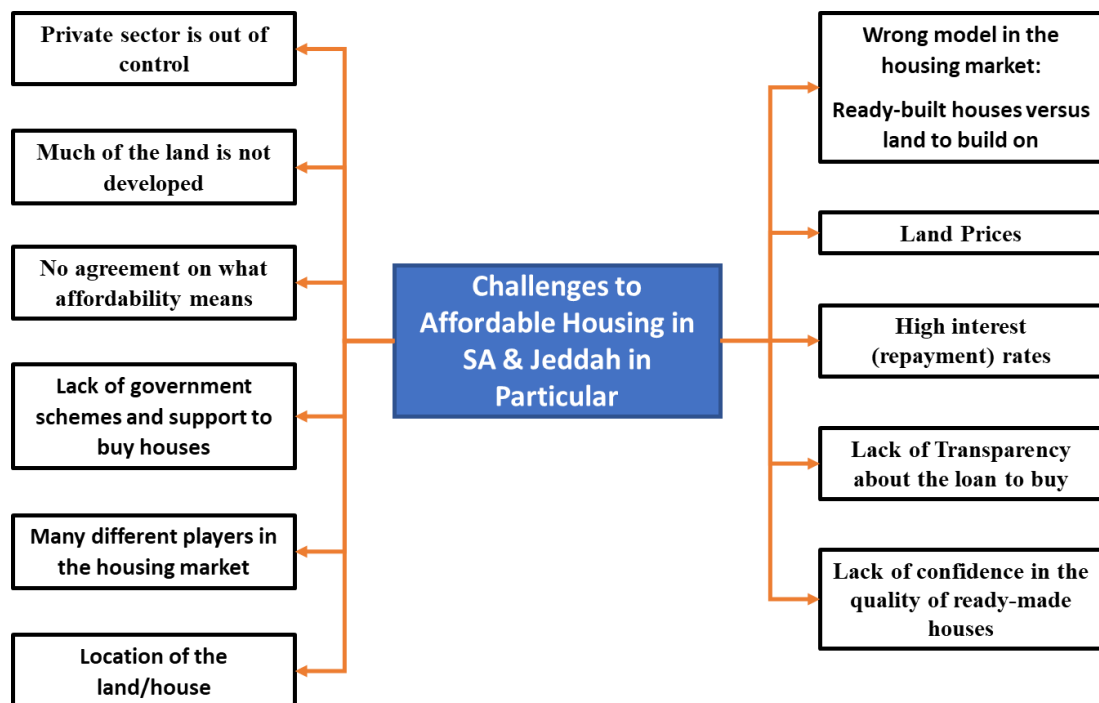
Figure 7.6 Thematic Map 1. Showing the Challenges to the Affordable Housing Scheme in Jeddah.

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The thematic map in Figure 7.6 was reached through an in-depth analysis of the texts identified through the initial codes and guided by the conceptual framework and the research questions. As was discussed in the methodology chapter (Chapter 5), a deductive approach was used. The data were sufficiently rich to provide a rationale for how solutions to the affordability crisis might work (the left column in Figure 7.7). The example which explains this is the challenge of having the wrong housing model (for example, a high interest real estate loan on a ready-built house). The solution is to change this model to a more socially acceptable model, and this should work because people would be more willing to adopt it.
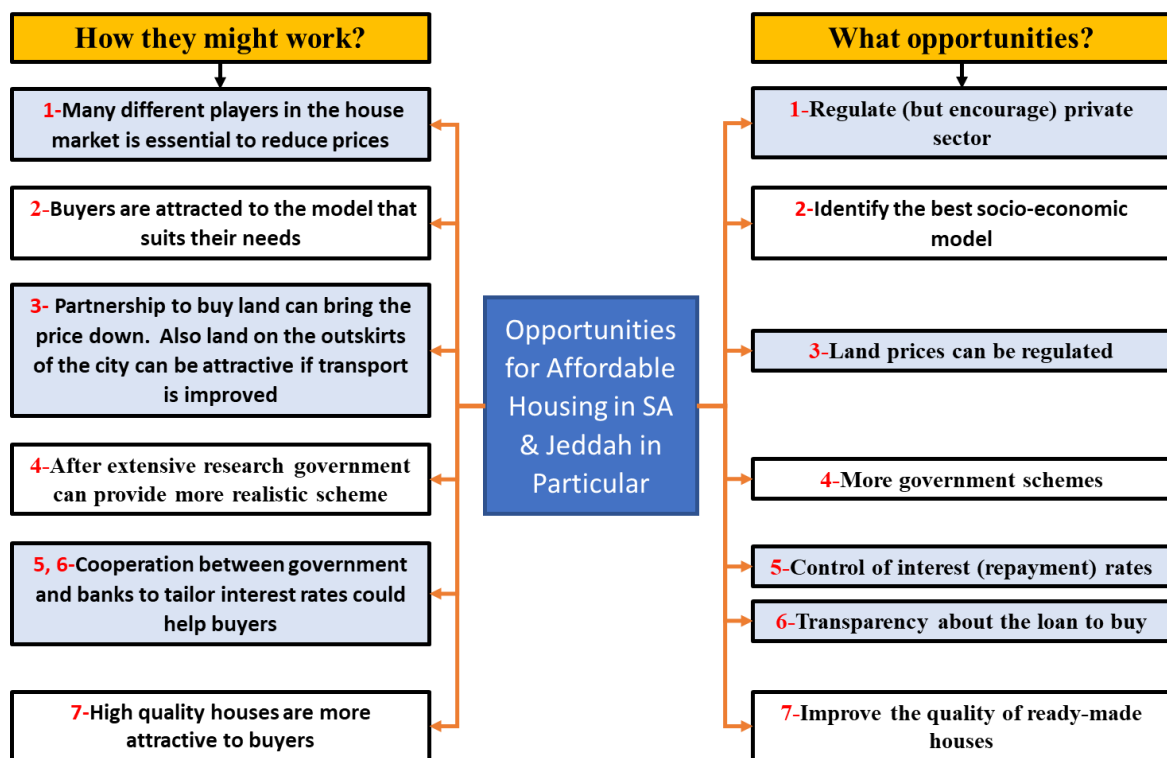
Figure 7.7 Thematic Map 2. Showing the Opportunities for Affordable Housing Schemes in Jeddah.

7.4.2 Links bewteen the themes identified and the conceptual framework

The thematic maps were reached by searching the text using 'Dedoose' and they were guided by the original conceptual framework. Table 7.1 shows these themes' alignment with the elements in the original framework and the suggested amendments previously discussed in

Chapter 6. Figure 7.8 shows how these themes and subthemes link to the elements in the original conceptual framework.

Table 7.1 Themes, subthemes links to the original conceptual framework and suggested changes to the framework.

	Theme	Original Conceptual Framework	The relationship between Theme & Original Conceptual Framework (Suggested Change)
Challenges to affordability	Private sector is out of control	Public/private financing and production	Confirmed the added element of the high prices of ready-built houses and the low supply of houses
	Much of the land is not developed	Affordable land supply factor linked to public policy and regulation	Global and regional influences' new relationships are in accordance with this theme
	No agreement on what affordability means	Public policy and regulations	No Change
	Lack of government schemes and support to buy houses	Public policy and regulations	This is already reflected in a double-sided arrow showing an impact on the preferences of end-users
	Many different players in the housing market	End-user stakeholders, professional stakeholders, government stakeholders, developer stakeholders and banking stakeholders	Confirmed the separation of end-user stakeholders' characteristics & preferences to an element of its own due to its significance
	Location of the land/house	Affordable land factor linked to public policy and regulation	No change
	Wrong model in the housing market: Ready-built houses versus land to build on	Public policy and regulations element linked to affordable land supply factor	Confirmed the added element of the high prices of ready-built houses and the low supply of houses
	Land Prices	Affordable land factor linked to public policy and regulations	No change as affordable land was already a factor feeding into public policy and regulations
	High interest (repayment) rates	Socio-cultural and economic factors	Need to separate the two groups of factors as this is more economic than socio-cultural
	Lack of transparency about the loan to buy	Public policy and private financing	No change

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	Lack of confidence in the quality of ready-made houses	Socio-cultural and public and private production	It is now a factor feeding into Public and private production
Opportunities and how they might work	**Regulate (but encourage) the private sector** Having many different players in the housing market is essential to reduce prices	End-user stakeholders, professional stakeholders, government stakeholders, developer stakeholders and banking stakeholders	The high prices of ready-built houses and the low supply of these units are now identified as factors affecting production
	Identify the best socio-economic model Buyers are attracted to the model that suits their needs	Socio-cultural & Economic element linked to these factors: Household changes Cultural and Islamic religious traditions	Separation of socio-cultural and economic factors is confirmed. Education is now added as a factor affecting end-user preferences.
	Land prices can be regulated Partnerships to buy land can bring the price down. Also, land on the outskirts of the city can be attractive if transport links are improved	Public policy and regulations element linked to these factors: Affordable land supply factor Implementation of strategies Quality Security issues Public private production	No change but the central position of this element is clearer
	More government schemes After extensive research the government can provide more realistic schemes	Public policy and regulations element linked to: Implementation of strategies factor	No change
	Control of interest (repayment) rates & transparency about the loan to buy Cooperation between government and banks to better tailor interest rates could help buyers	Public/Private Financing element linked to these factors: Sharia legislation and practice Mortgage law (which is not implemented yet in SA)	Already identified in the original framework
	Improve the quality of ready-made houses High quality houses are more attractive to buyers	Quality factor linked to Public policy & regulation element	The high price and low supply of ready-built houses is now incorporated in the framework

Regulate (but encourage) private sector
Many different players in the housing market are essential to reduce prices

Land prices can be regulated
Partnerships in buying land can bring the price down. Also, land on the outskirts of the city can be attractive if transport links are improved

High interest (repayment) rates
Many different players in the housing market
Lack of confidence in the quality of ready-made houses

Identify the best socio-economic model
Buyers are attracted to the model that suits their needs

Economic change
Households changes
Cultural and Islamic religious traditions

Socio-Cultural & Economic Factors (End-Users Stakeholders)

Global and Regional Influences

Implementation of strategies
Economic interference
Public resistance
Affordable land supply
Security of tenure
Quality
Security issues

Land Prices
Much of the land is not developed
Location of the land/house

Private sector is out of control
Lack of transparency about the loan to buy
Many different players in the housing market

Public/Private Financing (Government and Banking Stakeholders)

Public Policy & Regulations

Public/Private Production (Government and Developer Stakeholders)

Professional Stakeholders (Planner & Urban Designers)

Wrong model in the housing market:
Ready-built house versus Land to build on

Sharia Legislation and Practice Mortgage Law

Government Stakeholders

No agreement on what affordability means
Lack of government schemes and support to buy houses
Many different players in the housing market

Control of interest (repayment) rates & transparency about the loan to buy
Cooperation between government and banks to better tailor interest rates could help buyers

Lack of confidence in the quality of ready-made houses
Many different players in the housing market

More government schemes
After extensive research the government can provide more realistic schemes

Improve the quality of ready-made houses
High quality houses are more attractive to buyers

■ Themes & subthemes   ■ Opportunities   ■ How they might work

Figure 7.8 Themes, subthemes, opportunities & how they might work all links to the original conceptual framework

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7.5 Major findings

As shown by both the analysis using Dedoose and through the thematic analysis, it can be stated that the major issues that all participants contributed to, and everyone interviewed seemed to have a strong opinion on regardless of their status were:

- Affordability and finance
- Cost of land and building materials
- Regulation of the housing market
- Socio-cultural factors

The thematic maps identified the major challenges and opportunities in affordable housing plans and policies for middle-income first-time buyers. The following sections outline the major findings extracted from the thematic analysis.

7.5.1 Affordability and financing

There was little debate about the meaning of affordability in all groups with most interviewees suggesting that affordable houses should not cost buyers more than a third of their salary. There was not much difference between the different groups regarding affordability issues. A participant from the university with a background in planning said:

"An affordable house is a property maintained by a citizen who pays no more than 35% of his monthly income towards owning it"

[Initial code: affordability, Descriptor: 3 EUP, Group: University Lecturers with planning background]

By contrast, another participant speaking about a friend with a middle-income salary stated:

"*It is very difficult to deduct 30% from [his] salary. It is a disaster for him and his life as well, there are a lot of commitments one has to meet"*

[Initial code: affordability, Finance. Descriptor: 1 EUP, Group: University Lecturers with planning background]

A participant who has no background in planning or in the cost of building houses gave a lower figure for the repayment for affordable houses:

"The monthly repayment instalments should not be more than 20% of the salary. But, in reality, that's not the case"

[Initial code: affordability, Finance. Descriptor: 11 EU-NP, Group: University Lecturers with no planning background]

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Government officials gave a more flexible definition without referring to a fixed percentage of an individual's monthly salary. For the government, the 30% monthly repayment used to be the rule of thumb for the maximum figure. However, this does not necessitate that the real estate loan contract should automatically be set at 30% of the buyer's salary. More recently, SAMA has set a new dynamic ceiling for the maximum monthly deductions for loan applicants. They have divided the threshold for borrowing into three segments according to the customer's monthly income. Applications to these new loans opened this year, but as the new loans do not take account of any existing borrowing, it is too early to evaluate the impact of this new system. The data presented here suggest that most middle-income end-users are attracted to small loans rather than large loans.

Other factors also affect how much new buyers should pay, including the length of the real estate loan and how much deposit the new buyer can afford. However, finance interviewees hinted that affordability issues are not a priority for them, and that it is not their job to support middle-income buyers. For them, the most important issue is for the loans to be repaid on time. As suggested by some government officials, this is often not the case, however, as many loans are not paid on time because the housing loan system is badly regulated. Additionally, the magic figure of 30% was questioned by some interviewees as one of them stated:

"Some people can live on two thirds of their salary and some cannot. So, the issue of affordability is very relative"

[Initial code: affordability, Finance. Descriptor: 13 EU-NP, Group: University Lecturers with no planning background]

This same participant said:

"I have been trying to buy a house for the past six years and I just did a year ago. I can now afford the 30% down payment, which was my main obstacle, as my salary has increased throughout the past six years"

[Initial code: affordability, Finance. Descriptor: 13 EU-NP, Group: University Lecturers with no planning background]

The government officials seem to understand that the 30% monthly payment toward buying a house is not a magic figure that works for everyone. One government official said:

"Affordable housing [.... means that] the cost won't exceed one third from the total income of the middle class and the below middle-income people. Of course, this varies from person to person if we take the middle-income segment and those below the middle group who cannot

afford it. In the middle-income segment there are people that, even if they pay one third of their salary they can't afford to survive"

[Initial code: Affordability, Descriptor; 24G, Group: Government]

From the interviews it was clear that there could be a solution to the affordability issue if it is addressed in a holistic framework to resolve the housing market as a whole. One positive sign to emerge from the interviews was that both the government and the finance sector are aware that more cooperation is needed between the different players in the housing market.

One government official discussed how the SMOH is working directly with banks to find the best financial housing policies that will help citizens own a home. Finding suitable housing loans that fit new buyers' incomes and expectations from the available financial channels is one of the priorities of the government. Historically, in Saudi Arabia, the main regulators of the housing sector used to provide interest-free housing loans through the REDF as discussed earlier in Chapter 3. The new model of finance means that it is now the responsibility of private banks to be the main financial channel for loans. The interviews have shown that this new reality is not fully accepted by potential buyers and that a cultural change is needed for them to accept this new model of financing in the housing market.

Interviewees from the government and members of faculty with planning backgrounds highlighted the fact that developers are crucial in terms of building affordable housing that meets the population's needs. However, the developers interviewed showed clear dissatisfaction with how the municipalities (planners) affect their contribution to the housing market, and have also shown little awareness of affordability issues. Planners and developers alike complained about the lack of support they receive from the government. One government official expressed frustration regarding the inaccuracy of the figures related to who needs affordable housing and finance by saying:

"There is no transparency really. Every side has its own figures. For example, the municipality issued a report a week ago [2017] saying that the need for housing units in Jeddah is 25,000 housing units. A study by housing support says 50,000 to 70,000 annually"

[Initial code: Regulation, Planning, Supply and Demand, Descriptor; 24G, Group: Government]

All parties agreed that more cooperation is needed and that all entities must acknowledge that clear and comprehensive terms of affordability must be defined and explored. It was very apparent from government officials that they understand the needs of middle-income end-users,

but there is a lack of effort to explore different models that suit their needs. The bubble charts in the following sections further show how each group reflected on these issues in more detail.

Bubble charts were used as they are representative of at least three types of data in one graph (Trigueros, 2018). In this chart, the data points are replaced with bubbles, and an additional dimension of the data is represented in the size of the bubbles. The bubble chart in Figure 7.9 suggests that finance officials were more likely to speak about real estate law and finance matters and link this to government support. What was more surprising is that potential buyers, including planners, planning-specialist faculty members, and non-specialist faculty members, were less likely to speak about housing finance law because of their lack of understanding of the different products available in the market, and also because there are no suitable products that suit their needs. This contrasts with the overall understanding of the housing policy which was highlighted previously. This was also reflected in the quantitative chapter as a large number of those who own their houses have done so through help from relatives or inheritance rather than taking advantage of finance products in the market.
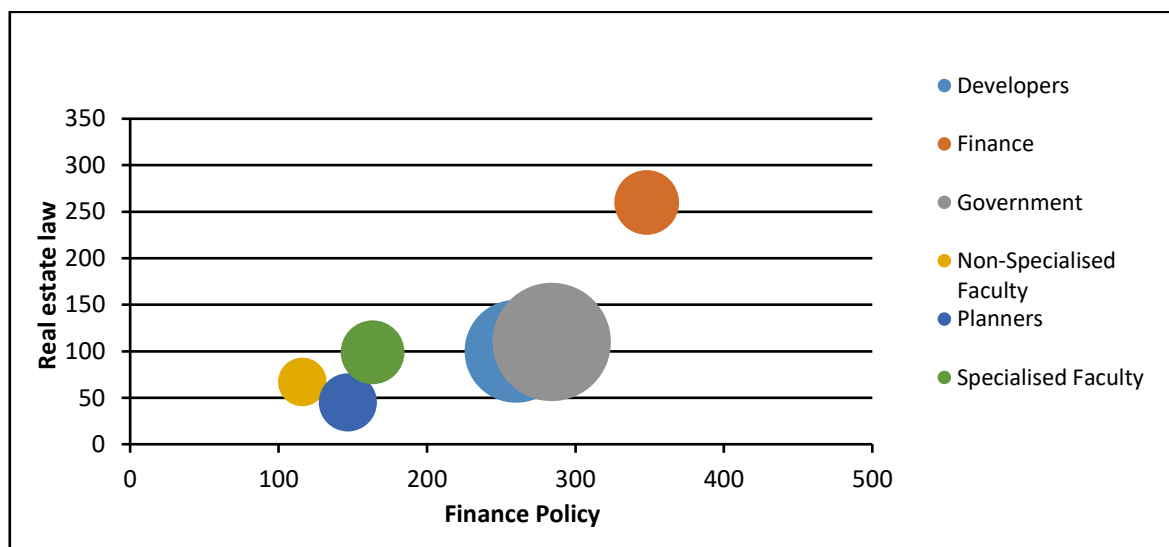
Figure 7.9 Frequency of mentions of real estate law and finance policy in relation to government support (size of the circle).

Not surprisingly, finance officials referred to the real estate law as both an opportunity to offer a solution and as a challenge. It is also clear that individuals with a background in planning came second in terms of their frequency of referring to real estate law as an issue. Figure 7.10 shows the frequency of the re-occurrence of the code 'Real Estate Law' on its own.

Interviewees from the finance group were at least 2.5 times more likely to refer to this law than any other group. Not surprisingly, the planners who are less likely to need a real estate loan referred to this law fewer than 50 times in all their interviews.
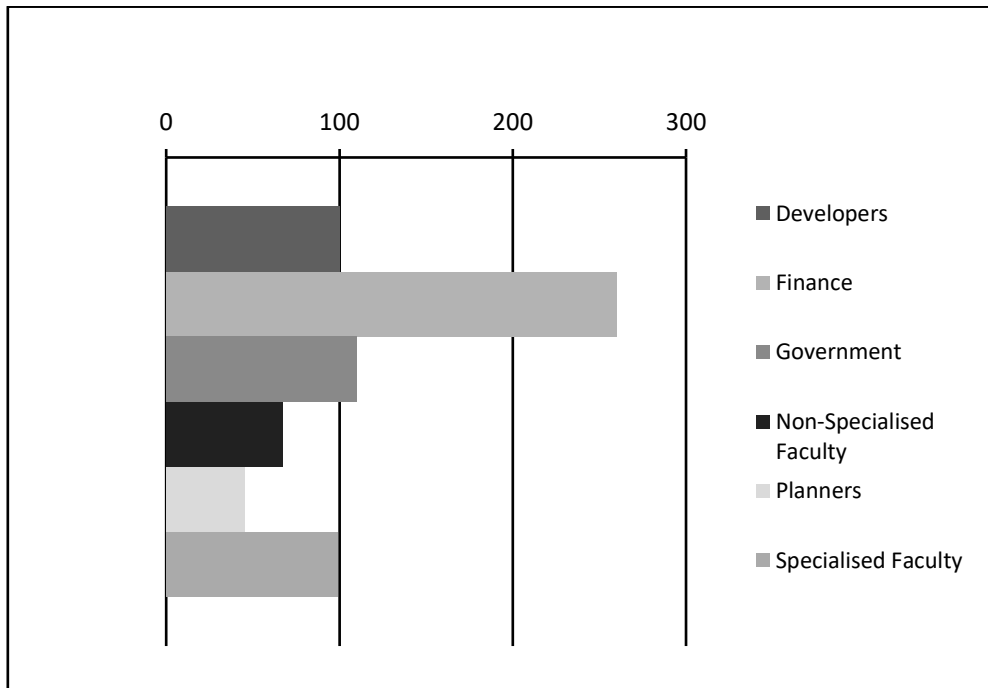
Figure 7.10 The frequency of occurrence of the code: Real Estate Law.

7.5.2 Land and building materials

This section has mainly been analysed in accordance with the elements in the conceptual framework of Affordable Land Supply and Global factors. Land availability and prices emerged as the most formidable challenge to be overcome as it was the most referred to in the interviews and one of the most frequent initial codes. One government official said:

"At this moment, available land is not covering the gap [of the affordable housing market], even if the rest of the available land is developed there will still be a gap in the real estate compared to the number of people wanting to own a house"

[Initial codes: Land, affordability, Descriptor: 25G, Group: Government]

This was a clear point also mentioned by members of the finance group i.e. that the cost of housing is out of control and out of the reach of middle-income buyers because of the initial costs of building:

"...In the current situation the gap [...of affordability] is going to grow bigger and bigger but [...even] when land prices are reduced, citizens are not able to buy. The increases [...of salaries] that were introduced [...are not enough]. Allowances that are stopped, low [original] income, incentives, are all reduced. I think the gap will increase more and more and the citizen won't be able to buy. The quick solution is that the Ministry of Housing has to build and distribute but I don't think citizens can buy"

[Initial codes: Land price, finance, affordability, Descriptor: 40F, Group: Finance]

It was clear that the scarcity of land available for development in Jeddah means that the prices are very high. One interviewee spoke about his friend who is a potential new buyer and said:

"...His monthly salary is low and he does not have enough support to buy land, whether it is through financing or government support"

[Initial code: Land, Descriptor; 20P, Group: Planners]

Another one said:

"...In most countries the cost of land must not exceed 25% of the overall cost [of the house]. But in some areas [in Jeddah] we saw land costs exceed 60% of the house cost"

[Initial code: Land, Affordability, Finance. Descriptor: 1 EUP, Group: University Lecturers with planning background]

There was a consensus between most groups about the problem of land, except for planners who seem less worried about the availability of land and its prices (Figure 7.3). One respondent clarified his point about the land problem by saying:

"There is a lot of land outside the city but everyone wants to live inside the city"

[Initial code: Land, socio-cultural. Descriptor: 2 EUP, Group: University Lecturers with planning background]

Another planner, when asked if he can solve this problem from a planning point of view, said:

"We can solve [the housing problems] and we have the means. Our country is very big. We have plenty of open and unused land thank God. We need investors. It is not necessary to live in the centre of the city. It could be on the outskirts of the city by providing transportation and all the services needed"

[Initial code: Land, Descriptor; 20P, Group: Planners]

By contrast, another member of the planning faculty expressed some confusion about the availability of land and said:

"What's apparent is that land is available, but no one knows who owns it"

[Initial code: Land, Descriptor; 23P, Group: Planners]

The government and developers agree on the need for more transparency about land ownership and the need for cooperation between them to develop the land, and this seems to resonate with other respondents from the public sector who said:

"The government sector needs the private sector to execute the projects [of land development] under their supervision"

[Initial codes: Land, Government, Cooperation, Descriptor; 14EU-NP, Group: University Lecturers with no planning background]

There were also some issues raised about the quality of the infrastructure needed when land is developed for residential use. Both the quality of land development and the quality of housing were major concerns for potential buyers. One respondent said:

"There is a need to give more time to [developers] in return for quality. This ensures that citizens will not need to change their house because of the poor quality of execution"

[Initial codes: Developing, Quality. Descriptor; 11EU-NP, Group: University Lecturers with no planning background]

There were also suggestions that the Saudi Arabian housing market should open up both land development and the construction of residential units to international companies to lower prices and improve the quality because the country still lacks high-quality local developers.

The other themes that were identified through the interviews as far as land is concerned are as follows (Thematic maps 1 and 2, Figures 7.6 and 7.7):

- A model of offering land to new buyers on which to build houses might be more appropriate to Saudi Arabian society; and
- Improving transport within the city of Jeddah could encourage development on the outskirts of the city where land is cheaper.

The cost of building materials in relation to house prices was also a recurring theme with some developers and specialist faculty members suggesting that importing cheaper and new materials could be a solution to lower the cost of housing projects. In addition, there were suggestions to open up the construction of houses to international developers and reduce the cost of housing by using more efficient construction methods and cheaper materials without jeopardising the quality. The cost of housing is affected by both global and regional factors as many construction materials are imported and their prices are controlled by the global market. This has been

identified in the conceptual framework in Figure 7.11. However, the relationship between these factors needs further tweaking to reflect the data gathered through the interviews. It was surprising, though, that the interviewees did not mention the global and regional factors directly. For example, developers would complain about the cost of the construction materials, but stop short of referring to the global market economy. This could mean that a section of stakeholders was omitted during this research. These stakeholders could be suppliers of building materials and other traders. Developers in Saudi Arabia usually buy their materials from local traders who in turn import most of the materials. Global factors also include the effect of changes in the global banking system on different financial products available in SA. This effect, however, was less clear in the data collected here. It has been covered here based on the literature provided earlier.
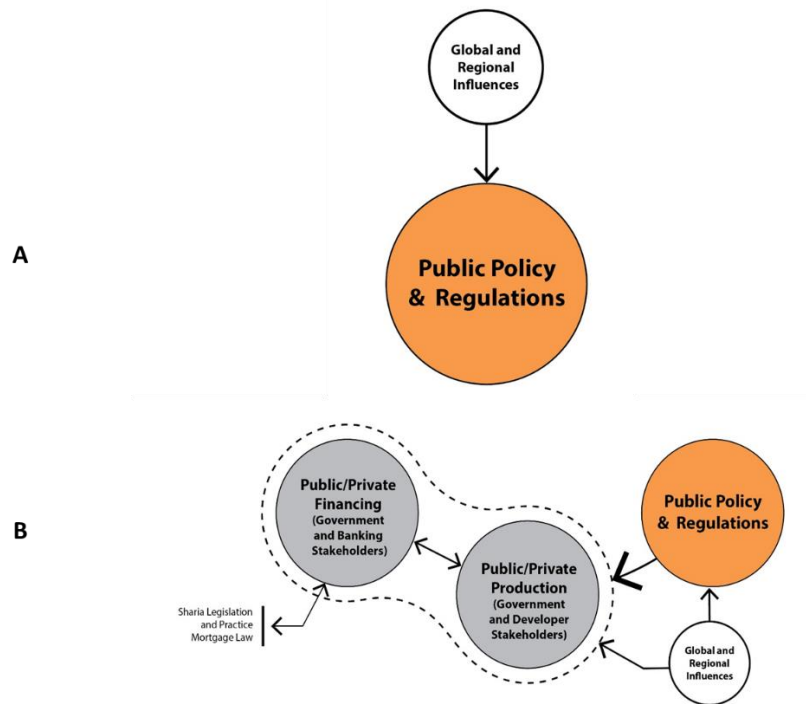
Figure 7.11 A proposed change to global and regional effects in the conceptual framework. The original conceptual framework (A) and (B) is the proposed change.

House buyers from the middle-income category complained that the market economy made affordable houses more expensive than their initial budget. They, however, were more inclined to buy if prices were controlled. One interviewee gave an example:

"When the prices were suitable, and the finance was reasonable [I might buy a house]. For example, in the King Fahad Housing Project in Makkah, the [actual] value of the villa was SR 280,000 (£56,000), and they [the government] sold it at SR 350,000 (£70,000). Therefore, there was a good profit for the government, and at the same time, they reduced the amount of the instalments. Also, the amount of SR70,000 (£14,000) was discounted for those who paid the loan back earlier. So, they were given the units at almost the same value"

[Initial codes: *Affordability, supply and demand, government support*. Descriptor; 8EU-P, Group: University Lecture with planning background]
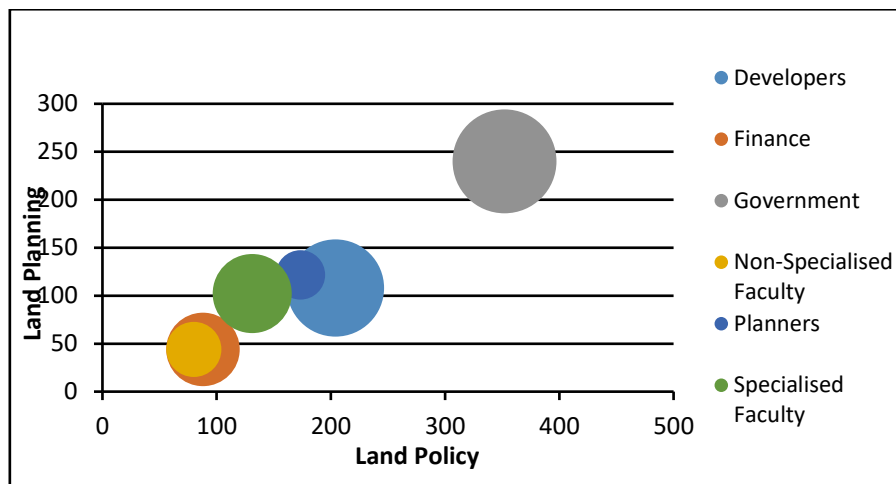
Figure 7.12 Bubble chart showing how frequently land planning was mentioned in conjunction with land policy.
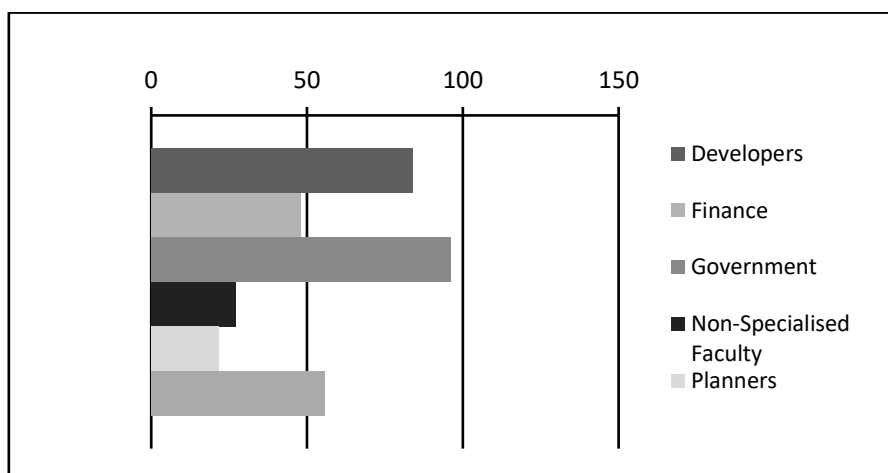
Figure 7.13 Land was referred to by government officials and developers more than any other group.

In Figure 7.12, government officials and developers were the most prominent groups in relation to these codes. The specialist faculty (academics with a planning background) also expressed concern about land grants (the size of the circle in the bubble chart). Again, and as shown in Figure 7.13, planners were the least concerned about issues to do with land. However, among the two groups of potential end-users of affordable housing, the specialist faculty with a background in planning were more likely to refer to the challenges of land and its cost in securing an affordable house than those in non-specialist faculties.

7.5.3 Regulations and Housing Policies

Before the establishment of the new Saudi Ministry of Housing (SMOH) in 2011, many government authorities were involved in the housing development process (GIZ, 2013). All these different authorities are now under the umbrella of the SMOH and it is the main regulator. Furthermore, it was established to organize the housing sector and thus develop housing policies that everyone must follow. However, the interviews reflected the fact that all parties agreed on the lack of transparency of these regulations. One faculty member of a planning department put it simply:

"There is no clear policy on affordable housing apart from that you have to learn to save"

[Initial code: affordability, Finance. Descriptor: 3 EUP, Group: University Lecturers with planning background]

Interviewees were specifically unhappy about the rental market. This is very important for end-users as low rents are essential for them to be able to save money to buy in the future. The failure of the government to control the private rental market was highlighted by a respondent:

"There must be a clear and standard system imposed by the Ministry of Housing to put in place a fixed rental contract that ensures the rights of the owner and the rights of the tenant and also by referring to a real estate evaluator"

[Initial code: Regulations, Planning, Housing Market. Descriptor: 2 EUP, Group: University Lecturers with planning background]

There were also concerns about land regulations. One expressed these concerns as:

"The Ministry of Housing should encourage the owners of white land to reduce the price by providing them with the right [policies for land development and incentives] scheme. The costs of the scheme could be deducted from the value of the real estate"

[Initial code: Land, Solutions. Descriptor: 3 EUP, Group: University Lecturers with planning background]

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Taxation of white land within the urban area of the city for residential or commercial usage may encourage its owners to sell it to developers, as suggested by a planner:

"I think imposing taxes on white land should be a successful policy once it starts taking place"

[Initial code: Land, Solutions. Descriptor: 21P, Group: Planners]

The code frequency bubble chart in Figure 7.14 shows that the government and developers were more likely to associate regulations with government roles than were other groups. However, as shown in Figure 7.15, when the code 'Regulations' was the only code counted, i.e. without referring to government roles, the developers were the second group, after government, that referred to this term in their interviews. This analysis suggests that the finance sector usually emphasises the government's role in managing real estate loans and other financial regulations, while developers only refer to the many regulations around housing specifications and building materials. While everybody is blaming the government for the lack of transparency regarding regulations, it is clear from interviews with the government that this most likely means a lack of transparency regarding the finance products rather than the housing projects. It is clear from government officials that there are many housing projects in place. One official said:

"Now the Ministry is aiming to allocate 280,000 residential products during 2017 through a programme named "Sakani". This is 280,000 residential products and not all of them are housing units, but these residential products could be land [to build on] or could be flats or villas or land with financial support"

[Initial codes: Planning, Affordability. Descriptor; 27G, Group: Government]

However, government officials were less inclined to explain who will get these products and how. It was clear for potential middle-income buyers that their needs are not always taken into consideration by the government and planners. This was reflected in the following quote:

"In other words, when real estate development companies develop a general housing project, they do not consider who they are targeting. But they follow their own standards and develop their housing units, then they set the price without regard for the target group whether they were affordable housing or for a specific income group"

[Initial codes: Planning, Affordability Descriptor; 20EU-P, Group: University Lecture with planning background]

In summary, the lack of transparency and the numerous regulations were constant themes throughout all the interviews.
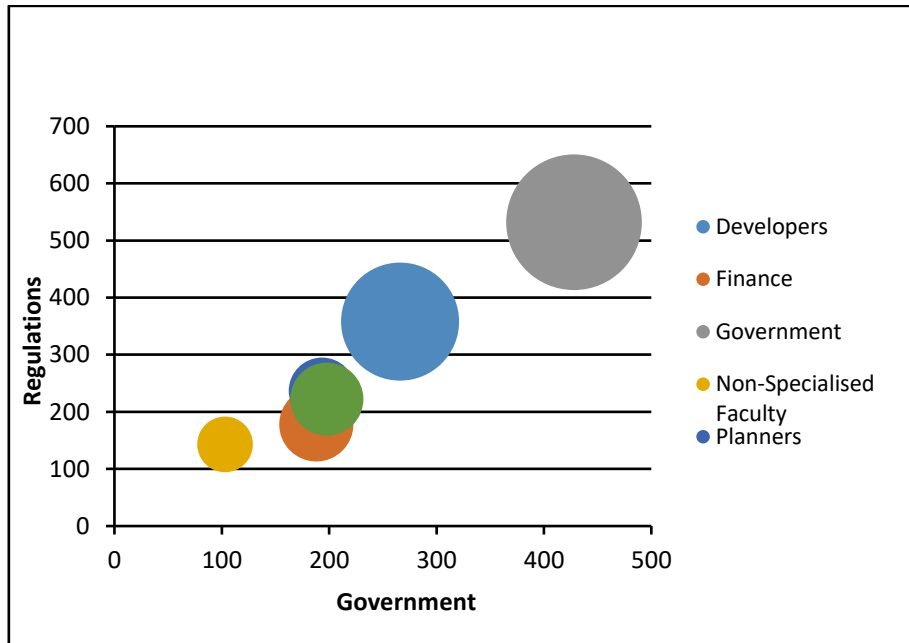
Figure 7.14 Code frequency versus interview groups plot.
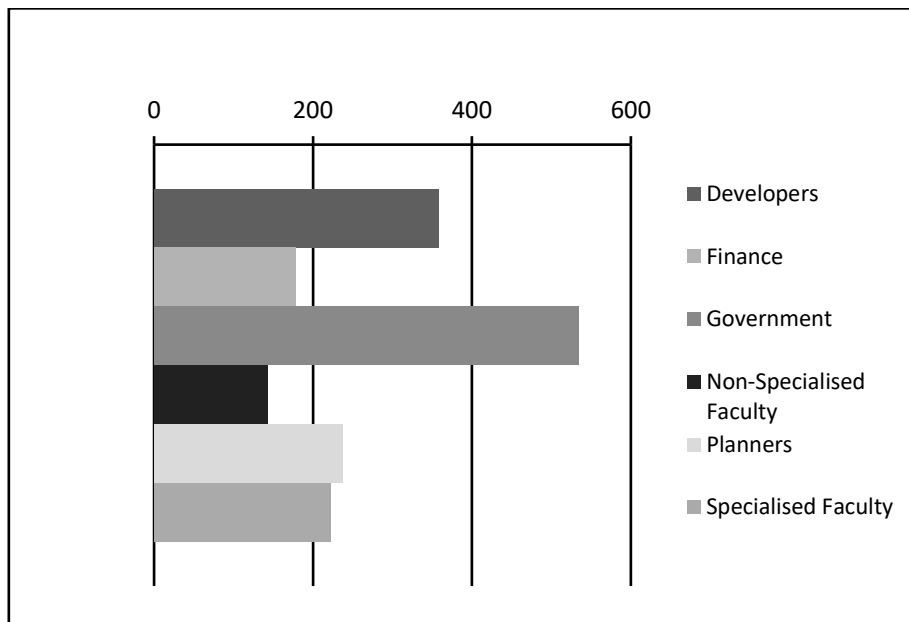
Figure 7.15 The occurrence of 'Regulations' in the interviews.

7.5.4 Socio-cultural factors

During coding, the frequency of the 'socio-cultural' code was much less prevalent than 'government', 'affordability' and 'land', but was reflected subtly in many other codes. For example, under the 'affordability' code, many respondents spoke about cultural issues such as living with family and their reluctance to take out a high interest loan. All the interviewees except one were men. This was expected as gender roles in Saudi Arabia are quite distinct for cultural and religious reasons, which necessitate that husbands are responsible for providing shelter for the family. There was no reference to this fact during the interviews even though it is now possible for both spouses to apply jointly for a loan. This factor could significantly reduce the burden of loan repayments, but, surprisingly, neither the government nor the finance sector highlighted this development as a potential opportunity to resolve the burden of loans.

The bubble charts in Figure 7.16 show that non-specialist faculty members (without a background in planning) and, not surprisingly, planners were the groups that were less likely to refer to socio-cultural factors as potential challenges in the affordable housing crisis in Jeddah. In Figure 7.17, when the two codes 'Affordability' and 'Socio-cultural' were plotted against each other, faculty members with a planning background, developers, and the government were the groups that most associated these two codes with each other. The government, through the literature, has suggested that there is a need to account for various socio-cultural factors in order to resolve affordable housing issues. However, they are generally referring to the perceptions and ambition of new buyers to purchase larger houses to accommodate large family sizes or to reflect social norms. One government official said:

"[People's culture and their beliefs] should totally change. Before a person would come to the Ministry looking for a loan and would request a [large] space. They would want six or seven rooms and, for the whole year, three to four rooms would remain empty. Now things have changed, and you take a loan that fulfils your specific needs and the size of your family. Like a person who builds a ground floor and later builds the upper floors as his children grow. Things have changed now. Before everything was a mess. Now there are new regulations"

[Initial codes: *socio-cultural, regulations*. Descriptor; 26G, Group: Government]

This was also reflected in one quote from a non-specialist participant who made it clear that he is looking for a larger house and was not happy to live in a three-bedroom property:

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"They ask for a high salary, instalments for 20 years, and the amount of loan they approve according to your income is too low. When I applied for a real estate loan, they only approved SR400,000 [£80,000] and when I searched the market, the only thing I found that I could afford with this amount was a three-room apartment. So, for the long term, this unit won't be a suitable house for me and my family"

[Initial codes: *Affordability, socio-cultural, finance.* Descriptor; 11EU-NP, Group: University Lecture with no planning background]

Government officials also referred to the inappropriate use of government support by borrowers as originating from the socio-cultural perspective and the common belief of citizens that loans have to come from the government. One official said:

"Anything related to money will come from the Real Estate Development Fund. The Ministry of Housing will not give money to citizens, it will provide loans through the banks now, not through the REDF. ……… You cannot take the loan and use it for marriage expenses or spend it on a different purpose. Or you will buy a house and sell it and later ask for more. We have provided you with a loan to buy land. This problem will continue so the transfer of responsibility to the banks has made it safe for all"

[Initial codes: Socio-cultural, Real Estate Law, Regulations. Descriptor: 28G, Group: Government]

The point of view of potential buyers, as far as cultural factors are concerned, is that they want a house that suits their socio-cultural status and expectations and they would prefer to build their own house to their own specifications. One potential buyer who is currently renting said:

"I don't want the kind of house that I will own to be imposed on me"

"If it is owning, I will not buy, I will build my house myself because of the experience [buying ready-made houses] that I have witnessed and truly speaking, it was a bad experience"

"Some say that they need a big enough house for them to ride a horse inside the dining room. They do not want a small house and there are cheap houses that I saw sometimes which are so small that cost SR 300,000 [£60,000] that if you enter through the front door, you suddenly land in the bedroom, meaning it is too small"

[Initial code: Socio-cultural. Descriptor: 1EUP, Group: University Lecturers with planning background]

A government official identified the cultural need for large houses due to large Saudi families:

"To rent, it's not a problem. Not very convenient but you could still find something to live in decently. But once the family grows you will need to move into a bigger house, leading to an

increase in price as [families] will not downgrade [their] level of living. This will be harder with [their] income"

[Initial code: Socio-cultural. Descriptor: 30G, Group: Government]

Another social-cultural factor is avoiding long commutes to work. End-users, however, could accept a long journey to work if their house were large enough:

"For example, if I, an employee in King Abdul-Aziz University, thought of buying a house, I would go to Al-Hamdaneyyah District [North East of Jeddah and 40km by car from KAU], which has the most suitable prices for me. But owning a house there would create another problem, which is transportation, as the location is far from work and I would discover that there are several problems with the unit [the house] such as the infrastructure"

[Initial code : Socio-cultural, Transportation. Descriptor: 11EU-NP, Group: University Lecturers with no planning background]

To summarize, socio-cultural themes are very important in both the decision to apply for a loan and the nature of the houses people want to own. However, as discussed earlier, the socio-cultural aspects are not strongly reflected in the views of non-specialist faculty members, while most planners and finance officials seem more inclined to adopt new housing policies, profitable lending regulations, and models imported from developed countries. Figure 7.16 and Figure 7.17 shows the tendency of users to reflect on socio-cultural and economic factors together. However, as was found in Chapter 6, the two groups of factors are distinct, with economic factors having a greater impact than socio-cultural factors. This fact already informed the re-structure of the conceptual framework.
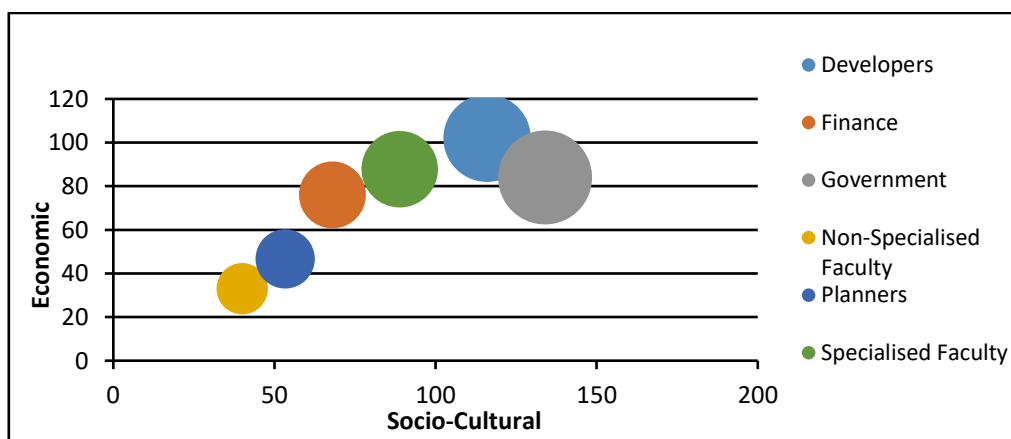
Figure 7.16 Occurrence of socio-cultural factors with economic factors as far as the housing policy is concerned.

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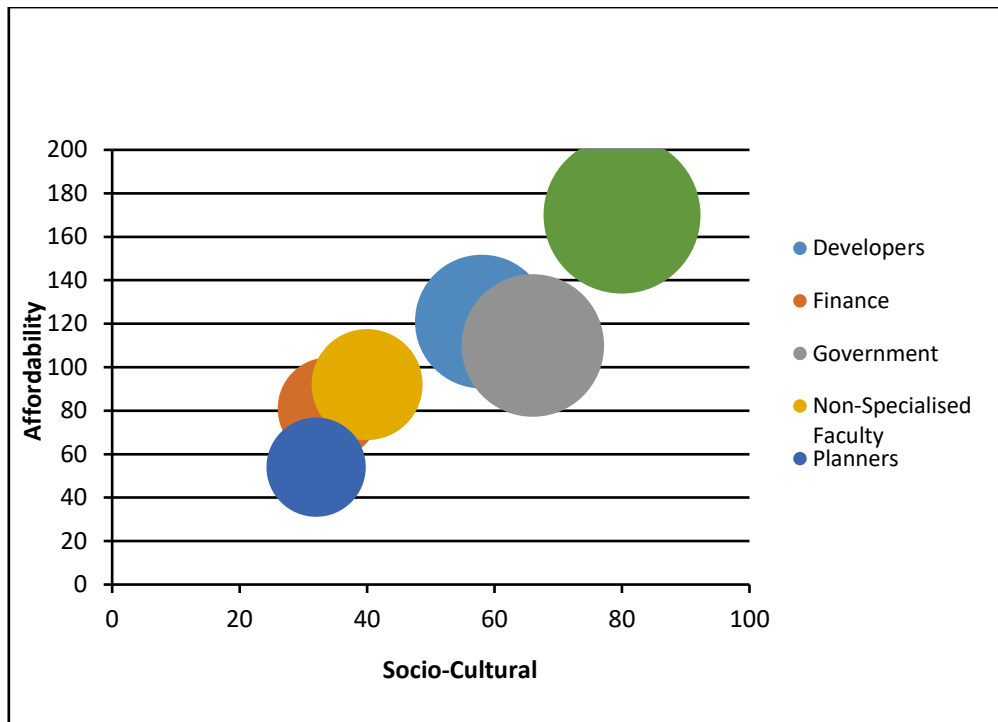
Figure 7.17 Occurrence of socio-cultural factors with affordability as far as the housing policy is concerned.

The third socio-cultural aspect that was almost hidden within layers of either denial or reluctant acceptance is the way in which the real estate law is now applied in Saudi Arabia. The Islamic tradition that prohibits flexible or varied interest rates on loans and allows only a fixed cost to be added in accordance with some schools of Sharia jurisdiction is discussed in Chapter 3. Several potential buyers said they avoid flexible rates on loans. One developer referred to SAMA's new policy (mentioned above) positively and discussed the fact that there may be a solution for those who hold these views:

"There is a real estate law (known as: Rahn al aqari which literally means mortgage) that will be implemented in Saudi Arabia by the private financial sector and other bodies that will not have [Sharia related] problems in terms of the interest unlike banks that charge interest (Riba)"

[Initial code: Socio-cultural, Real Estate Law, Finance. Descriptor: 31D, Group: Developers]

7.6 Major Findings and Discussion

Using thematic analysis to identify the major trends, challenges, and opportunities of the affordable housing market in Jeddah, it was possible to identify several themes and trends in

the opinions of potential middle-income buyers and representatives of the major players and stakeholders in the SA housing market. The major findings and the challenges identified by the respondents included the following:

1- The inappropriateness of the housing unit model being used

This came up mostly among end-user participants. However, other groups, including government officials, also mentioned the fact that there is a desire for a model based on owning land first and then building a house according to the potential buyer's preferences. This finding is in complete agreement with a similar finding in the quantitative study, as it was found in Chapter 6 that difficulties in obtaining accommodation that suits the family needs was an obstacle for the middle-income housing sector.

2- The lack of transparency of financial and housing products

This came through clearly in the analysis and was also reflected in the high frequency with which respondents referred to government (overall, this was mentioned 4398 times by end-users). While it was to be expected that government officials would mention the term 'government' often, end-users' references to government were mostly negative; this was confirmed by the thematic analysis which identified various challenges such as lack of transparency and, more importantly, a lack of suitable government schemes to help individuals buy houses. This reflects a finding in Chapter 6 that most people are unhappy about the recent change from the interest-free and long-term loan provided by the REDF scheme to the high interest loans offered by banks despite the shorter waiting list.

3- Lack of agreement on the meaning of affordable housing and affordability

This is especially evident across different stakeholder groups. The group which was most conscious of affordability were the end-users with a planning background as they mentioned affordability 170 times in their interviews compared with end-users with no planning background who mentioned it 92 times. Unsurprisingly, planners mentioned the term, or related terms to affordability, only 54 times. Another trend was that almost all groups considered that the suggested definition of affordability was acceptable, referring to spending a maximum of 30% of one's monthly income toward the repayment of a real estate loan. This is, however, different from the quantitative analysis (Chapter 6) as most end-users, while agreeing on the 30% threshold, could not actually afford to pay this amount for rent or for a real estate loan.

4- High land prices

This was a clear echo of the findings in Chapter 6 and many reports from the housing authorities (Ernst & Young, 2013; Business Group, 2013; Fattah, 2013; GIZ, 2013; SMOH, 2016a; SMOH, 2016b), emphasising the global nature of the issue. In Chapter 2, the USA was identified as a large country with a great deal of available land compared to the UK. While Saudi Arabia, despite its large surface area, has a land problem as geographically, many parts of the country are undeveloped or desert (GIZ, 2013; SMOH, 2016b). There is also a trend in the preference of end-users to live in the central areas of major cities including Jeddah, where services and infrastructure are widely accessible.

5- Lack of control of the private market

This was identified through thematic analysis and was also indirectly mentioned in the replies to the questionnaire in Chapter 6 through complaints about house prices, rent levels, and lack of transparency within the private market.

In addition to these major challenges, respondents were adamant that finance solutions are in urgent need of development. There has also been, albeit briefly, an inference of increased building costs in response to the impact of global factors such as the cost of labour from outside Saudi Arabia, the cost of new building materials, and transport costs.

On the other hand, there are potential opportunities which will eventually help answer the research questions around how to tackle these issues. More transparent policies and regulations and more cooperation between the different players and stakeholders in the housing market were identified as potential positives which will ensure more effective utilisation of the private sector in contributing to the housing market.

The thematic analysis showed the significance of understanding the socio-cultural requirements of citizens seeking affordable houses and possible solutions to the land problem by improving the infrastructure and transportation around the available land, specifically on the outskirts of the city. Indeed, socio-cultural issues were mentioned by respondents more than 1019 times when they were speaking about housing policy and regulations. This code reoccurrence was the most prominent of all reoccurrences in this study. As far as the comparison between the groups of stakeholders was concerned, the bubble charts show that non-specialist faculty staff members were less likely to mention social factors, land and regulations than all other groups, likely due to their unfamiliarity with planning issues. There

were also complaints in the groups about government regulations and policies and this appears to be a common trend in Saudi Arabia in which the private sector and banks are not well equipped to meet the demand of potential buyers.

Socio-cultural issues, whether directly or indirectly cited (e.g. different housing model), were also mentioned frequently in answers to specific questions in the questionnaire (Chapter 6). Therefore, it can be concluded that there are clear similarities between the findings of this chapter and the results from the previous chapter. For example, there is broad agreement on the definition of affordability in both sets of results and the maximum 30% of salary threshold that middle-income end-users could afford as monthly loan repayments. However, there were also reservations from some respondents as they believe this threshold, on their current salaries, would not be sufficient to buy a house in the future without additional government support or appropriate financial products that respect the religious beliefs of potential buyers (i.e. with fixed interest or some type of affordable form of Islamic loans). Surprisingly, there was little mention by any groups in either of the analysis chapters about the effect of global factors on the housing market, despite several developers and respondents with a background in development hinting that building materials are affected by global market dynamics, and that they contribute significantly to the cost of new housing projects.

In the next chapter (Chapter 8), an overall discussion, conclusions and recommendations based on the findings of both the quantitative and qualitative data will be attempted in light of the literature review and existing housing policies in Saudi Arabia.

7.7 Triangulation of data and conformity to the conceptual framework

In this section, the findings from the two studies as well as from the literature will be triangulated to summarize this research and to improve the conceptual framework for further research. Data from both analysis chapters suggest that, in general, the conceptual framework developed in Chapter 4 is appropriate, but that a few relationships need to be readjusted and at least two new factors need to be added in order to reflect the rich data that were collected in both the quantitative and qualitative studies. For example, as discussed in Chapter 6, the socio-cultural and economic factors can be divided into two domains.

In this section, the main findings which conform to the original framework will be summarized and presented. Thereafter, a new framework will be redrawn and discussed.

7.7.1 Socio-cultural and Economic factors

The main findings in this component of the conceptual framework (Figure 7.18 A) were; 1) difficulties in finding suitable loans and challenges in obtaining accommodation that suits the family needs, 2) the middle-income end-users' high expectations of the type of houses they aspire to own, and 3) widespread reluctance to take out loans due to cultural and religious reasons. These findings confirm the changes suggested to the new conceptual framework that were suggested in Chapter 6. In the new conceptual framework, the economic and social factors are separated (Figure 7.18 B).
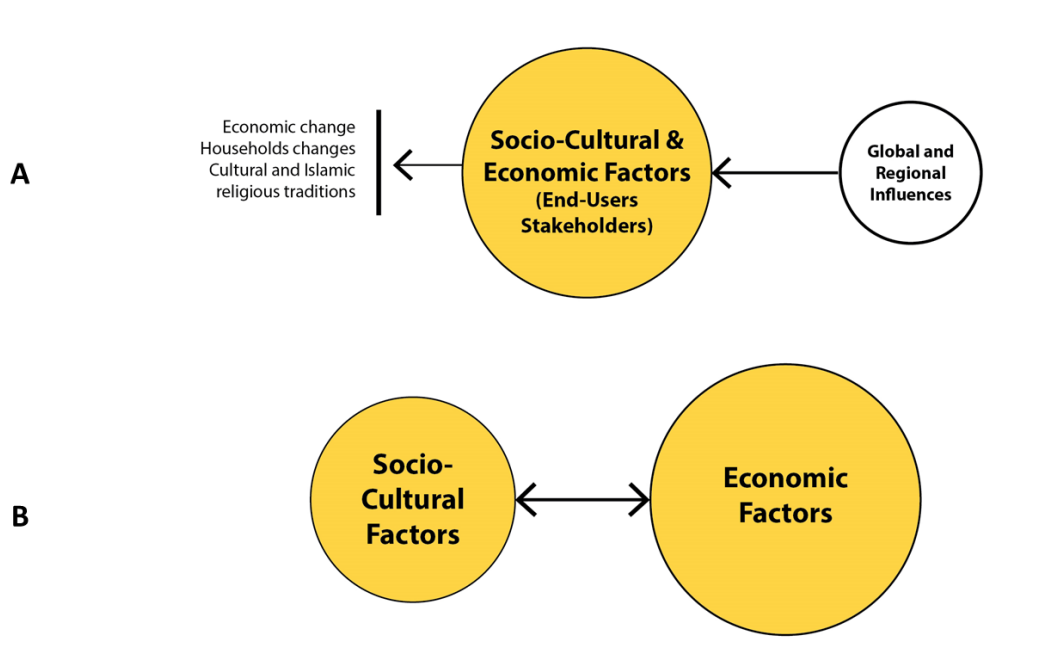
Figure 7.18 Changes to the socio-cultural and economic factors component in the conceptual framework from (A- the original to B- the updated conceptual framework).

The economic and socio-cultural factors were reflected in both studies. In the qualitative study, end-user groups and other stakeholders referred to the challenges of finding suitable loans and the general expectation of living in a large house (in particular villas and duplexes). Historically, government policies were mainly based on providing an interest free real estate loan from the REDF. This was popular because it does not contravene Sharia law on the prohibition of interest (see Chapter 3). However, it was also problematic owing to the long waiting times for loans due to high demand and the lack of legal procedures available to enforce

repayment of the loans. Culturally, the recipients of these government loans treated them as grants or subsidies, which caused the government difficulties in accommodating more people and ultimately led them to decide to change the system into an interest-based system administered through the finance sector.

Even though the respondents, to the questionnaire and throughout the interviews, hinted that they could allocate 30% of their monthly salary to the repayment of a real estate loan, other data suggests that a large proportion of the participants used other methods when deciding to purchase a house including borrowing from family and friends. Undoubtedly, the dislike of interest-based loans is a socio-cultural factor that affects local attitudes towards borrowing. This not only stems from the Islamic prohibition of interest but also from the Arab/Bedouin culture in which families stand with and support each other financially.

Homebuyers' high expectations is another challenge affecting affordable housing as most people interviewed were adamant that they would prefer to wait for a large house to suit their needs rather than starting out in a small home. This was the main conclusion of a recent PhD study in which Awliya (2017) emphasised that a major theme in her studies was the need for potential house buyers in Saudi Arabia to change (lower) their expectations. However, many previous findings were based only on interviews with leaders of the private sector. In contrast, the findings of this research were based on both private and public sector views and, more importantly, end-users.

In an interview with a government official in Chapter 7, the official reflected on the expectations of potential buyers and stated that they should be more realistic. Data in Chapter 6 reflect that the end-users indeed aspire to live in a large house and they do not see this as the main problem. This conflict of views (government versus end-users) should be resolved, and thus it is one of the recommendations of this thesis that the social needs of the public should be addressed and not simply dismissed as unrealistic. Further social research on reasons for housing choices in Saudi Arabia is recommended. However, it is concluded here that the best model for end-users is to own land and build a house themselves. Furthermore, it is an interesting finding of this thesis that approximately 70% of middle-income participants think their current house is too small, suggesting that their expectations of moving to a larger and more suitable house is a fundamental issue within the housing market because of the size of Saudi families and other cultural norms in Saudi Arabia.

Conversely, private developers were more concerned with the cost of imported construction materials, which is affected by global market dynamics. The interviews and the surveys provided little information about potential solutions. What was more surprising is that government officials, in particular, did not engage in the challenging factors that were highlighted in the literature, suggesting that there is a gap in opinion between government officials and end-users.

7.7.2 Public Policy and Regulations

The main findings as far as regulation and government housing policies are concerned were the perceived lack of transparency, specifically in relation to home financing, and the lack of regulations controlling the private market (Figure 7.19). The data presented in this study have shown that there are many negative views regarding renting, the suitability of rented houses, and how the government has failed to control the rental market. As mentioned in Chapters 3 and 4, apart from the popular REDF programme, the different housing policies were seen as a mixture of trial and error.
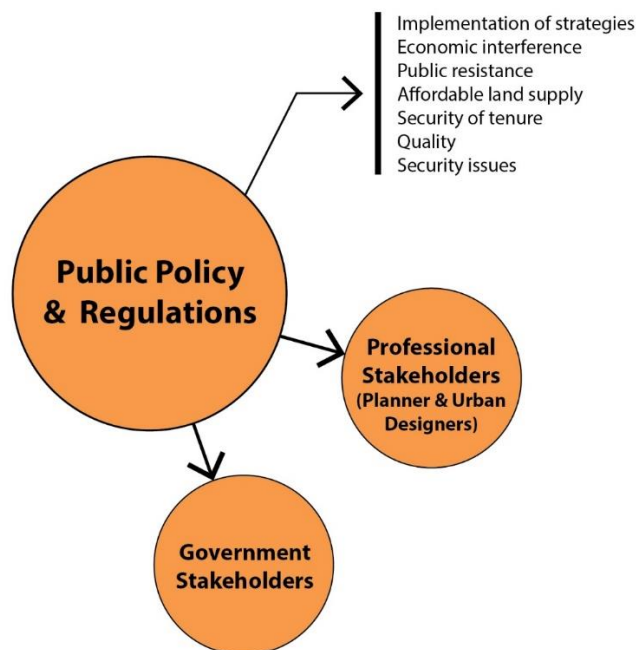
Figure 7.19 Public policy and regulation element in the conceptual framework.

The affordable housing model, which is based on the ability of end-users to spend 30% of their salary on a long term loan seems to be the model of choice in most of these policies and this

has been the case over the last 20 years (Sidawi, 2009). The literature review in Chapter 3 concluded that the three main challenges for housing policy and regulations were:

- The financial availability of loans,
- Issues associated with housing finance in general, and
- Housing market volatility.

Data, specifically responses to the survey questions, highlighted the fact that other disadvantages of regulations include the lack of culturally-specific provisions such as developers failing to take cultural considerations into account at the design stage of housing projects. This finding is in accordance with earlier literature (Salama, 2006; Sidawi, 2008).

Additionally, the data mirrored the literature on other countries, identifying the government as the main player in the housing market. The Saudi government's control of the housing market has more similarities to the control in China than in the USA, as both have shown a weak or developing private sector. The data also indicate that the government should cooperate with private sector developers and banks to provide more acceptable and efficient housing alongside financial products that are tailored to meet the end-users' needs. This finding reflects the dissatisfaction with the existing financial products and was initially captured in the conceptual framework in the prominence of the public/private financing domain that in turn is affected by multiple factors including Sharia-friendly interest-based long-term loans.

Results from the qualitative and quantitative studies presented here suggest that land regulations are under reconsideration in Saudi Arabia with new policies that include incentives for landowners to develop their land for the purpose of housing construction. This is likely to be a global trend as Gillespie (2018) concluded that the management of land is one of the most important obstacles in the housing market for developing countries.

In conclusion, policies in Saudi Arabia are continuously developing to resolve housing affordability for middle and low-income end-users. However, the impact of this development was not perceived positively by many end-users, although improving and developing housing policy should generally be seen as a positive process as it is a response to end-users' demands. Fields & Hodkinson (2018) argued that this is a global trend, and Saudi Arabia is not very different from other countries in the continuous development of housing policies to respond to the demands of the middle-income group.

7.7.3 Public and Private Finance and Production

Findings related to this element of the conceptual framework (Figure 7.20) show that the middle-income group were unhappy about house prices and rent levels and they also complained about a lack of transparency within the private market. In addition, the government and end-user stakeholders identified that accessing housing funds is one of the major challenges in the affordable housing market.
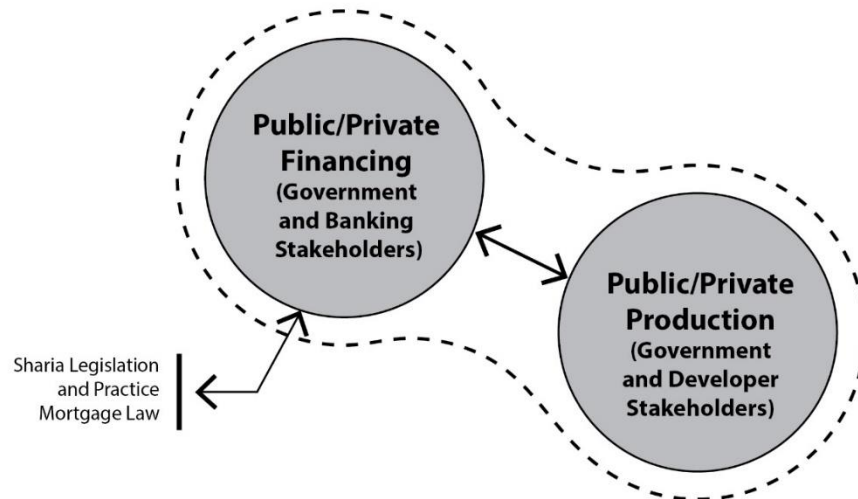
Figure 7.20 Finance and private production element of the conceptual framework.

The interviewees, specifically end-users, complained about the lack of transparency and the need to develop housing finance to meet local needs. There was also a trend in both the quantitative and qualitative findings suggesting that Saudis are reluctant to take out long-term loans such as real estate loans. It is also clear from government officials that the one area that could boost affordability immensely is finding better financial products that both attract end-users and remain in accordance with Sharia law. This is very challenging on both accounts. By discontinuing the previous REDF programme and handing over the delivery of loans solely to banks and financial companies, end-users were more reluctant to take out long-term loans; this makes it very challenging for the middle-income group as it puts more financial burden on their repayments.

This was also confirmed by the findings of Chapter 7 (qualitative analysis); that there is a need for more transparent policies and regulations and more cooperation between the different

players and stakeholders in the housing market. This is in accordance with the literature reviewed in Chapter 3. The socio-economic environment in Saudi Arabia has changed enormously over the years. Due to the growth in urbanization, the government has realised that much better cooperation with the private sector is essential to resolve the increased demand for housing (SMOH, 2016a; SMOH, 2019a; SMOH, 2019f). One vital issue recognized by both the government and end-users was the challenge of accessing housing funds.

The triangulation process informed further changes to the conceptual framework. The disentangling of the social and economic factors and the significance of global factors are two important additions. In the following chapter, the updated conceptual framework will be redrawn in full, taking into consideration all the findings from Chapters 6 and 7. This will have implications for affordable housing research in Saudi Arabia.

In conclusion, findings from this chapter have confirmed the challenges in the affordable housing market identified in Chapter 6. However, as previously discussed, the findings from stakeholders other than the end-users suggest poor cooperation between the private and public sectors and a lack of tests of the new housing policies. Education on affordable housing also arose as a significant element of the newly updated conceptual framework.

Chapter 8: General Discussion, Recommendations, and Conclusions

8.1 Introduction

The focus of this chapter is to discuss the overall findings of this thesis to reach clear recommendations and then summarize the main conclusions of the research. The aim of the thesis was to develop a conceptual framework based on the literature (developed in Chapter 4) and to investigate housing affordability policies that are applicable to middle-income households in Saudi Arabia (Chapter 3). This PhD programme of study also strives to collect data relevant to existing housing affordability policies to evaluate their effectiveness and inform future decisions. This was achieved through two methods (Chapters 6 and 7). Different stakeholders that influence or are influenced by the development of affordable housing solutions were surveyed, either through an online questionnaire or a face-to-face interview. The questions were designed to gather data from all stakeholders on their needs and how they view regulations, housing policies and the socio-cultural influences involved in the process of owning a house from a middle-income perspective.

The main questions and objectives of this thesis will be revisited in this chapter to ascertain if the findings have contributed to knowledge on Saudi housing policies, as well as providing a road map and recommendations for future policies. In addition, suggestions for further research and the implications from academic and professional perspectives will be identified and summarised with the goal of guiding the improvement of housing affordability and affordable housing policies in Saudi Arabia. A cornerstone of this chapter will be the triangulation of the initial findings from the analysis chapters based on the conceptual framework developed for this research (Chapter 4). This conceptual framework will then be updated based on these findings. Figure 8.1 shows the structure of this thesis.
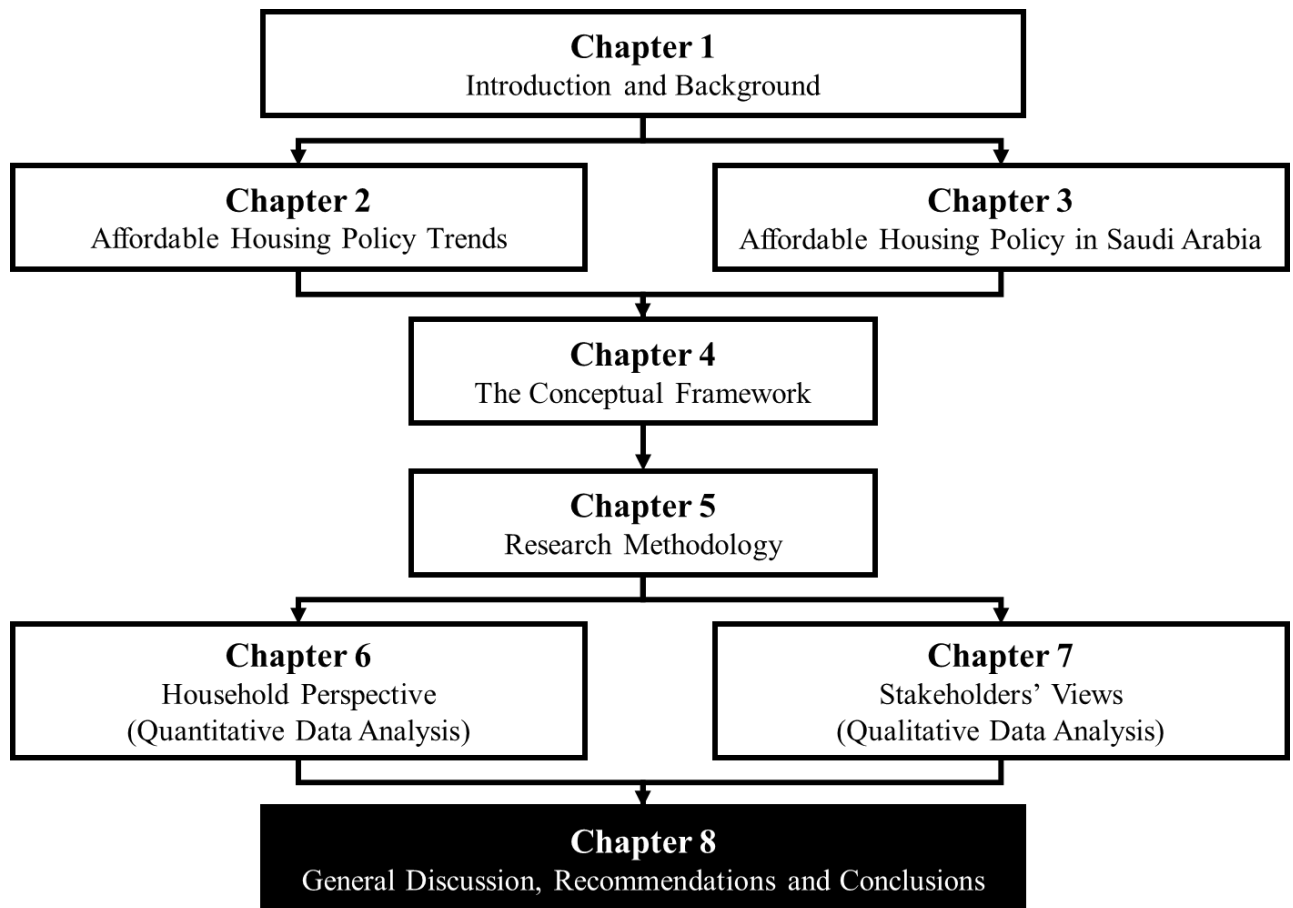
Figure 8.1 Position of Chapter 8 in Relation to the Previous Chapters

8.2 Overview of the thesis

As shown in Figure 8.1, this thesis is comprised of eight chapters. In this section, an overview is provided of the main concepts and findings of these chapters. Chapter 1 presents an introduction to the thesis; states the aim and objectives; and outlines the main research questions. The main issues were how Saudi Arabia can deal with its increasingly challenging affordable housing problem, which is a result of the increase in urbanization and the growth of the country's young, educated, and ambitious population.

In Chapter 2, the literature on global affordable housing was critically appraised. Affordable housing literature in the UK, USA and China was discussed to compare and contrast with affordable housing issues in Saudi Arabia (Chapter 3). The findings from Chapters 2 and 3 suggest that different countries deal differently with affordable housing. However, the transfer

of knowledge, including housing policies from these countries, to Saudi Arabia is possible if they are implemented responsibly and with respect to Saudi cultural and religious sensitivities.

The main finding from Chapter 3 was that there is a gap between policy and practice in Saudi Arabia. The literature on SA housing policies also identified a lack of consistency in these policies. Affordable housing in SA also lags behind other GCC countries.

Chapter 4 was devoted to developing a conceptual framework to guide the design and analysis of the primary research that followed. The three major components of this framework were: 1) Socio-cultural and economic factors, 2) Public and private financing and production, and 3) Public policy and regulations. The following chapter focused on methodology (Chapter 5) and the argument for a mixed-method approach was discussed. In this approach, two methods were suggested: one was to capture the perspectives of end-users on affordable housing and their preferences related to the houses they want to own using an online questionnaire. The second method was the use of qualitative semi-structured interviews to gain detailed opinions from different stakeholders involved in the housing market including: government officials, finance personnel, planners, developers and end-users in the form of middle-income KAU staff.

An extensive analysis of the answers from 115 online questionnaires was presented and discussed in Chapter 6. The results suggested that the middle-income group are more likely to live with family or rent homes compared to the higher income group. Other answers highlighted that they struggle to own a house. While this information was in accordance with the literature, the expectations of this group were high regarding the nature of the house they hope to eventually own. Respondents reported that they are willing to spend 30% of their salary on rent or a real estate loan, but that they struggle to find suitable loans or an appropriate house. Affordable land was also a major challenge identified by this group. Most respondents preferred to own a house through a personal loan rather than a real estate loan because the data suggest that real estate loans carry much higher interest rates and longer repayment periods. Their preferred solution to affordability seemed to be owning land and building on it as they often disliked new build mass-produced homes.

In Chapter 7, thematic analysis of 40 interviews concluded that the housing units on offer in Saudi Arabia are not appropriate, land prices are very expensive, and the private market is not regulated. These factors directly impact affordability. The respondents also complained about the lack of transparency within the financial and housing market. Additionally, the different stakeholders could not agree on the meaning of 'affordability' and government officials

highlighted that end-users should manage their expectations regarding buying a large house in a centrally located area within one of the large cities. The following sections take the initial findings further to identify key findings and recommendations, and triangulation is used to critically evaluate and update the conceptual framework developed for this study.

8.3 Key findings

In this section, the key findings of this thesis are discussed and aligned with the pre-determined objectives and research questions. Moreover, the findings will inform the update of the conceptual framework. Conclusions based on the findings will then be used to inform further research and discuss implications for affordable housing policies in Saudi Arabia.

8.3.1 Findings from the literature
The first two objectives of this thesis were:

1. To identify and review affordable housing policies for middle-income groups used in selected developed and developing countries; these countries are the UK, the US, China, and countries in the Gulf Cooperation Council (GCC), specifically Saudi Arabia,

2. To identify the reasons for the lack of housing affordability in Saudi Arabia, specifically within middle-income groups residing within the city of Jeddah.

The literature review identified that Saudi Arabia is facing major housing challenges and struggles adopting a successful affordable housing policy compared to countries with higher or lower HDIs (Table 3.6 in Chapter 3). This was clear from indicators such as the proportion of house ownership in which only 47% of Saudi Arabian citizens own their own homes compared to an average of 89% in China and 50% and 70% in the UK and USA respectively. While this could be explained by the population pyramid in Saudi Arabia and differing family sizes, in general there are more young people seeking new homes in Saudi Arabia than is the case in parts of the west and China. Further research was therefore needed to explore the reasons for this low home ownership and, in particular, the struggle of individuals from the middle-income group to own a house.

Chapter 3 concluded that Saudi Arabia's affordability challenges may be the result of an increase in urbanization as a result of oil-driven wealth and a population explosion. This was reflected in the literature by the Oxford Business Group (2013) who highlighted a 500%

increase in the Saudi population compared to the 1970 census. The Saudi population is now 34 million compared to 6 million in 1970.

However, the literature review of government policies together with examination of official reports (Chapter 3) revealed that affordable housing policies are not as successful as the government and local populace would like. However, the lack of efficient affordable housing policies in Saudi Arabia cannot be solely attributed to government policies. The literature review concluded that the challenges facing the SA housing market, and specifically affordable housing, were:

1- Factors affecting the housing industry such as land prices, building material costs, the inadequacy of the housing industry in Saudi Arabia, and an under-developed finance sector.
2- Inefficient and continually changing government housing policies targeting the middle-income group.
3- Socio-cultural factors affecting the housing and financial preferences of the middle-income group.

This conclusion informed the development of the conceptual framework and the subsequent discussion of the initial findings in Chapters 6 and 7. Each of these factors will be further discussed in the following sub-sections.

8.3.2 Critique of the Methodology

To inform a suitable methodology for this PhD programme of study, the following objectives were set:

3. To create a conceptual framework to address the issue of middle-income housing affordability within the country,

4. To apply a methodology to identify critical elements of affordable housing policy in the case study city of Jeddah.

A conceptual framework was then developed (Chapter 4) to guide the methodology and interpretation of the findings. In this conceptual framework, three major elements were identified; socio-cultural factors, regulations, and financing. The key stakeholders were also identified. This led to the design of a case study methodology based on a mixed-method

approach focusing on one representative case study in Jeddah, Saudi Arabia. The initial findings were subsequently outlined in Chapters 6 (quantitative analysis) and 7 (qualitative analysis). Finally, these findings were used to further develop the conceptual framework to inform research and practice in the affordable housing market. The use of a conceptual framework to guide this research has many advantages as discussed earlier in Chapter 4. This conceptual framework, however, is dynamic and further findings should lead to its improvement. In Chapter 7, a thematic analysis was applied to find the main themes in the qualitative data. However, the data produced themes that were not completely aligned to the conceptual framework and changes were warranted based on these findings. Finally, the triangulation of data from Chapters 6 and 7 enriched the research and led to a stronger framework.

Strengths and Limitations of the Methodology

This thesis presents data using a mixed-method approach after developing a case-specific conceptual framework. Compared to earlier research on the issue, this thesis covers more respondents and investigates the views of end-users and other major players in the housing market. The analysis used was vigorous and extracted major findings that contributed to knowledge about the housing crisis in Saudi Arabia and countries sharing the same criteria such as other GCC states. Both sets of data (quantitative and qualitative) were triangulated with each other and the literature and were critically discussed to provide a set of findings and recommendations and to suggest further research.

There were however, a number of limitations with regards to the generalizability of this research. These were discussed in earlier chapters and are summarized as follows:

1- The quantitative sample may be biased as end-users were only recruited from among the academic staff of the King Abdul-Aziz University in Jeddah. While this reflects the general profile of the middle-income group, it does not necessarily reflect the views of middle-income earners who are not in academia.

2- There was a disproportionate number of females in the quantitative study compared to only one female in the qualitative study. This is significant as religious and cultural factors designate responsibility to husbands to provide the main family home and financial support for their wives and children. However, recent cultural changes in SA suggest that more females are entering the workplace, with some of them earning more than their spouses, and therefore, they can also contribute to the future family home.

3- The response rate in the quantitative study was very low but the number of participants was acceptable as it met the sample size requirements. In addition, some respondents did not answer all the questions which made it difficult to acquire the full opinion of the group. Finally, some questions and terms can be understood differently by different people (e.g. duplex).

8.3.3 End-users and other stakeholder perspectives on affordable housing policies

The last two objectives of the thesis were met by conducting two studies which generated new data for this topic (Chapter 6 on household perspectives and Chapter 7 on stakeholder views). These two objectives were:

5. To identify key elements of affordable housing policy and measure its use in Saudi Arabia,

6. To identify more generic implications of affordable housing policy for the Middle East and other developing countries.

Before starting to synthesise and discuss the major findings from these two studies, it is essential to recap the main questions and how the findings have answered them; this is attempted below.

Main issues

1. What are the main issues related to affordable housing policies for the middle-income group in Saudi Arabia?

The main elements of the conceptual framework were socio-cultural and economic factors which in turn influence all other components of the framework, including financing and production of housing, by both private and public sectors. Two findings were related to the socio-cultural dimension from the household perspectives' study (Chapter 6); these were:

- Difficulties in finding suitable loans.
- Difficulties in obtaining accommodation of a suitable size to meet the family's needs.

Data from the survey (Chapter 6) clearly indicate that the Real Estate Development Fund (under the old system) and personal loans are preferred by middle income individuals compared to house loans. This may be due to the fact that personal loans come with low interest rates and faster repayment schemes compared to house loans, which take up to 25 years to repay and generally incur more interest. Findings from the two studies suggest that there is a lack of

transparency regarding interest rates. Media reports as well as anecdotal evidence suggest that in Saudi Arabia, information regarding interest on either personal loans or housing loans is not available to the public, even on bank websites. According to finance experts, the reason for this is that the percentage varies from one bank to another and depends on the loan and, of course, the person's financial capabilities (Property Finder, 2019).

Online sources suggest that interest on a personal loan may reach 3.15% while interest on a house loan in Saudi Arabia may reach up to 8% (Property Finder, 2019). This is a significant discrepancy which explains why end-users prefer to take out a personal loan rather than a real estate loan. The reluctance to take out loans for religious reasons, a topic that was strongly discussed in the literature (Sidawi, 2008; Roberts, 2010), or due to a dislike of high interest rates should be investigated further. There is a claim in SA by both religious scholars and finance authorities that financial products available to end-users are in accordance with Islamic teaching regarding interest. These were discussed earlier in Chapter 3. The two main products provided by the banks in SA are Al-Murabahah (cost of the house plus credit) and Al-Ijara (a lease contract). It is beyond the scope of this PhD to discuss in depth the religious compliance of these products. However, in essence, they are interest-based loans sold in an acceptable Islamic format.

There is pressure from the government to resolve the transparency issue. SAMA has previously directed guidance to banks and finance companies to remind them to ensure that financing granted to clients should be fully explained in plain language including the full list of terms and conditions of any proposed financing product (Alshamri, 2019).

However, compared to the UK, interest on personal loans in Saudi Arabia is lower than interest on real estate loans. This is an interesting point as it suggests that the preference for a personal loan rather than a real estate loan is economically-driven rather than affected by religious concerns. In the conceptual framework, the socio-cultural and economic factors were grouped together as one component and it is sometimes difficult to disentangle these factors. Certainly, ungrouping these two factors will help distinguish if the choices made are due to religious or financial reasons. Some banks in Saudi Arabia claim that their loans accord with Islamic law as they provide a fixed interest rate (see Chapter 3). This is an interesting finding which could be explored more by the government and the responsible regulatory authority (SMOH). Again,

this indicates that end-users' preferences may be more economically motivated than religiously shaped. There are further questions originating from this finding and in need of more research, for example, where is there a shift in religious values, and will this affect affordable housing in the future? It is recommended that further research on this topic is warranted. However, this is a controversial issue.

Another important socio-cultural finding is that many respondents in the quantitative study (Chapter 6) said they live with their extended families. This is very different from what was found in the UK, USA, and China. In Saudi Arabia, potential buyers desire large houses so they can accommodate their children even when they are older. It is also clear that large houses provide space in which to host guests and such houses can be used during occasions such as weddings and religious celebrations such as Eid. This socio-cultural aspect will not change until the attitudes of people living in cities change and they begin using public places for large gatherings. This point deserves further research to measure the effect of having estates with more public spaces such as function rooms for social gatherings.

Another finding, related to the previous one, was that people in Saudi Arabia mostly prefer villas and two-floor duplexes. As the cost of land is an obstacle for affordable housing, one could argue that vertical buildings will partly solve this issue. For example, if there is a tendency for potential buyers to use a small piece of land and build three storeys on it rather than one or two, this will help to resolve the land price problem. However, research into the preferences for certain housing designs is also needed for socio-cultural reasons.

Buying a plot of land and building a house was the preferred model of acquiring a home for the middle-income group in Saudi Arabia. However, as the price of land is expensive, especially within Jeddah, other solutions must be proposed. One suggestion mentioned during the interviews was that improving transportation could encourage citizens to buy land on the outskirts of the city and commute to their workplace. This type of solution is, however, ambitious as it requires the government and planning authorities to treat the housing challenges within a holistic framework that includes the development of infrastructure elsewhere and better accessibility to health centres and schools.

As far as global and regional influences are concerned, the qualitative study in this thesis (Chapter 7) highlighted that the price of building materials and the cost of construction have a major impact on affordability as they directly increase the price of housing units. This was an

element in the conceptual framework that influenced economic factors, public policy, and regulations. However, as discussed earlier, the country could be more prominent in the production of housing and supporting the finance sector. Saudi Arabia is considered affluent by all indicators, but it is fair to say that not all of its people are rich, and thus there may be a benefit from experimenting in building houses using local materials to reduce the overall cost of construction.

Using local materials in construction can lower costs, as experience in other countries suggests. For example, the success of Hassan Fathi's architecture in Egypt, who argued that, because steel and other building materials were expensive and usually imported, changing the construction philosophy and using locally available materials with smart engineering could result in producing affordable housing for the poor in society (Fathi, 2010), and thus could also contribute to lowering the cost of affordable housing targeting the middle-class. Arguably, this is an ambitious step and needs further research, but Fathi's success in Egypt, Pakistan, and Nigeria can at least encourage authorities in Saudi Arabia to research if his ideas are transferable. However, the feelings of entitlement which Saudi Arabian citizens have towards using the best construction technology and their higher expectations could make it a challenge to pursue such an idea. Further social studies are needed to evaluate whether these are solely the views of academics or if these opinions are widespread among middle-income individuals regardless of their education and social status. Notably, inspiring news recently came from the SMOH (2019o), stating that there is a new housing policy under development, the Building Technology Stimulus Programme, which is an initiative to reduce the cost of construction to ensure affordability (discussed in Chapter 3). However, the challenges that face this type of initiative include the willingness of developers to embrace it and client satisfaction, both of which remain to be seen. In addition, there is also little data on the availability of infrastructure, including trading channels, to support this initiative.

In summary, the main issues for end-users were:

1. Difficulties in finding suitable loans.

2. Difficulties in obtaining accommodation of a suitable size to meet the family's needs.

3. High expectations.

4. Reluctance to take out real estate loans, which may be due to economic rather than cultural or religious reasons.

Main Stakeholders

2. What are the causes of these issues and who are the main actors involved?

The conceptual framework which was based on the literature (Chapter 4) and data from the two primary studies (Chapters 6 and 7) suggest that the government is the main stakeholder in the affordable housing market and the private sector is either weak or in need of reorganization. In Saudi Arabia, the newly established SMOH is the major government authority responsible for housing issues. Local authorities are important, but their role is limited. This differs greatly from the situation in the USA and the UK. In these two countries and specifically in the UK, there are various social housing initiatives aimed at the middle and lower-income groups whilst the private market is healthy and thriving. In China, the government is the main actor as is the case in countries with similar socio-economic and demographic structures such as Saudi Arabia. Despite this, besides the government, there are two other categories of stakeholders who should be included when considering the housing market: these are the private sector; and the financial organizations (SMOH, 2016a). Data suggest that the main issue in affordable housing in Saudi Arabia is the change of the loan system from the REDF (see Chapter 3) to private banks. There is a reluctance among Saudis from the middle-income groups to take out loans with long term repayment schemes associated with high interest rates. However, as options are limited for the middle-income group to own a house in any alternative way, they may eventually come to terms with this new policy. It is recommended that the government acts on the feedback from end-users and takes their concerns seriously.

Housing policies and regulations

The questions on current policies revealed a variety of responses from the different stakeholders. The questions were:

3. Which current policies developed by different stakeholders are aimed at tackling middle-income housing issues?
4. How do these current policies address the problem of middle-income affordable housing?

There were differences of opinion between government officials and end-users on issues related to the regulation of the housing market. The two most significant findings in relation to this component of the conceptual framework were: firstly, the need for better communication and explanation regarding government housing policies and the terms and conditions of

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available housing loans; and secondly, the lack of financial products that serve the needs of the middle-income group. There was also a debate regarding the discontinuation of the popular REDF, resulting in the end-users now having to deal directly with banks to obtain loans.

It is probably advantageous for the government and the private sector to investigate more flexible solutions in financing the housing market. By comparison, the process of finding affordable housing in the UK is more positive in terms of the availability of options and alternatives, such as shared ownership. However, as mentioned previously in Chapter 2, the benefit of importing housing policies is questionable (Crook & Kemp, 2014). Local solutions are therefore required, and this should be based on research and better understanding of the local culture and economy. This includes the finance sector as well.

In summary, the main points about regulations and housing policies were:

1. Lack of transparency, specifically in relation to home financing.

2. Lack of regulations controlling the private market.

3. Many negative views regarding renting, the suitability of rented houses, and how the SMOH has failed to control the rental market.

4. Apart from the previous well-liked REDF programme, the different housing policies were seen as a mixture of trial and error.

Main Opportunities

The main opportunities for affordable housing policies were explored through the following two questions:

5. How can these policies be developed further to address existing or future issues?
6. Which other policies can be introduced to contribute to a solution?

There was a great emphasis from end-users and also from other stakeholders on the need to regulate the private market, land prices (as discussed previously), and, more importantly, control interest rates on loans. There were also suggestions made regarding improving commuting links between the outskirts of the city, where land is more affordable, and the city centre.

The cost of land, which was explored through the affordable land supply element in the conceptual framework, is extremely high in preferred locations, particularly when noting that

the most desirable model of housing in Saudi Arabia is buying your own land then building on it. This was reflected by 90% of middle-income participants stating that the price of land is the most expensive element in housing costs (Fattah, 2013; GIZ, 2013; Jeddah Economic Forum, 2013; Oxford Business Group, 2013; Batrawy, 2014; SMOH, 2016g; SMOH, 2016h). The middle-income group in particular struggles to buy land as only 24.3% of them have managed to acquire plots for future development, compared to 44% from the high-income group. Having a plot of land is a positive step toward owning a house in SA as it is the custom to build one's own house to satisfy one's personal and social needs. Therefore, the price of land alongside the prices of ready built houses (i.e. buying the house as a freehold including the ownership of the land) are major challenges. These two issues subtly suggest that if the government resolves issues with the ownership of land and offers new housing models such as leaseholds (owning a house but not the land), could begin to be one solution to the affordable housing problem, as used in countries like the UK.

To summarise, the following findings were highlighted:

1. The unhappiness of the middle-income group with regards to house prices and rent level, but this can be regulated.

2. There is an opportunity for coordination between the government and the private market.

3. Government and end-users identified the challenge of accessing housing funds, but this could be addressed through new innovative schemes as discussed earlier.

8.4 Recommendations relevant to the Saudi affordable housing

Overall, engagement with the literature, both governmental and in peer reviewed journals, showed the need for further research on the affordable housing challenges in SA. In general, SMOH reports tend to be over-descriptive and ambitious despite there being little evidence of the effectiveness of the measures it has taken to resolve affordability issues and a lack of a public debate on housing affordability. However, in the final stage of this PhD research journey, SMOH has become proactive in engaging with the media and in publicising new housing policies.

Peer reviewed articles on the effectiveness of the new housing policies are rare. This was a challenge for this research as it restricted the information and data sources used to inform the

discussion of affordable housing policies and limited opportunities to compare and contrast the data with other research. However, the data collected here strongly suggest that members of the middle-income group struggle to find affordable solutions in the housing market in Jeddah; the research area in this thesis. Perhaps more significantly, the data suggest that there are preferences for major stakeholders in the housing market which, if met, could resolve some of the challenges facing end-users. An example is the inclination of end-users to buy land and build their own house. Thus, the following recommendations are presented to answer the question: what is the way forward to resolve the affordable housing challenges in SA?

Firstly, the government (the Saudi Ministry of Housing and local authorities) should take full responsibility for resolving the challenges of ownership of land and it should offer flexible models such as leaseholds alongside conventional freeholds. In addition, there is a need for transparency on the different affordable models available. Social media platforms should offer channels to communicate government regulations and policies. In addition, it is important to learn from other countries' experiences in developing Saudi housing policies and apply what suits the local culture in Saudi Arabia with care and selectiveness.

A way forward is to offer affordable financial products to help the middle-income group own their first home. The policies put in place by the SMOH are focused on helping Saudi citizens with the equivalent of a maximum £2800 monthly salary. In this case, SMOH pays the full interest rate for these individuals up to a maximum of £100,000. The challenge here is that most of the middle-income group (with a monthly salary from £2600 to £4000) will have only 30% of the interest rate paid by the SMOH. House price estimates by the SMOH are also outdated, as the maximum of £100,000 represents less than a third of average house prices in major cities. One solution is, instead of support being contingent on a maximum price (£100,000), it should be changed to a proportion of the real-time price of houses.

Secondly, it is important to develop the housing market in parallel with other sectors such as the finance market and public/private agencies. This holistic approach, including improving infrastructure and transportation, will directly improve the housing market.

Thirdly, while it is essential that the SMOH supports all income groups, the middle and low-income groups could be targeted with more suitable affordable models. The SMOH must take the financial ability of the middle-income group into account as this research suggests and support them accordingly. Another important suggestion is to control the rental market as it is

directly linked with home ownership. It is worth remembering that, when enforcing their policies, the SMOH should coordinate with a strong financial system.

Finally, because of the demand for housing in major cities such as Jeddah, continuous evaluation of supply and demand in these areas is required. Improvement in housing policy must be made fast and findings from housing market studies should be applied to meet housing needs, demand, affordability issues and other changes. This may also require citizen involvement in developing housing policies. Additionally, it is essential to develop the private sector and involve it in the affordable housing process, although this can only be a viable option if the government subsidises the private sector in this respect.

The literature review of this thesis has made it clear that some affordable housing solutions in other countries, such as the UK, could be applied in Saudi Arabia. Therefore, it could be recommended here that shared ownership schemes (Lund, 2017; HM Gov., 2018; Jones et al., 2018) could be trialled within the housing policy of Saudi Arabia. This type of tenure will reduce the amount of home loans and thereby the financial burden on middle-income end-users. The findings from chapters 6 and 7 showed that a high percentage of end-users are either renting or living with parents and this product could be appealing to them.

Other solutions to move end-users from renting to owning homes in Saudi Arabia could be to entertain the idea of investing some of the rent toward a deposit or an investment in a future home. Similar policies were successful in the USA. For example, 'means-tested choice vouchers' scheme used in the US (Kutty, 2005; Lund, 2017; Byrne & Norris, 2018) can be adapted to help middle income groups to save money while they rent in order to own in the future. In addition, experience from China suggested that transforming the rental housing market into an ownership market could be a viable solution if the right housing products are available. Huang (2012) reported that Economic Comfortable Housing (ECH) is "ownership-oriented housing provided by developers on free land allocated by local municipal governments, and sold to qualified households at government-controlled prices" (Huang, 2012:942). A similar approach can be used in Saudi Arabia if properly researched.

8.5 Further Research

The conceptual framework developed earlier (chapter 4) and updated based on the findings from this thesis could inform further research in different locations in Saudi Arabia to enhance the generalizability of the research presented here. Social research using mixed methods is required to explore the following challenges:

1- The views of end-users toward the most acceptable model for affordable housing to confirm the findings of this research.
2- The socio-cultural appropriateness of the leasehold solution and shared ownership in Saudi Arabia.
3- More research is also needed to clarify whether the reluctance to take out long-term loans is economically or religiously motivated.
4- Research into developing new solutions to lower the cost of construction in the country.
5- Research on the potential use of the idea of using rent towards future ownership (ex. Shared ownership).

8.6 Adjusting the conceptual framework

The following table (8.1), contains a summary of the findings mapped to the elements of the conceptual framework. It also contains the updated sections of the adjusted framework.

Table 8.1 Summary of Findings and Elements of the Original and Updated Conceptual Framework for this Thesis

Socio-Cultural & Economic Factors (End-User Stakeholders)

Element of Conceptual Framework	Changes to Conceptual Framework
  1-New elements were identified (e.g. education). 2-Socio-cultural and economic factors should be separated. 3-End-users' characteristics and preferences are now a major element that are influenced by both socio-cultural and economic factors. 4-Global and regional factors should be moved to the regulations and policy major element.	

Other Interconnected Elements	Findings	Conclusion/Recommendation
Global and Regional Influences	1-The price of building materials and the cost of construction are high because of global trade reasons. 2-Foreign builders increase the cost of building and constitute a social challenge.	1-Manage expectations of users regarding building materials. 2-Investigate alternative cheaper and more effective building materials. 3-Encourage local developers to train and recruit local builders.
Economic Changes	3-End-users are more economically driven than religiously motivated. 4-More women are earning an income.	4- Loans should be based on total household income rather than the husband's income. 5-High real estate loan interest rates should be avoided by the government/banks.
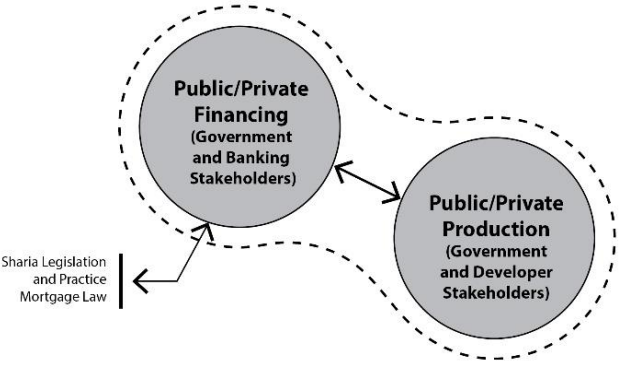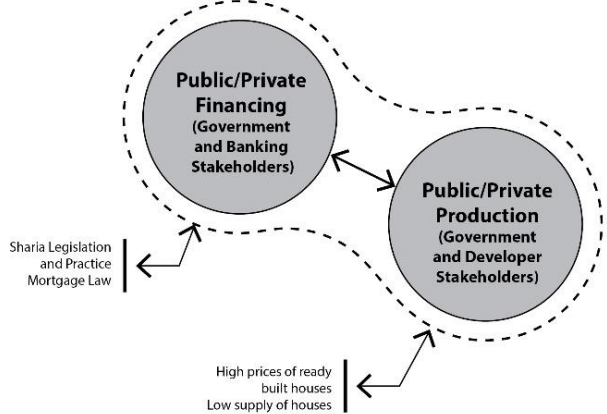
Household Changes	5-Changes in family sizes. 6-Changes in social behaviour/manners.	6-Social research is needed to evaluate the reduction in family size. 7-Invest in infrastructure to accommodate social changes (e.g. community halls for gatherings/weddings). 8- Education and raising awareness of a savings culture.
Cultural and Islamic religious traditions	7-Husbands are responsible for providing the main family home and supporting their wives and children financially. 8-The preference for a personal loan rather than a real estate loan is economically driven rather affected by religious concerns. 9-Living with the extended family is still preferred over living separately. 10-Large houses are expected for social reasons. 11-Certain housing designs are required.	9- The attitudes and expectations of end-users need to change.
Overall	**Socio-cultural and economic factors are related to each other but should be investigated separately.**	**Choice of loans is not motivated/affected by religious beliefs but by economic considerations. Household structures and social attitudes are changing gradually to accommodate modern lifestyles.**

Public Policy & Regulations

Element of Conceptual Framework	Changes to Conceptual Framework
1-Global and regional factors are now linked to the public policy and regulations major element.	

Other Interconnected Elements	Findings	Conclusion/Recommendation
Government Stakeholders	1-The government in SA is the main stakeholder responsible for the housing market and its policies; in this case, the Saudi Ministry of Housing is the main government body. 2-Regulations was the most recurrent code by all stakeholders but was more frequently talked about by government stakeholders.	1-The government should take full responsibility for resolving affordability issues including ownership of land and offering flexible models. 2-More effective communications between the government and other stakeholders is needed (specifically regarding newly adopted regulations).
Professional Stakeholders (Planner & Urban Designers)	3-The private sector is either weak or in need of organization.	3-There is a need to support and regulate the private sector.
Implementation of Strategies	4-There is a need for more transparent policies and regulations and more cooperation between the different players and stakeholders in the housing market.	4-Raise awareness of the new products and educate end-users (better communications).

		5-Social media platforms should offer channels to communicate government regulations and policies. Important to learn (knowledge exchange) from other countries' experiences
Economic Interference	5-The socio-economic environment in Saudi Arabia has changed enormously; there has been a rise in urbanization and the government realised that much better cooperation with the private sector is essential to resolve the increased demand for housing	6-Further research is needed to identify the impact of urbanization and the new demographic, economic and social changes on affordable housing.
Public Resistance	6-End-users are resistant to the change from the Real Estate Development Fund to interest based real estate loans from banks.	7-Much better communication and control of interest rates issued by banks should encourage end-users to engage with the new financial products.
Affordable Land Supply	7-There is a need to regulate the private market, land prices. 8-Improve commuting between the outskirts of the city, where land is cheaper, and the city centres. 9-The government should resolve the challenges around ownership of the land and offer new housing models.	8-The government should address the land affordability issues (including the white/empty land issue). 9-Apply a holistic approach to developing areas for housing projects (improve transportation, local services, schools. etc).
Security of Tenure	10-The rental market should be regulated. 11-More transparency is needed regarding contracts and terms and conditions of any tenure.	10-Protecting tenants' and landlords rights and applying ceilings to rents in specific areas should be negotiated with the private market.
Quality	12-The quality of ready built houses was doubted by end-users.	11-Improve the quality of ready built houses and take on board the views of end-users.
Security Issues	13-End-users raised the issues of preference of location with more infrastructure (including security measures).	12-A holistic approach should address the security issues within new build housing projects.
Overall	**Lack of transparency from the government plus weak coordination across government bodies was identified.**	**Better communications across all stakeholders plus a holistic approach is needed.**

Public/Private Production (Government and Developer Stakeholders) and Financing (Government and Banking Stakeholders)

Element of Conceptual Framework	Changes to Conceptual Framework
  1-High prices of ready-built houses and low supply of houses came up as a major challenge and is now an interconnected element. 2-The global and regional factors could influence these two major elements.	

Other Interconnected Elements	Findings	Conclusion/Recommendation
Overall	**Lack of transparency across the government plus weak coordination between government bodies was identified.**	**Better communications across all stakeholders plus a holistic approach is needed.**
Sharia Legislation and Practice	1-See Cultural and Islamic religious traditions (above).	1-See Cultural and Islamic religious traditions (above).
Real Estate/Mortgage Law	2-Vital issue recognized by both the government and end-users was the challenge of accessing housing funds.	2- Better and controlled financial products should be available.
Overall	**Low supply of houses because of the weak private sector (developers). High prices of built houses. Weak banking system plus high interest rates.**	**Important to develop the housing market in parallel with developing other sectors such as the finance market and public/private agencies.**

As discussed previously, the two analysis chapters added new insights to improve the conceptual framework presented in chapter 4 and the updated framework can be seen in the following figure:
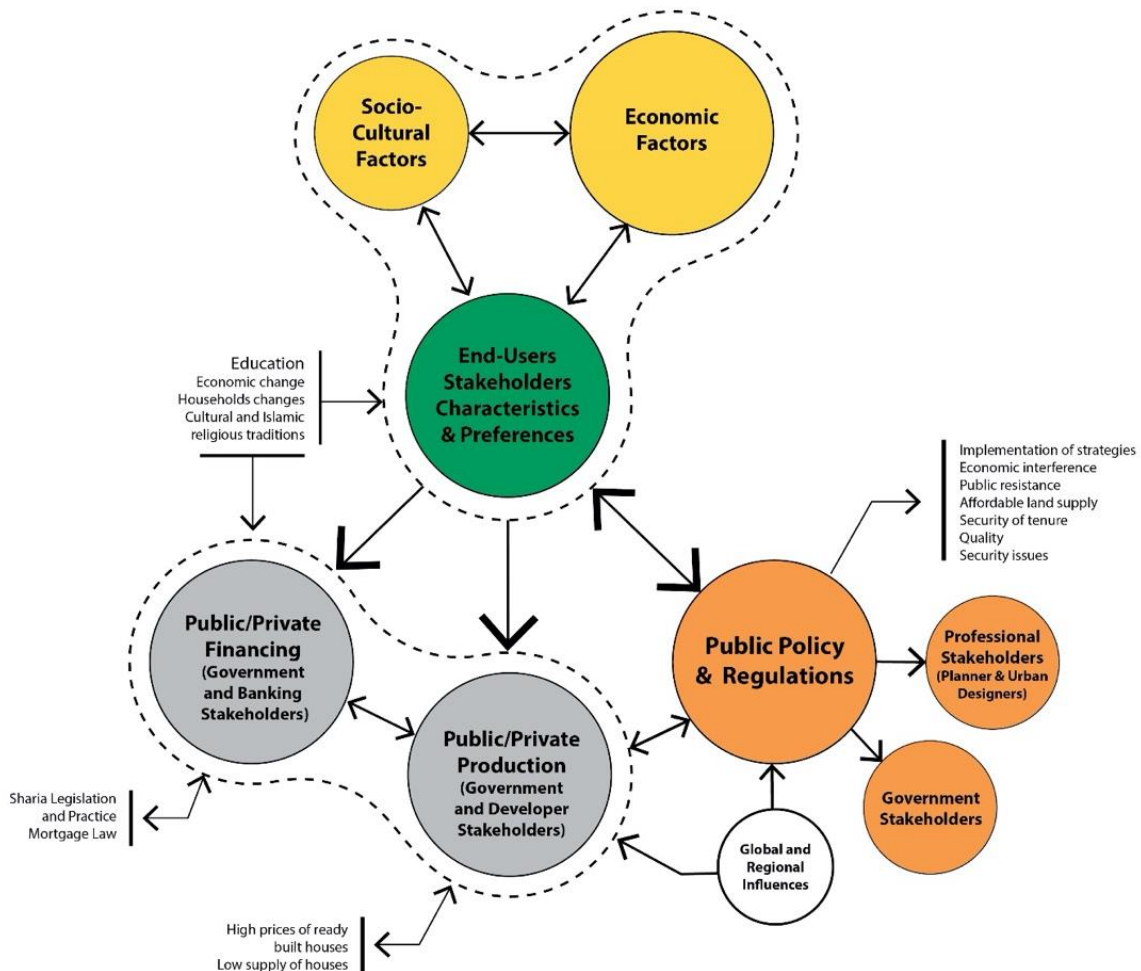
Figure 8.2 The updated conceptual framework.

While these changes have not impacted on the general concepts developed earlier, the new framework shows the interaction between the elements as more dynamic than it was previously. For example, the policy and regulations are indeed affected by the complexity of the socio-cultural and economic environment and end-users' preferences. The interrelationship between the different components in this conceptual framework is now clearer. Overall, it shows that affordable housing is a multifaceted issue with interaction between different stakeholders across several domains. This updated conceptual framework suggests that future research and

the development of housing policy should be holistic in approach and not restricted to one area. These relationships can be regarded as a summary of the contribution to knowledge.

8.7 Contribution to knowledge and global generalizability of the research findings

This thesis, through the extensive data generated by the two studies, has provided several findings that could contribute to the general knowledge surrounding housing affordability in Saudi Arabia. After an initial summary of the main points which constitute an addition to housing affordability research in Saudi Arabia, the impact of the findings of this thesis on academic research into affordable housing in the Saudi context and worldwide is discussed. Furthermore, potential recommendations for governments outside Saudi Arabia are also highlighted. This account necessitates evaluating the value of the conceptual framework for academic, local and central governmental authorities worldwide.

Summary of contribution to knowledge in the Saudi context:

- This thesis has found that the middle-income group in Saudi Arabia is struggling with housing affordability.
- The data show that existing housing policies are either in progress or have little impact on affordability. However, the research also suggests that there are potential solutions to affordability such as controlling interest rates and reducing waiting times for loans.
- The housing model of choice for a large proportion of participants is buying land and building their own house, which suggests that mass construction of housing units in Saudi Arabia is not popular.
- This thesis confirms earlier findings that the expectations of Saudi citizens with regards to the size and location of the housing they aspire to buy may be economically unattainable and people must be educated about affordability. However, this thesis shows that there are legitimate socio-cultural reasons for potential buyers wanting larger houses.
- The findings also suggest that resolving the affordable housing challenges should be approached in a holistic way, including improving infrastructure and transportation.
- Solutions such as reducing the cost of building materials, resolving construction costs through better management of labour, and enhancing the local economy that contributes to the housing market were indirectly inferred from the data and literature.

8.8 Worldwide impact of the findings:

The worldwide generalizability of the findings will be critically debated to meet objectives 1, 3 and 6 of this thesis. In this section, the contribution to knowledge of the methodology used in this thesis and the global use and development of the conceptual framework is discussed. In addition, practical outcomes that may contribute to the global application of affordable housing solutions such as policy transfer, cultural factors and a holistic approach are also highlighted. A summary of these contributions is presented below in table (8.2)

8.8.1 Global contribution to Academic research:

The findings of the research presented here could guide and inform changes to the methodology used in researching housing issues globally. Another significant contribution is applying the conceptual framework approach as a skeleton to guide the research and also to be used by governments and housing authorities.

Methodology

The mixed method approach used in this thesis was found to produce rich data and contribute to knowledge. There is a potential for both academic and governmental research in affordable housing to use the strength of this methodology and also consider overcoming some of the drawbacks I have identified in my methodology. One such drawback was the low response rate of the quantitative study (chapter 6). I had solely used email to reach my target population and did not exploit the potential of using other social media platforms to improve my response rate. Therefore, it would be advisable to invest in these new technologies to improve participation in research. In addition, using the new online meeting apps could potentially reduce costs and enable investigators to reach a wider base of participants.

Conceptual Framework

My experience has been that using a conceptual framework (CF) to guide the research has provided a robust methodological advantage. In the CF for this research, I identified the main concepts after reviewing the findings in relation to affordable housing policies for middle-income groups. Therefore, the CF developed in this research could guide other research into affordable housing in SA, the GCC, and MENA region as a whole. The CF will also provide guidance for academic research in other countries and could be used as a starting framework for further research. However, every new sitting may be slightly different and new factors and relationships could arise depending on the community or regional settings.

My experience in developing this CF is that, while developing it using an extensive literature review, the CF has to be a flexible tool to accept changes based on findings. Therefore, the best approach is to treat the CF as a dynamic tool to summarise the main concepts, factors and relationships to guide the research and also to report the research back to the academic communities and to the government and planning agencies. Government and local housing authorities could also make use of the conceptual framework to identify major issues and to guide their own policies.

Contribution of the findings to ongoing research into housing affordability

My findings consolidate the fact that a large proportion of the society is struggling to own houses. Research on affordable housing worldwide recognises that this issue is of paramount significance because of the impact of the lack of affordable houses on the health, wellbeing and financial status of end-users. This is a global issue as recognised in many global research studies (Gibb and Hayton, 2017 and Alqahtany, 2020). In addition, there is a trend in academic research into affordable housing to investigate and search for solutions locally (at a country level) (Gibb and Hayton, 2017). However, the ongoing debate on the value of policy transfer is still strong among scholars dealing with affordable housing research. The research presented here shows that policy transfer could be successful if implemented carefully. The research approach applied by some Egyptian scholars highlighted the fact that successful policies in certain countries could be of value to other countries. Abdel Raheem *et al.,* (2020) analyzed affordable housing solutions in Thailand, India, Algeria, and Jordan and evaluated them for future use by Egyptian Housing authorities. Indeed, Egypt had some success in applying a holistic approach to building neighbourhoods and small cities around Cairo to ease the congestion and the land issues in the capital. These approaches could be of value to countries with crowded cities such Saudi Arabia and countries in other parts of the world.

Exploring ideas for further research

The findings in this thesis also strongly identified further research topics that should guide other research projects from Saudi Arabi, the GCC countries and the wider MENA region. This is because housing policy issues in Saudi Arabia are very similar to other gulf states (as discussed earlier in chapter 3) and, to a lesser extent, to other Arabic and Islamic countries. However, the findings could also be of global value as affordable housing policies often share the same ideas and exchanging policies between countries is a potential possibility. More on this will be discussed in the policy transfer section below. In addition, some of the issues

identified in this thesis are applicable to countries with a large young population (e.g. South East Asia).

One topic that was highlighted in the findings is that the expectations of end-users can be managed to improve the acceptability of different housing models. This necessitates further social research into different local communities to identify the determinants of these expectations. Another relevant finding from Chapter 7 is that education is of great significance in modifying end-users' expectations and their choice of housing model. Other technical topics include the need to rethink the source of building materials to lower the cost of housing units. There seems to be little research on this topic in the middle east. Other research centres around the world could contribute to these topics.

8.8.2 Practical outcomes applicable worldwide

Despite the differences between countries in terms of their demographics, socio-cultural background and economic and political systems, this thesis research was found to yield significant findings that could be applied in different parts of the world after careful changes to meet the different settings. The three major practical outcomes are:

- The possibility of transferring successful housing policies or avoiding the use of housing policies that have failed in many other countries.
- The applicability of the findings on the significance of economic factors that override cultural concerns.
- The success of a holistic approach in creating successful housing solutions in many parts of the world.

These three practical contributions to global housing policies are discussed below.

Policy transfer:

The critical review of the literature has shown the complexity of housing policy transfer between countries (Crook & Kemp, 2014) despite some of its benefits (Lund 2017). However, I have shown in my thesis that there is some support for the idea of housing policy transfer between countries among some stakeholders (Chapter 7). The findings from the interviews suggested that the transfer of knowledge, including housing policies from other countries, to Saudi Arabia is possible if they are implemented responsibly and with respect to Saudi cultural and religious sensitivities. This, of course, works both ways suggesting some ideas

implemented in the Saudi context could be used elsewhere. It is important that local sensitivities and differences in demography and culture are observed.

For example, the need to develop an acceptable housing model in Saudi Arabia was a major finding in this thesis (see chapter 3). Many middle-income end-users in Saudi Arabia preferred to buy a plot of land and build their own house on it. This allows them to meet their housing requirements. This idea could be implemented elsewhere with local and governmental support under flexible local council regulations. However, further investigation by government and housing organizations in any country should invest in research to identify what is the best housing model for their local communities and specifically for middle-income end-users.

Cultural factors:

Another important finding with worldwide practical implications, especially for UK and the US housing policy, is that Muslim communities are reluctant to take out loans or mortgages with variable interest rates as they are deemed un-Islamic (as discussed in Chapter 3). The findings from my research can inform banks and building societies in the West to provide financial solutions acceptable to the Muslim communities in these countries. However, the most significant contribution of this thesis is that middle-income end-users are more concerned with economic factors than religious and cultural issues as far as loans are concerned. End-users would prefer long-term, low, fixed interest solutions whether it was claimed that these solutions were Sharia-compliant or not.

Holistic approach in affordable housing polices:

One major finding from the two studies in this thesis (chapters 6 and 7) is the preference of end-users to live as near to the city centre as possible because of the availability of different amenities and the different transport facilities. Some stakeholders suggested that improving the infrastructure and services outside the city of Jeddah and, in particular, transport links is in accordance with research elsewhere which showed that improving transport to allow for more homes to be built on the outskirts of cities was a successful affordable policy plan (Reed, 2015). This is indeed a global rather than a local issue in Saudi Arabia.

Table 8.2 Summary of the global implications for academic research and affordable housing policies.

Main Findings of the research	Global implications for research findings	Global implications for affordable housing policies
Middle-income participants are more likely to be affected by economic factors than by socio-cultural ones, a clear shift from the past	This finding consolidates the conceptual basis to investigate housing policy worldwide by identifying all the factors contributing to the relationship between the different stakeholders. It is important, also, to estimate the magnitude of the different factors. Further research in other countries with a Muslim majority population is required to investigate the socio-cultural changes that influence housing policies, in particular the preference for different financial products.	While housing policy solutions and financial products should be socially acceptable to end-users, governments and housing authorities should always prioritise low interest housing loans and mortgages over socially tailored solutions (e.g. Sharia-compliant loans with higher fixed interest). Other housing solutions such as shared-ownership schemes and the American Housing Choice Vouchers (HCVs) could possibly be implemented in different parts of the world. These products use rent to encourage owning the house and would be acceptable to end-users regardless of their socio-cultural orientation.
Education could contribute to resolving challenging issues in housing policies.	Middle-income end-users' behaviour, expectations and choice of their dream house is largely affected by their level of education. There is, however, room for further research to investigate how education shapes housing preference.	Education is a vital factor affecting housing preference. Governments and housing organizations/authorities have a major responsibility to educate and share the opinions of the segments of the society that they are targeting. This will be effective when issuing new policies.
The study indicates that affordable housing is a multifaceted issue with interaction between different stakeholders across several domains	The stakeholders involved in this research, while clearly stating the challenges facing affordable housing, mentioned several solutions that would help to solve the problem. This proves affordable housing cannot be solved only by building houses. Further research adopting a similar methodology is needed.	Policies made by governments must include a wide range of factors and indicators that are involved within housing. In this research these elements are the ones which have arisen in the conceptual framework which can be adapted for use in different parts of the world.
There is still a clear gap between policy and implementation in this rapidly evolving society. Effort must be placed on developing a more holistic solution to middle-income housing that is proactive rather than reactive	Evaluation of a policy takes time, as shown by the literature. Only time will prove whether a housing policy is effective or not. Therefore, implementing housing policy must be done after a deep analysis of many factors including the society, thus treating the shortage of affordable houses as an acute rather than a chronic problem and investigating the success of the responses from governments and building societies.	Continued/regular evaluation of housing policies must be conducted annually. Fast decisions and changes of policy must be made accordingly. Therefore, planning for a policy and early anticipation of challenges is crucial and it is not possible to have a healthy housing market only using a reactive rather than a proactive problem-solving approach.

8.9 Conclusion

As mentioned above, this is an extensive programme of study in which the literature suggested that there was a gap in the knowledge as far as housing affordability for middle-income groups in Saudi Arabia is concerned. The literature review has attempted to cover affordability issues in three different countries to inform understanding of the housing affordability situation in Saudi Arabia. After an extensive account of housing policies in Saudi Arabia, a conceptual framework was developed. Based on this framework, three major elements were identified; socio-cultural and economic factors, public policy and regulations, and public and private financing and production.

This conceptual framework proved to be valid for conducting this PhD programme and led to two studies (chapters 6 and 7) that provided answers to the research questions. Eventually, the data contributed to improving the conceptual framework, which stayed broadly the same, but a few details had to change.

In contrast to earlier conceptual frameworks related to the sustained development of affordable housing such as that by Nair et al (2005), the framework presented in this thesis is simpler and more direct. It is also more appropriate for use in Saudi Arabia and countries with similar socio-cultural and economic structures. However, Nair et al's conceptual framework was more specific about the technological aspect of housing, an element that was barely mentioned or discussed in this framework for housing policies in SA. The impact of global factors and the high prices of new build houses reflect this component. It could be a way forward to expand on this element further in SA housing policies to reduce housing prices in a sustainable way. Sources from SA housing authorities suggest that they are aware of the construction and technological impact on house prices.

Therefore, this conceptual framework and how it was developed served two additional purposes to allow for robust research:

- It consolidates the idea that global research on housing policies would benefit from using this approach and thus this CF can be applied in different research studies either in GCC countries or other parts of the world as a starting point.
- Governments and housing authorities can use this CF to address housing policy issues.

Overall, the findings suggest that a large proportion of the middle-income group in Jeddah, struggle to own their own houses, wait a long time for appropriate loans and generally believe their current residence does not meet their needs. Most respondents agree that they would be able to spend a third of their salary on loan repayments or rent.

The literature review and the primary research have revealed that, besides the end-users who are the target of affordable housing policies, there are several players in the housing market, with the government being the main stakeholders. The challenges in the area of affordable housing are due to a range of economic and cultural factors and the sector is also affected by global factors (e.g. the cost of building materials). These findings mostly verify the main components in the conceptual framework which was developed in chapter 4. However, the findings suggest that the social and economic factors should be separated to better understand their impact on affordability. Another element in the framework which the data suggests is less significant is the impact of religious factors on housing decisions. While it is beneficial to consider it a small element, it is probably more efficient to link it only to socio-cultural factors. Recent changes in the political system of Saudi Arabia suggest that the country is more open in its economic and cultural approach that it used to be. This may have some impact on future financial solutions.

The new Ministry of Housing and other government authorities, including local authorities, are ambitious in relation to resolving the affordable housing crisis. However, the main findings surrounding the challenges involved such as the price of land and the culture of not opting for long-term loans, alongside the unpopularity of new policies of managing loans only through banks, suggest that a change of policy on its own may not be sufficient to encourage end-users to take out loans. There is a need to educate people and to treat housing issues through a holistic approach including improving infrastructure and transportation.

The main message of this thesis to government stakeholders is to take into account the middle-income end-users' perspective when considering opportunities to make houses available through affordable and sustainable housing projects. This will only be possible through continuous research and development of affordable housing policies. The private market must be regulated, and the interest rates must be evaluated according to the main global and local markets. The main concerns of the end-users as shown by this research were loans with long repayment terms and high interest rates and also land supply. This is probably a result of the

monopoly of the finance sector and land ownership. New regulations may be needed to force developers to contribute to affordable housing projects by reducing the prices of ready-made houses or developed land. This could possibly be achieved by assigning a proportion of each new development to affordable housing units. Strategic planning of the housing market is only a part of the jigsaw that can support the development of this dynamic, young and ambitious society.

This research also has global implications for academic research and policies concerned with providing affordable housing for the middle-income group. Applying a mixed method research approach and using a conceptual framework are two examples of the contributions of this thesis to global research on this topic. On the other hand, policy transfer, the significance of economic factors and the need to adopt a holistic approach to housing issues are the three main contributions to housing policies worldwide.

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Appendices

Appendix 1 Online Questionnaire

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تقييم (نقدي) لعملية توفير الإسكان الميسر بالمملكة العربية السعودية بمدينة جدة ــ شريحة أعضاء هيئة التدريس بجامعة الملك عبدالعزيز كشريحة متوسطة الدخل

السلام عليكم ....انا أحمد محمد عابد ، محاضر بجامعة الملك عبد العزيز ، كلية تصاميم البيئة ، قسم التخطيط الحضري والإقليمي. حاليا أقوم بدراسة عن الإسكان الميسر في المملكة العربية السعودية مستهدفا أعضاء هيئة التدريس بجامعة الملك عبدالعزيز بمدينة جدة كشريحة ذات دخل متوسط ، وذلك لمرحلة الدكتوراه ، أرجو منكم مساعدتي بإستكمال هذا الإستبيان حيث أنه متعلق بسعادتكم ، ولكم مني خالص الشكر والتقدير ،،،

وقت الإستبيان هو : 5-8 دقائق

</div>

Online Questionnaire

General questions

1 - Age

o   21-25

o   26-30

o   31-40

o   41-50

o   51-60

o   61+

2 - Nationality

o   Saudi

o   Non-Saudi

3 - Sex/Gender

o   Male

o   Female

4 - Marital Status

o   Single

o   Married

o   Divorced

o   Widowed

5 - Household Size

o   1-2

273

o   3-4

o   5-6

o   7-8

o   9-10

o   10+

6 - Education

o   Bachelor degree

o   Master's degree

o   PhD

7- What is your current position/rank at work?

o   Professor

o   Co-professor

o   Assistant professor

o   Lecturer

o   Administrator

8 - Monthly Average Income from university job (in Saudi Riyal)

o   Between 6,001 to 10,000

o   Between 10,001 to 15,000

o   Between 15,001 to 20,000

o   Between 20,001 to 25,000

o   Between 25,001 to 30,000

o   Between 30,001 to 35,000

o   35,001+

9 - Do you have another source of income?

o   Yes

o   No

10 - What is the type of your main house?

o   Apartment

o   Villa

o   Duplex

o   With parents (or other family)

o   Other:

11 - How long have you lived in your main residence?

o   1-4 years

o   5-9 years

o   10-14 years

o   15-19 years

o   20 years and over

12 - Does your main residence suit your needs?

o   Yes

o   No

13 - If your answer is yes, please tick why:

o   Good environment

o   Suits your needs

o   No alternative

o   Other:

14 - If your answer is no, please tick why:

o   Too big

o   Too small

o   Old house

o   Far from work

o   Bad location/neighbourhood

o   Located in dense area

o   Other:

15 - Is it possible to live outside the city so you can own an affordable house?

o   Yes

o   No

16 - By car, how far away do you live from university in the morning (during working time)?

o   1-15 minutes

o   16-30 minutes

o   31-45 minutes

o   46-60 minutes

o   61-75 minutes

o   76-90 minutes

o   91 minutes or more

17 - What are the main obstacles that you may face when you decide to own/buy a house? (You can choose more than one)

o   High price of land

o   High price of houses

o   Low supply of houses

o   Difficulties in finding a suitable loan

o   Difficulty in obtaining accommodation that suits your needs

o   All previous reasons

o   Other:

18 - Approximately what percentage of your total household monthly income would you say you spend on your rent or housing loan payment?

o   1-13%

o   14-23%

o   24-33%

o   34-43%

o   44-53%

o   54% +

19 - Do you own another house elsewhere?

o   Yes

o   No

20 - If you answered yes to the previous question, please specify in which city is the house located?

o   Riyadh

o   Jeddah

o   Makkah

o   Madinah

o   Damam

o   Dahran

o   Khobar

o   Other:

21 - Do you own a piece of land for future development?

o   Yes

o   No

22 - If yes, how did you buy it?

o   Directly from the open market

o   Government grant

o   Finance

o   Inherited

o   Savings

o   Through family / gift

o   Other:

23 - What is your postcode (main residence only)?

o   :

24 - Social question: as a consequence of cutting some allowances from your monthly salary, would that affect your ability to pay for and access housing?

o   Yes

o   No

25 - Is your main residence: (automatically you will be directed to a set of questions related to your answer to this question)

o   Owned fully

o   Owned with a loan

o   Rented

o   Living with family

o   University accommodation

o   Other:

<u>Owned fully</u>

1 - How did you buy it?

277

o   Grant

o   Finance

o   Inherited

o   Savings

o   Through family / gift

o   Other:

2 - As you own a house, have you used any of these features?

o   Real Estate Development Fund only

o   Real Estate Development Fund only and Personal Bank Loan

o   Real Estate Development Fund only and Savings

o   Personal Bank Loan and Savings

o   House Loan/Finance from Banks

o   House Loan from Banks and Savings

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

3 - Are you seeking other accommodation?

o   Yes

o   No

4 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o   Yes

o   No

 If yes, please type your email:

<u>Owned with a loan</u>

1 - As you own a house, have you used any of these features?

o   Real Estate Development Fund only

o   Real Estate Development Fund only and Personal Bank Loan

o   Real Estate Development Fund only and Savings

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o   Personal Bank Loan and Savings

o   House Loan/Finance from Banks

o   House Loan from banks and Savings

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

2 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o   Yes

o   No

If yes, please type your email:

Rented

1 - Why you are renting?

o   Can afford rental costs

o   Freedom of movement

o   Do not want to waste time and money in maintenance and restoration

o   Saving money to buy a suitable home in the future

o   Other:

2 - Are you happy with renting/rent prices?

o   Yes

o   No

3 - Are you renting by intention?

o   Yes

o   No

4 – When in the future are you expecting to buy a house?

o   1-3 years

o   4-7 years

o   8-11 years

o   12-15 years

o   15 years and more

5 - If no, how much do you pay for rent (per year)?

o   Nothing

o   15,000-25,000

o   25,001-35,000

o   35,001-45,000

o   45,001-55,000

o   55,001+

6 - If you want to own a house, how would you consider paying for accommodation?

o   Real Estate Development Fund only

o   Real Estate Development Fund only and Personal Bank Loan

o   Real Estate Development Fund only and Savings

o   Personal Bank Loan and Savings

o   House Loan/Finance from Banks

o   House Loan from Banks and Savings

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

7 - Are you currently on a waiting list for any kind of governmental housing support programme?

o   Yes

o   No

8 - If yes, after how many years did you receive the REDF loan, land or both?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

9 - If no, how long have you been on a waiting list for?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

10 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o   Yes

o   No

 If yes, please type your email:

Living with family

1 -Why are you living with family?

o   There is a separate section in my family's house that suits my needs

o   I could not find proper accommodation elsewhere

o   I could not afford to buy accommodation elsewhere

o   I could not afford to rent elsewhere

o   Other:

2 - How would you consider paying for accommodation if you want to move/buy?

o   Real Estate Development Fund only

o   Real Estate Development Fund only + Personal Bank Loan

o   Real Estate Development Fund only + Savings

o   Personal Bank Loan + Savings

o   House Loan/Finance from Banks

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

3 - Are you currently on a waiting list for any kind of governmental housing support programme?

o   Yes

o   No

4 - If yes, after how many years did you receive the loan, land or both?

o 1-5 years

o 6-10 years

o 11-15 years

o 16-20 years

o 21+

5 - If no, how long have you been waiting for?

o 1-5 years

o 6-10 years

o 11-15 years

o 16-20 years

o 21-More

6 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o Yes

o No

 If yes, please type your email:

<u>Living in university accommodation</u>

1 - How long have you waited to receive university accommodation?

o 1-2 years

o 3-4 years

o 5-6 years

o 7-8 years

o 9-10 years

o 10+

2 - Do you see it as appropriate/suitable for your needs?

o Yes

o No

3 - Do you have another house that you own besides university accommodation?

o Yes

o   No

4 - How would you consider paying for accommodation if you want to move/buy?

o   Real Estate Development Fund only

o   Real Estate Development Fund only and Personal Bank Loan

o   Real Estate Development Fund only and Savings

o   Personal Bank Loan and Savings

o   House Loan/Finance from Banks

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

5 - Are you currently on a waiting list for any kind of governmental housing support programme?

o   Yes

o   No

6 - If yes, after how many years did you receive the loan, land or both?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

7 - If no, how long have you been waiting for?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

8 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o   Yes

o   No

If yes, please type your email:

Other:

1 - How would you consider paying for accommodation if you want to move/buy?

o   Real Estate Development Fund only

o   Real Estate Development Fund only and Personal Bank Loan

o   Real Estate Development Fund only and Savings

o   Personal Bank Loan + Savings

o   House Loan/Finance from Banks

o   Loan from relatives/family

o   Family gift

o   Savings

o   Other:

2 - Are you currently on a waiting list for any kind of governmental housing support programme?

o   Yes

o   No

3 - If yes, after how many years did you receive the loan, land or both?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

4 - If no, how long have you been waiting for?

o   1-5 years

o   6-10 years

o   11-15 years

o   16-20 years

o   21+

5 - The researcher is aiming to conduct a focus group to test the results from the online questionnaire and will match some of them randomly. Do you agree to be one of the participants?

o   Yes

o   No

If yes, please type your email:

End of Online Questionnaire

Appendix 2 Interview Questions

General Interview Questions (To All Stakeholders)	
1	In your opinion, what are the housing problems in Saudi and why?
2	What is your own understanding of affordable housing and why?
3	What are the affordable housing policies that you are aware of and why?
4	Are these affordable housing policies enough/appropriate and why?
5	In your opinion, which are the most successful policies and why?
6	In your opinion, which authorities are complicating the development of affordable housing in Saudi and why?
7	How do you see and read the rental market in terms of policies and prices? Does it go in the right direction and fit all the different segments of the community?
8	How would you improve and provide more affordable housing for all segments of society, especially the middle-income groups?
9	In your opinion, what are the governmental or private entities involved in the housing sector?
Questions for End-User Stakeholders (members of the teaching staff at KAU)	
1	If you wanted to buy and own a house today, does the availability of houses on the market suit you and why?

2	What is the most important thing to you when buying a house?
3	Is it clear that there are differences between current housing policies and citizens in your group (middle-income), and why is this?
4	Do the current housing policies support you and if so, how?

Questions for Employees in Different Government Sectors such as the Ministry of Housing

1	We all agree on the fact that we have a big housing issue. Therefore, do the current housing policies suit all categories of citizens, and if not, why not?
2	Whether the housing policies are appropriate or inappropriate, how is it possible to improve these policies?
3	What are the difficulties that governmental bodies are facing in order to develop and apply appropriate housing policies for all categories of citizens?

Questions for Planners such as the Municipality of Jeddah

1	Do you think the planning supports housing sufficiently in Saudi Arabia, and why?
2	In your opinion, how can we overcome these obstacles and problems?
3	Why are our planning system and policies weak?

Questions for Financial Sectors such as Banks

1	What are the most important financial and economic obstacles that limit the financing of affordable housing?
2	How do you think we can overcome these obstacles and problems?
3	Is the mortgage system active in Saudi or not, and to what extent does it affect the provision and solutions for the problem of affordable housing?
4	Do you think banks have an influential role in society in terms of housing in particular?

5	Why is the role of our banks weak - for example, they do not have multiple financing programmes and solutions?
Questions for Real Estate Developers	
1	Do you think we have an attractive market for the development of affordable housing, and why?
2	What are the obstacles to providing affordable housing? How do you think these obstacles can be addressed?
3	Do you think we have enough contractors to build a large number of houses each year, and if not why?
4	Do systems and policies support you as a developer to work in the housing sector, and how do you think it should support you more?
5	In your opinion, how can the government and its systems support the private sector in providing affordable housing units?

Appendix 3 Interviewee Reference, Position, and Housing Status

Reference	Position or status	Housing status
EU-P1	Planning department	Renting
EU-P2	Planning department	Renting
EU-P3	Planning department	Own a house (parents' gift)
EU-P4	Planning department	Own a house
EU-P5	Planning department	Renting
EU-P6	Planning department	Lives with parents
EU-P7	Planning department	Renting
EU-P8	Planning department	Own a house
EU-P9	Planning Department	Lives with parents

EU-NP1	Social Studies	Own a house – lives with/in husband's house
EU-NP2	Water Marine Department	Own a house (parents' gift)
EU-NP3	Chemistry Department	Own a house (parents' gift)
EU-NP4	Chairman of Department	Own a house
EU-NP5	Engineering	Renting
EU-NP6	Engineering	Renting
EU-NP7	Engineering	Lives with parents
EU-NP8	Engineering	Renting
EU-NP9	Engineering	Renting
EU-NP10	Engineering	Own a house (parents' gift)
F1	Branch Manager	Renting
F2	Investment and Finance Manager	Renting
F3	Branch Network Area Manager	Own a house (parents' gift)
F4	Finance Department	Own a house
F5	Regional Bank Manager	Own a house
G1	Planner (Ministry of Housing)	Own a house (parents' gift)
G2	Ministry of Municipal & Rural Affairs	Renting
G3	Building & Construction Department - Ministry of Municipal & Rural Affairs	Own a house
G4	Government Engineer	Lives with parents
G5	Government Engineer	Lives with parents
D1	Private Developer	Lives in a section of parents' house
D2	Developer in Emaar the Economic City	Own a house
D3	Manager & Developer in Emaar the Economic City	Own a house

D4	Private Developer	Own a house (parents' gift)
D5	Private Developer	Lives with parents
P1	Ministry of Municipal & Rural Affairs	Lives with parents
P2	Ministry of Municipal & Rural Affairs	Lives with parents
P3	Ministry of Municipal & Rural Affairs	Lives with parents
P4	Ministry of Municipal & Rural Affairs	Lives with parents
P5	Ministry of Municipal & Rural Affairs	Renting
P6	Ministry of Municipal & Rural Affairs	Renting

Appendix 4 Example of Translated Interview from Arabic to English

Interviewer: Ahmed Mohammed Abed

Interviewee: Member of the teaching staff at the Faculty of Environmental Design – Urban & Regional Planning Department, **[Initial code: affordability, Finance. Descriptor: 1 EUP, Group: University Lecturers with Planning Background]**

Interview location: Faculty of Environmental Design, King Abdul-Aziz University, Jeddah, Saudi Arabia

Interview Date: 03-2017

- Start of Interview –

In the name of God, the Merciful

Introduction

Interviewer: I will welcome Dr. (……) for attending this interview, I will take the opportunity to bring to your attention that, as you know, this is my Doctoral research project regarding the policies of the Affordable Housing in the Kingdom of Saudi Arabia. I am targeting the middle-income segment, and I will address the policies in the United States and Britain and how they support this segment. Most people belong to the middle-income segment. Therefore; it is very important that our policy addresses this large segment of the population and our policies have to be addressed to support not only the low-income segment. The major components of housing are the *basic infrastructure, land, manpower, building materials and finance*. Definitions of

the policies are as you know are Laws, Regulations, Government decisions. The definition of affordable housing in SA as per the Ministry of Housing is a study that is taken from the King Saud University.

Interviewee: What was the definition?

Interviewer: Affordable housing is housing that is owned and maintained by the citizen and the owner will pay not more than 30% of his monthly income facilitated to buy or to own a house. On the other hand, in the case of Britain, or Europe or America owners of houses will not pay more than 30% for housing from their monthly income whether it is owning or renting. They are entering into the renting market to solve the housing ownership problem, whereas we don't have that facility. We always think of 100% ownership. SAMA has allocated 33% for bank loans. We have the Saudi population of 20 million Saudis and 12 million expatriates with an average growth of 2.5% annually. 65 % of the residents in SA are centered mainly in Jeddah, Riyadh and the Eastern Provinces. If you would like, we can start the interview on the general aspects supported with facts and figures. If I ask you, Doctor, at the beginning, in your opinion, what is the problem of housing in SA? Is it the prices, the laws and regulations, or loans, policies and so on?

Interviewee: The major problems of the housing issue were neglected and handled by housing institutions for some time which were not active and later dismissed. Suddenly, as the problem started to increase, there was a suggestion that we need a Ministry to handle the issues. During this period and due to the lack of a database, the problems accumulated and when they reached a level of concern, we needed the staff of engineers and others. As we didn't have a housing problem before, the issue of prices, land, inflation, and increase of material costs was noticed.

Interviewer: To support your argument with figures; over 100,000 housing units are needed yearly, 60% of the average population of Saudi are below 30 which means they are young people who are ready to start their family life, and own a house. On the other hand, we don't have regulation policies and a regulated market nor access to data. As I am a doctoral student, I get information from various sources, is the site of the Ministry of Housing a trial? As you mentioned, there was gross negligence in the beginning on this respect.

Interviewee: The data and the figures that I am hearing from you were not available. We didn't hear about these figures nor was there a database to utilise. We didn't know the number of the

young population, how many housing units we needed yearly, and so on. The data and research were kept unpublished.

Interviewer: Even when we come to the data, we receive various and different figures. For example, there are studies saying the percentage of Saudi house owners is 30%, and others say 63% or 47%. Which figure shall we consider?

Interviewer: What is your definition of affordable housing?

Interviewee: In my opinion, affordable housing is a kind of house that provides both economic and psychological comfort. I want a house either in the form of ownership or renting and not always to own a house 100% at the beginning. It won't be costly at the same time from my income if own house 30% and renting 25-28%. Some say that they need a bigger house for a horse to ride in the dining room, not a very small house and there are cheap houses that I saw sometimes which cost SR 300,000 (£60,000) and are so small that if you enter from the front door and suddenly slip, you will land in the bedroom. If I want to own a lifelong house it has to give me the comfort I need. I don't want the kind of house I own to be imposed on me. I have also seen a house where if you put two beds in the children's bedroom you don't have a place to put the cupboard. I sometimes worked as an adviser in IKEA, and they said the space in housing units in Saudi is now getting so small that the furniture available in the market does not fit.

Interviewer: To support your comments, for example, in Jeddah or any other city, how can I assess the housing problems, what are the criteria? The main gap between the real estate price versus the capability of purchasing and even if I can't buy and the rent is also high and you have your own criteria to buy a suitable house, the area you want to buy where it is near to where me and my family and relatives work. They say that 80% of Saudi families are not able to own houses of even 200m².

Interviewee: I have come to know this data for the first time.

Interviewer: Do you have any affordable housing policies that you know of, like financial support from a specific body? In terms of family housing, do you have ideas or policies you think can help people to own affordable housing?

Interviewee: There is no clear policy on affordable housing and it is only that people have to learn the savings and housing culture. I didn't take a real estate loan from the bank, but my father took one and the procedure at that time was suitable but nowadays the procedure really

discourages you from taking a loan. The bank really welcomed my father's loan request and after being approved, he bought a house and relocated. The bank was supposed to pay the purchase amount to the estate owner, but this was not done and my father was paying the monthly instalment for almost two months before he was handed over the house. The bank didn't agree with the owner. My father wanted to take over the housing unit but he was afraid that the unit might be given or sold to another buyer. Then my father went to the owner and the owner told him to occupy the unit and my father then reported the situation to higher management and finally, after three months, the situation was settled. So, there is no clear policy on loans and one has to think twice before getting involved in problems of loans with the banks. Recently, one of my friends wanted to take out a loan to buy a house before the new housing law was implemented. I advised him to wait for a while as he has a house now, he has no problems, and he wanted to transfer from his current flat to buy a villa……. Continued the interviewee that he really feels pity for those who have taken real estate loans. I myself have taken a personal loan to be completed in five years and thank God I have finished three years now. How about those who are paying instalments for 20 or more years and 60% from their monthly income. And the policy when I am not able to own the estate rent goes up, I will go for the rent. If you like it take it and if you don't leave it, policy. There is a renting market policy on paper but implementing it is the issue.

Interviewer: Do you think the policies are enough for ownership? In general, the real estate, the support, loan etc.?

Interviewee. I think the policies are good but the implementation of the mechanism is the problem. The theory is good but the loan procedures of how and when is not effective. There is a commission for the owners, and even I was surprised about which department it belongs to. This commission is followed through to the Ministry of Commerce, and then is transferred to the Ministry of Housing which has its budget and a Manager to manage it but it is not activated.

Interviewer: Which department do you think is an obstacle to the development of housing whether it be the private sector or the governmental bodies?

Interviewee: I think both of them.

Because the private sector has profited 100%. They are targeting certain segments, if they think this is correct, they have to target the largest segment which are the middle-incomes who are

52%. You must target these segments to profit. The private sector always complains of government bodies that aren't cooperating and who have long procedures. Most people now if you ask them, they say they're better off opening a research office rather than a development establishment.

Interviewer: The interviews I did with housing developers informed me that if you apply for a housing project the approval will take up to four years and the demand for housing yearly is 100,000-150,00 housing units. Give me a housing developer who can provide 10,000 housing units yearly. Banks are profiting 100% and the housing developer also wants to profit as well. If I start an affordable housing project, besides the difficult procedures and the extra expenses, spending is not calculated at the beginning and I am obliged to spend a huge amount. You mean now continued the Dr., after they imposed taxation the developer has to provide and not the Municipality at present is to providing the infrastructure. A company came to do a feasibility study to provide electricity and estimated the cost of one generator was SR 25 million to 60 million (£5-12 million). And the developer needs four generators for the project and he found that he cannot afford it……… the Dr. asked the interviewer did you meet Dr. (….)? We made an arrangement to meet. he can share his experience in one of the company's, Dar al Arkan, he can give you more information on an affordable house for the middle-income segment. He has a vast experience in this in a way that they will bring you the housing unit empty from inside and you will provide the Gypsum board and you will do as you want. It is very cheap as you have to give up of some features.

Interviewee: In Al Zahra I found a house for rent for 80,000 SR (£16,000/year) with all the facilities, but why should I rent when I am better off owning a house with that money?

Interviewer: Now the culture of saving or ownership and the Ministry addressing for example, outside especially in the UK the ownership market which is suitable or rental market is provided for those who are not able to buy for all classes of the citizens. Whereas in the US, they have the voucher method and the government support. They want their citizens to own a house.

Interviewee: Like now the new lifestyle project for 'Al-Batterjee' which is fully booked has a big audience. You know the rentals as you said, you can sometimes get a location that might not suit you for 70,000 or 100,000 SR (£14,000-20,000). The 'Burj' and 'Jeddah Gate' projects are all for sale. The question now is whether a person will continue to remain renting or wish to own. It is very difficult to deduct 30% from a salary, it is a disaster for himself and his life

and there are a lot of commitments one has to meet. The problem is that our culture is one of having a big family and wanting to be next to them, owning a big house, with endless demands. If we go elsewhere, this culture is not available. So, I replied him that I was living in Newcastle in the UK, in a house with all facilities, two story with garden, 3 bedroomed 2 toilets, a garage, and services at about 700 pound monthly. Provide us such facilities even for 1000 pounds and I will live in rent for ever. I will never think of owning a house I told him. You are comparing un unparalleled situations. ……. the Interviewer continued that there was an article in Riyadh newspaper and was discussed on Dawood Sherians programme that 960,000-housing unit are empty and not resided. This of course need some data and explanations

Interviewer; If you were to decide to provide affordable housing for those who need to own houses, what would you do? There are a lot of challenges and the market is tough and the situation as you see is transferring from one ministry to another.

Interviewee: In a very short time from the date the Ministry of Housing was established, the way they are handling the housing issue by starting to collect data and land, I think they have done a tremendous job. I would start with renting and not ownership, I would not impose it as if it is natural and a right. For example, I cannot tell Eng. Ahmad if he is driving a BMW, why? That is his interest. Most of the people are now renting not owning so I will start relieving them from this burden. Then we will move on to the issue of the housing units that are empty, why they are empty, is it because of the small space or are there other reasons and how can we make use of them?

Continued the interviewer that a lot of parties will get involved as this sector is very sensitive and touches the citizens deep issues and when you solve this problem means you have taken a lot of burden from their back. When we are working all sides has to work in parallel together. Dr. what do the citizen need? Like someone who owned a flat having a problem with his neighbour every day and eventually sold his flat and went on to buy a villa. He said he wants to live with his family freely, no neighbours, and peacefully. On the other hand, others say now you are in a villa but when you grow older you will come back to a flat…………. continued it is difficult to provide villas for everybody. You start small and then grow this is the routine of housing. It is not possible to satisfy everybody. Despite the big land we have we are not able to provide housing as people are immigrating to the main cities. On the other hand, we have Economic city. The matter is complicated it is not easy to solve or conclude. The ministry has to be powerful and be the one to decide. For example, if I have a conflict with the Ministry of

Municipal and Rural Affairs, I can't impose my authority on him. He is a Minister and I am as well a Minister.

Interviewer: Which kind of sector, whether government or private sector, do you think has to come to the Ministry of Housing? There are diversified sides, the Ministry of housing of course, the Ministry of Justice, the Ministry of Municipal and Rural Affairs, the Ministry of Commerce?

Interviewee: Yes, finance who finances all the projects. Money comes from the Ministry of Finance. If it finances the Ministry of Housing, things will progress better otherwise it will be like a car without petrol.

Interviewer: Do you think this diversification is healthy?

Interviewee: Diversification is needed in every Ministry and is available in all countries. Like in Britain, for example, they call it the City Council with all the facilities provided. All major decisions made will go through the Council. In addition, the government will not take all the burden but part of it will be carried by the private sector.

Continued the interviewer: to add on what you say Dr. the private sector role is said in our country to be weak. They don't support the public at all. It has no presence at all. The biggest support comes from the Government …. continued the interviewer…The body that supported the public is the SA Real Estate Development Fund. Studies say that more than 60% of houses were only provided because of the Real Estate Development Fund help. If we get out of our topic, my next interview after I finish with you is with someone in the Saudi French Bank. Just if you do not mind, I have a personal question for you which will be the last.

Interviewer: If you want to own a house, is it suitable for you now to buy?

Interviewee: If it is owning, I will not buy, I will build it myself because I have witnessed bad experiences before, truthfully speaking. I was one of the people who was a fan of ownership. I wanted to buy before, and people recommended me that the price was very cheap, but I said I will wait and you see the situation now. When I waited, I was right with what has happened. There are some people who bought houses then, on high incomes and who are now in compounds where a lot of issues have come up like the maintenance, security, services, owners' unions. If someone builds a housing unit and tells me to buy, I won't do it because my confidence in the building quality is low. There are some problems which will be discovered later on.

Continued the interviewer in most countries the cost of land must not exceed 25% internationally from the overall cost. But in some areas, we saw the land costs 60%. Therefore; Dr. as you said if you want to build as you mentioned is building a house a problem? The Dr. replied No. ……the price of land at first is the main problem.

Interviewer continued then your problem is the Land! Replied the Dr. Yes. Then you go back to your preferred option that you want to build your own house as per your interest. When I talk to my relatives, they tell me they don't want to buy readymade houses and they only want to buy land and build for themselves. They asked if you see a villa will you buy. And if you want after all to buy a villa or a house you need to bring an inspector, especially one who has experience in checking. They have a special machine like a scanner and run it on the walls to see inside the building, the pipes inside, whether there is any defect or not, which is very costly as well!

Continued the interviewer even if you want to buy a flat still you will spend a lot of money that you keep at least SR 50,000 (£10,000) aside so that you can do any modification or the way want to do according to your standard maybe the amount might be not enough.

Dr. replied my experience on Haramain district in Jeddah. On a building the inspector hit the wall and said this wall is good. He said a flat he was checking when he hit the wall the whole wall came down. He said go and file a case. To whom the case will be forwarded?

Continued the interviewer there are no courts that are specialized in such cases which is another problem. Now I have paid my money and what can I do now? It is really a disaster.

Interviewee: Now people are afraid of ready-built houses, there is no confidence in buying them.

Interviewer: For example, this house has been inspected by the Ministry of Housing so you have all the reports regarding the cement. There is approval from the Ministry of Housing, all the detailed reports and approvals by the concerned departments on the materials used and a set of reports. So, I need an official body to give me reports that convince me. Otherwise why would I buy and put myself in trouble?

Interviewee: How are developments done here? Some people who have money sit together and contribute money and plan to build a housing unit or villa and will sell it. This is not the way to handle development. You have heard about Iwan Company or Dar. Al Towhid?

Interviewer: Yes

Interviewee: I know people working there in Malik Road, Al-Simu building, it started as an affordable housing project and now they are having major problems, and have stopped their work due to a lot of issues.

Interviewer: Dr., one last question, do you see that there is a big gap between the policies and needs of the citizens? Do you think we have to address to certain bodies that the policies need to focus on certain segments of people who do not have housing?

Interviewee: As you mentioned, yes! The housing issue has to be taken seriously. They have to see who are the biggest segments that need support, like the middle-incomes, then the upper, and know who they are, their income and help the widowers, the divorced, and at the beginning you have to start with rent. When you let people relax a bit then move on to ownership, when you say you will make a development plan it is not easy, you need to go step by step.

Continued the interviewer to make a saving programme. I heard there is a programme to save from the salary every month so that you will be able to buy a house. I said it is enough now. Therefore; I don't need you to save for me. I can do it by myself!

Continued the interviewer asking the Dr. if he has any input in this regard before closing the interview?

Interviewee: The housing problem is a challenging issue and has to be addressed seriously as the Ministry of housing has started a plan which they were supposed to do at the beginning. Like rent. You know housing goes through a lot of bureaucracy - the Ministry of Municipal and Rural Affairs, the Ministry of Justice, etc. So do the easiest way now, there was a programme from the Chamber of Commerce saying there is a policy that makes the maximum rent for a villa in SA that won't exceed SR 30,000 (£6,000). So, the reporter asked him where is such a villa available, he said the market is different he told him this is the cheapest villa you can rent. You know the citizens don't report ………. Dr. continued I was thinking of such laws or policies. Then I immediately went to ask about this policy? But I was told that there is no such policy.

Interviewer: Transparency and coordination all are needed. The interview was finished and the interviewer thanked the Dr. whereas the Dr. said it was a very interesting interview and really, I was the interviewer more than the interviewee.

- End of Interview –

Appendix 5 Initial Code Tree

1. **Stakeholders**

   1. End Users

      a. Individuals

      b. Institutions

   2. Government

   3. Professionals

   4. Developers

   5. Finance Professionals

2. **Influencing Factors**

   1. Global Factors

   2. Local Factors

      a. Social

      b. Cultural

      c. Economic

      d. Transformation Plan

3. **Housing Policy**

   1. Regulations

   2. Planning

   3. Housing Market

      a. Evaluation