Determinant Attributes of a Well-Functioning Market-Based Home-Financing Model in the MENA Region Constraints and Feasible Development Paths

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Constraints and Feasible Development Paths

by

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Contents

List of Tables

List of Figures

List of Abbreviations

Declaration

I, the author of this thesis, declare that this thesis and the work presented in it are my own and have been generated by me as the result of my own original research. No Part of the work that appears in this study has been submitted in support of an application of any other degree qualification in this or any other university. Where other sources of information have been used, they have been acknowledged.

Statement of Copyright

Signature:

Abdulkader Husrieh

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Abstract

Determinants of a well-functioning market-based home-financing system for MENA

Housing finance is a cross-cutting topic of major economic, social, and political significance. It enables middle-class households and other targeted people to turn need for housing into effective demand by extending finance to buy their homes. Housing finance in Middle East and North African (MENA) countries is underdeveloped compared with countries of a similar level of income and stage of development. Existing literature cites many causes for this underdevelopment, among which is path dependency and culture. The study aims to address the path dependency issue by identifying attributes of a well-functioning housing finance system with the objective of contributing to the design of housing finance systems in MENA countries.

To fulfil its objectives, the study uses primary and secondary research. Using comparative case analysis, firstly, housing finance systems in nine developed and emerging economies were assessed. Secondly, housing finance supply in nine countries in MENA were evaluated using a framework of analysis developed as part of the research. By conducting a survey in three MENA countries, the study attempts to understand people in terms of beliefs and attitudes towards housing finance, and characteristics of demand for housing finance.

The findings of the study demonstrate the pivotal role of governments, and the significant influence of private financial institutions in the evolution and performance of any HFS. MENA countries have a fragmented supply of housing finance rather than a system, mainly due to a performance gap of players, lack of diversity in products, and self-exclusion of people from housing finance. Generally, people prefer finance from friends and family members and lack proper understanding of Islamic finance in Muslim dominated population.

In conclusion, transferability and development of a well-functioning market-based housing finance system necessitates adoption of right public policies; regulators who supervise and enable financial institutions. Product diversifications is crucial to tailor to the needs of consumers, while engaging people by spreading awareness and protecting consumers.

Dedication

I dedicate this work to my late father, Izzat, whose life and teachings guided me in this life; my late mother, Majdeh; and my caring family: my wife, Reem Kuzbary, whose love and support have been source of inspiration, and my wonderful sons Izzat and Kareem and daughters Maria, Dahlia and Talia.

Chapter 1

INTRODUCTION

1.1 Introduction

This study is about the development of a market-based housing finance system in the Middle East and North Africa (MENA) region. The study aims at identifying attributes of a well-functioning market-based housing finance system, identifying the gap between existing supply and such system in MENA and the requirements to bridge the development gap.

Home financing is the purchase of a home with a loan. Many people look for financing a home purchase because they cannot afford to make a large, lump-sum cash payment. The price of buying a housing unit could range from as low as five times the average annual income in certain countries to more than 100 times in other countries. Therefore, most people have to borrow a portion of the asking price from a bank or financial institution. The full cost of the loan is based on principal amount and interest charged to use the money.

Financing can be defined as the provision of funds by a lender, or lenders, to a business or person for daily operating activities or purchases. For a business, the lenders could be investors or a lending institution. For most ordinary people, a loan comes from a banking institution. Financing comes at a cost to the person accepting the loan, usually as interest charge in conventional banking, which are based on interest, or as a profit in the case of Islamic financing. Home financing provided by most lending or banking institutions is referred to as a mortgage. Mortgage refers to the lien put on the real estate record of the property, which is the housing unit, as guarantee for the interest and the principal for the benefit of the lender for repayment of the loan. The common repayment period is typically between 15 to 30 years, while usually no more than one-third of one's monthly income should be dedicated to repayment. The monthly payment is calculated as a portion of the principal, or amount of the loan, and the interest charged, or profit made in Islamic financing, on that principal amount.

The purpose of a housing finance system is to provide the funds which homebuyers need to purchase their homes. While this is a simple objective, the number of ways in which it can be achieved is limited. Notwithstanding this simplicity, in a number of countries, largely as result of government intervention, sophisticated 'circuits' have been developed to channel funds from households to people in need of housing finance to meet their housing need.

1.2 Background of the Problem

International experience suggests that there is a causal relationship between demand, housing finance, financial sector development and economic growth. In urbanised countries where the development process generates sharp increases in mobility and relocation, housing investment increases as a share of the GDP. Increased financial sector institutional development and macroeconomic stability in developing countries are conducive to a rapid rate of growth in the supply of housing finance (Harvard, 2005). Widespread availability of affordable mortgages may enhance savings, promote financial market development and stimulate investment in housing sector. At the same time, housing construction in most developing countries is labour-intensive whereas unemployment is a chronic problem. Thus, it is not surprising that housing finance is a major policy focus in developed economies.

In many developed economies, governments have intervened in the market to set up 'special circuits', characterised by a significant degree of regulation, segmentation for the rest of the financial markets, and often-substantial government subsidy. One rationale for the creation of special circuits was that private markets were incapable of allocating sufficient funds to meet demand at 'reasonable price' (Diamond and Lea, 1992).

Compared to other countries in the OECD or other emerging markets at a similar stage of development, countries in the MENA generally have a low penetration rate of housing finance as measured by the total outstanding housing finance loans to GDP. A low proportion of homeownership and high proportion of informal housing is prevailing in many countries in the region. The penetration rate is 22% in OECD countries compared with a less-than-average rate of 5% in the region. Path dependency has been cited as one of the phenomenon which explains the underdevelopment of housing finance in region. The successful transfer of known mortgage finance innovations in developed and emerging economies to developing financial market requires adaptation to local institutional and financial conditions.

While it is still lagging behind other countries, housing finance in MENA has developed rapidly in terms of both sources and instruments of financing, during the three distinct stages over the past two decades: from early to mid-1990s, the late 1990s and early 2000s, and post-2003.

During the first stage, primary mortgage markets, although having been in existence for several decades, were very small. Sources of financing were limited to personal equity from bequest, savings and remittances. Private banks were very conservative (given that they were intermediated by bank deposits backed by heavy collateral) and stipulated a large fraction of a property’s face value be paid up front. Lack of credit information about borrowers drove up the prices of housing loans, and highly regulated markets – in which governments dominated with direct mortgage lending through state-owned banks and agencies – resulted in chronic underfunding.

Deregulation of the region’s mortgage finance market in certain countries in the region began in the late 1990s. This second stage of development featured competitive pressure brought on by the entry of additional incumbent banks and a wider variety of products. While housing finance access was broadened, it remained limited to high- and middle-income households. Moreover, large deficits in infrastructure and tight regulation persisted.

The third stage of development commenced in 2003 and resulted in a profound change in housing finance across all dimensions. However, this was limited only to certain countries in the region (Hassler, 2011).

1.3 Problem Statement and Purpose Statement

Most people in MENA, like anywhere in the world, need a home to live in and this creates demand for housing. However, to convert this need into demand and satisfy this demand, housing finance is required. Given the current penetration of housing finance in MENA, quite a limited number of people have access to finance from financial institutions; people rather have to finance with equity or loans from friends, which take a long time and are quite limited in quantities and amounts. Generally, MENA countries fall behind countries with similar economic indicators when compared with OECD countries.

The comparative work on financial systems have been focusing only on a very small subset of advanced economies to generate a rich set of hypotheses about why different countries have different financial systems, why these systems do exist, and whether these differences eventually matter. However, the successful transfer of known mortgage finance innovations in developed and emerging economies to the developing financial market requires adaptation to local institutional and financial conditions.

My aim is to identify attributes of a well-functioning housing finance system for MENA with the purpose to contribute to addressing issues of path dependency.

1.4 Research Design and Context

As can be seen from the literature review, the majority of research on national housing finance systems is descriptive or uses descriptive comparison. The following indicates the existence of a research gap:

1. There is a lack of adequate theoretical and empirical studies about the different housing finance systems in the World in general, and MENA countries in particular. Quite a significant number of the studies are descriptive and tend to give only statistical information without proper analysis. Warnock and Warnock (2008) state that while housing finance is a vital component of well-functioning housing systems, to date there has not been a systematic analysis of the depth of housing finance across broad set of countries. Warnock and Warnock (2008) state that no formal cross-country study of the size of the housing finance exists; housing finance studies tend to be descriptive. While Warnock and Warnock (2008) recognise the importance of all studies, they lament that none of them includes formal empirical analysis why some countries have larger mortgage markets than others.
2. Though housing finance systems or lack of a system has political, economic and social effects, a theory or a model for housing finance which is tested empirically is still lacking. Such model should be based on empirical research and lead to the development of a housing finance model. A theory about housing finance which gives legitimacy to decision-makers is still lacking.
3. The current literature does not cover directly the transferability of housing finance systems from developed to developing countries. Michael Oxley (1991), in a paper on the quality of comparative housing policy research and studies, has lamented – a major omission of such studies, namely – a thorough analysis of the extent to which transfer is likely to work. ‘An examination of transferability would acknowledge that policies that work in one country will not necessarily travel well. It would demonstrate that the context of the “success” and the “failure” of policies has to be thoroughly understood before any recommendations about adoption elsewhere can be made with any degree of authority. Transferability analysis would attempt to make explicit those factors that work towards promoting the easy exportation of policies and those that act as impediments (Oxley, 1991).

1.5 Aims and Objectives

The aim of the study is to address the path dependency issue by identifying the attributes and determinants of a well-functioning market-based housing finance system that meets the growing market needs for housing in MENA. The following objectives are to be pursued in this study:

a. To identify the attributes of a well-functioning housing finance system;
b. To discuss factors leading to the development of a well-functioning housing finance system in developed and emerging economies;
c. To evaluate the existing supply of housing finance in MENA;
d. To discuss the role of public and private players in the establishment and development of housing finance systems;
e. To have a better understanding of Islamic housing finance and whether this mode of finance is a must or a choice in MENA;
f. To identify demand characteristics for housing finance;
g. To make recommendations on how to develop a well-functioning housing finance system in the MENA region by adopting best practices from developed economies.

Based on the said objectives, the study tries to develop a set of recommendations for policymakers, private sectors, institutions and stakeholders of housing finance systems.

1.6 Research Questions

This study aims to answer the following research questions:

1. What are the attributes of a well-functioning housing finance system?
2. What are the determinants of sound housing finance system?
3. How does a well-functioning housing finance system operate?
4. Who are the key players, public and private?
5. Are housing finance systems in developed countries transferable specifically to MENA?
6. What are the characteristics of demand for home financing in MENA?
7. Is Islamic finance a must or an option?

1.7 Research Methods

This study consists of three interrelated parts aiming at realising its purpose of identifying characteristics of a well-functioning housing finance system in MENA. The first part covers country cases of housing finance systems in developed and emerging economies. The second part covers housing finance supply in MENA countries. The third part covers demand characteristics of housing finance in a representative group consisting of three countries.

The research method used in the first and second parts is the comparative case analysis. Secondary market data pertaining to the research work include different types of reports and articles collected in the first part. Three countries were visited as part of the study, Denmark, Malaysia and Lebanon, to get a better understanding of housing finance systems. In the second part, secondary market data was collected; three field visits were conducted covering Lebanon, Kuwait and United Arab Emirates.

In the third part, the research method used to gather primary data in response to research questions is a questionnaire survey of samples of consumers in the three representative countries. A period of three months was spent to carry out the fieldwork in three countries, Kingdom of Saudi Arabia, Lebanon and Egypt. The objective was to obtain information about attitudes towards finance and specifically housing finance, preferences, experiences and behaviours. This research is regarded as being explanatory and evaluative since it attempts to investigate the trend, demand, products, preferences, obstacles and prospects for housing finance in the countries covered in this part. Islamic finance and housing finance are also covered in this part of the research. The research uses a sample survey as it is considered a suitable means of achieving the research objectives. In Lebanon, data from the eastern and western parts of the Lebanese capital, Beirut, was used to answer the research questions. In KSA, data from two main cities, Jeddah and Riyadh, were collected as well. In Egypt, data was collected from the capital, Cairo.

1.8 Conceptual Framework

Despite all studies done about housing finance after the global financial crisis of 2008, which was rooted in the failure of mortgage finance systems in the United States, Spain, Ireland and several other countries, there is still a lack of theories about housing finance. Such theory would help policymakers in designing, developing or managing housing finance systems. So far, no theory has been presented for housing finance. Accordingly, the study uses observation, comparative case study and evaluation of the different cases to come up with a framework of analysis of housing finance systems in developed economies. The conceptual framework is a written or visual presentation that 'explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables – and the presumed relationship among them (Miles et al., 1994). Based on the literature review and the outcomes of Part 1, a conceptual framework is developed. This framework of analysis is described in Chapter 3.

1.9 Significance of Research (Limitation, Scope)

A key issue concerning practice in housing finance is lack of a theory or framework of analysis about the performance or transferability of housing finance systems across borders, including the MENA region. The study aims to contribute by developing a framework of analysis of the cases researched and then using this framework to understand, analyse and present a gap analysis leading to development of a well-functioning housing finance system in MENA. The study aims as well at revealing the features and key factors leading to the development of a well-functioning housing finance system in the MENA region. In Part 1, the research aimed at identifying the best practices in developed countries of a well-functioning housing finance system. The framework of analysis aims at giving legitimacy to policymakers and regulators for their decisions regarding the development, regulation and operation of housing finance systems.

The main stakeholders of the research are public as well as private entities including policymakers, regulators and private institutions, which extend housing finance or play an advocacy role to develop the factors identified in the research.

There are two types of limitations of the study. The first type is related to scope of the first and second parts of the study. Housing finance could be thought of as the intersection of two sectors: the housing and the financial sectors. The study does not cover directly these two sectors.

The second type of limitation is related to the third part of the study, which covers characteristics of demand for housing finance in countries covered in this part of the research. The limitation stems from using the questionnaire survey, which imposes the following limitations:

a. The ability of respondents to comprehend the questions asked
b. The diligence of responders in answering the questionnaire

c. The data collection method being limited to a survey questionnaire without other methods, focus groups or semistructured interviews
d. It would have been more beneficial if more respondents were surveyed. However, because of budget and time limitations, this was not possible

There was difficulty in getting all respondents to fill out the questionnaire. Certain questions were not answered by all respondents.

1.10 Structure of the Thesis

The plan of the study is spread over six chapters including the introduction and conclusion, with the other chapters covering the three parts of the study, which are interlarded.

Chapter 1: Introduction is an overview of the research background, which highlights the importance of the research topic, housing finance, in general. The statement of the problem and the aims and objectives of the research are then covered. The research questions which the study aims to answer are listed. Then the research and the data-collection methods are covered. Finally, the significance of the study and the structure of the thesis is covered with expected outcomes.

Chapter 2: Housing Finance: An Overview provides a general picture of the housing finance system along with what a market-based housing finance system entails. It covers the products/services the housing finance system provides. Then the origination process of housing finance and the financial institutions involved such as banks and specialised institutions are defined. Funding methods are presented, which cover banks, nondeposit institutions and securitisation. The players in the housing finance system are presented covering government, regulators, banks and financial markets. At the end of the chapter, Islamic home finance is presented, including the principles of Islamic finance, the Islamic financial products/contracts and the method and structures of Islamic housing finance. This section concludes with a discussion of similarities and differences between conventional and Islamic housing finance. Chapter 2 covers as well people, culture, financial education, quality of government and legal origins.

Chapter 3: Cases of World Housing Finance Systems (Developed and Emerging) presents an overview of the housing finance systems in three developed countries which could be considered as successful models: Canada, Germany and Denmark. The housing finance system in the United States, which underwent success and challenges, is discussed as a case. Two cases, Spain and Ireland, are shown as challenging cases. Two cases in emerging market countries, Malaysia and South Korea, are also presented. Based on the cases compared and discussed, a framework of analysis of the attributes of a well-functioning housing finance system, PPP, is presented, with its three pillars: players, products and people.

Chapter 4: Housing Finance in the MENA Region: Supply Side and Impediments covers cases of nine countries in MENA. The cases cover three subareas of the region, GCC, Levant, Egypt and North Africa. In all the cases, country overviews and the supply of housing finance in KSA, Kuwait and UAE are presented. Levant, Jordan, Lebanon and Syria are covered as well. Finally, three countries in North Africa, Tunisia and Morocco, along with Egypt are discussed. Chapter 4 concludes with a discussion and analysis aiming at identifying barriers to the development of a housing finance system in MENA.

Chapter 5: People and Characteristics of Demand for Housing Finance in MENA covers the third part of the study, which is people. After introduction, the research design and research method are presented, as well as the research instruments and data collection methods. Interview and survey techniques used and the advantages and disadvantages of such techniques are then discussed. The survey structure and content are presented, and the research findings in the three representative countries, Lebanon, KSA and Egypt, are covered. Based on the research done, the characteristics of the demand for housing finance, perception about housing finance and perception about Islamic housing finance are presented. The chapter concludes with a discussion and analysis with a sample of questionnaire in the appendix at the end of this study.

Chapter 6: Overall Conclusion shows the attributes of a well-functioning housing finance system in MENA, regulatory framework, institutional framework, the government's role and public and private partnership. I will be reflecting on the findings with recommendations of the study covering public policy recommendations, supply recommendations and demand-side recommendations. The chapter concludes with limitations of the study and areas for future research.

Chapter 2

HOUSING FINANCE SYSTEM: AN OVERVIEW

The purpose of a housing finance system is to provide the funds which homebuyers need to purchase their homes. This is a simple objective, and the number of ways in which it can be achieved is limited. Notwithstanding this basic simplicity, in a number of countries, largely as a result of government action, very complicated housing finance systems have been developed. However, the essential feature of any system, that is, the ability to channel the funds of investors to those purchasing their homes, must remain (Boleat, 1985).

There is a recognition of other relevant forms of housing finance, apart from residential mortgage finance, such as developer finance, rental finance, or microfinance applied to housing. Developer finance is often in the form of unregulated advance payments by buyers, and developers sometimes provide long-term finance to buyers through instalment sales when mortgage markets are not accessible. However, the focus of this study is on residential housing finance.

2.1 Market-Based Housing Finance

2.1.1 The Product

Housing finance is the provision of funds to homebuyers to purchase their homes, which is referred to as mortgage finance. To mortgage means to make a financial asset or so tied to a debt so that the asset or its value is sued for repayment of the debt in case of default. The mortgage contract is binding for the mortgagor once it is concluded, and the mortgagor does not have the right to revoke it from his own side, whereas the mortgagee has the right to do so (Ayub, 2007).

Mortgage is a written document evidencing the lien on a property taken by a lender as security for the repayment of a loan. The term *mortgage* or *mortgage loan* are used loosely to refer both to the lien and the loan.

Origination is the process of extending finance for home purchase. To extend the required financing, the originator, or mortgage lender, is the party advancing money to a borrower at the closing table for a note evidencing the borrower's debt and obligation to repay (Guttentag, 2010).

Housing finance may be provided by banks or by specialised financial institutions such as mortgage companies in the United States or building societies in the UK. Banks could be universal or specialised banks such as the case of housing banks, which are usually publicly owned. Mortgage companies usually borrow from banks or raise funds from the capital markets. The specialised institutions usually borrow from the banking sector or directly raise funds through securitisation.

To avail the product and provide housing finance, financial institutions have to raise funds mainly either through deposits or on the capital markets through securitisation.

2.1.1.1 Bank Deposits

Usually banks use what they call core deposits to finance the purchase of homes by their clients. Core deposits are the deposits made in a bank's natural demographic market (Investopedia). Banks count on core deposits as a stable source of funds for their lending base. Core deposits offer many advantages to banks, such as predictable costs and a measurement of the degree of customer loyalty. However, in the case of housing finance, using core deposits, which is short to medium term, to extend housing finance, which is by nature long term, could expose the lending bank to liquidity risks.

2.1.1.2 Securitisation

The traditional model for mortgage financing is that the bank originating the loan would keep it on its balance sheet until the mortgage is repaid. The loan would be financed out of general liabilities, which are primarily composed of bank deposits (Carbó-Valverde et al., 2011). However, this model has many issues and constraints which led to development of secondary mortgage markets as banks do not have the funding resources necessary to hold mortgages permanently.

Secondary mortgage markets are markets in which mortgages or mortgage-backed securities are traded. Secondary mortgage markets are of two general types, 'whole loan' markets which involve the mortgage themselves, sometimes on loan-by-loan basis, but more often in blocks. In the 1970s, markets introduced also the mortgage-backed securities (MBS) issued against pools of mortgages. Instead of selling, e.g., $50 million of whole loans, the loans are segregated in a pool and $50 million of securities are issued against the pool (Guttentag, 2010).

Mortgage companies usually raise funds by borrowing from banks, or directly from investors or resort to capital markets to extend housing loans. Mortgage banks usually raise funds from capital markets by selling short-term notes, repaying when loans are sold.

Funding through financial markets is done through securitisation. Securitisation is a process in which the issuer creates a financial instrument in the form of mortgage bonds. A bond is a debt investment in which an investor loans money to an entity (typically corporate or governmental) which borrows the funds for a defined period of time, at a variable or fixed interest rate. Mortgage bonds are bonds collateralised by a pool of mortgages which is a liability of the issuer (Guttentag, 2010). Mortgage-backed security is a security on which the cash flow from a pool of mortgage collateral are passed through to investors (Guttentag, 2010). The issuer could be a public or a private specialised institution, such as Fannie Mae, or through specialised financial institutions through securitisation, or through investment funds by packaging and slicing.

Covered bonds are issued by a credit institution ('bank') and are backed by a loan portfolio ('cover pool') that remains on the issuer's balance sheet. This funding instrument is specifically designed for credit institutions. Covered bond holders have a dual recourse, both over the issuer – with whom the obligation to pay lies – and over the covered pool all its cash flows in case of issuer's insolvency. Investors can choose to either liquidate the cover pool by selling it to another entity or to continue receiving coupon from cash generated by the cover pool. All this is managed by a dedicated cover pool administrator.

Residential or commercial mortgage-backed securities ('RMBS' or 'CMBS', respectively) are issued by a special purpose entity ('SPE'), to which the pool of mortgages has been sold. This SPE thus finances the acquisition of the pool of mortgages by issuing RMBS or CMBS bonds ('secured notes' or 'notes'). Subject to certain requirements being complied with, the bank or originating institution ceases to have the mortgage pool in their books. Instead, the SPE is a separate entity, with assets being the mortgage portfolio and liabilities the issued notes. As with any other bond, noteholders have recourse only over the SPE's assets, i.e., the mortgage pool, and not over the original bank. On the other hand, this ensures bankruptcy remoteness, with bank insolvency having no material impact over the ability of the SPE to keep debt service payments current. The SPE has its own dedicated management as well as pool credit servicer (typically the original bank but with a backup servicer agreed from inception).

At a very basic level, Mortgage Backed Securities and Covered Bonds (MBS and CB) work similarly. A bank originates a group of mortgages that are then put into a 'ring-fenced' pool. While the characteristics of the ring fencing and the pool can differ across types of securities and across countries, the common characteristics are that the mortgages serve as specific collateral for the bonds, be they MBS or CB. This means that the mortgages are, in effect, financed by the bondholders giving banks access to a broader set of investors rather than the traditionally financed mortgages.

The mortgage-backed security market was begun in the United States in 1970 by Genie Mae, a wholly owned agency of the American federal government at that time. The agency guaranteed the payments of securities issued by lenders against pools of mortgages.

2.1.2 The Players

In any housing finance system, several players are involved, public and private. In the public domain, government, regulators and public financial institutions in certain countries are the main players. In the private domain, banks and specialised mortgage banks are the main actors.

2.1.2.1 The Government

The government is a major player in any housing finance system or supply. The government designs and implements public polices related to housing and financial sectors, which are the two main sectors in which the housing finance system operates, sets the regulatory framework and regulates and license institutions. In many countries, the government intervenes in the housing finance system through ownership of public banks specialised or extending housing finance.

2.1.2.2 Regulators

Regulators play an important role in regulating and controlling institutions which provide housing finance. Given the role and size of any housing finance system, this role is very sensitive and essential for the success of any housing finance system.

2.1.2.3 Financial Institutions

In many countries, banks are the sole provider of origination and funding of housing finance to beneficiaries. Since housing finance is for medium to long term, banks depend on their core deposits, being a stable base of deposits. Since the deposit base could be short-term deposits while housing finance is for the long term, this leads to liquidity mismatch. In certain countries, specialised financial institutions, liquidity facilities, are created to provide banks with liquidity needs. Liquidity facilities are usually funded by long-term loans from governments and development agencies and could resort to raising funds from the capital markets.

2.1.2.4 Financial Markets

Funds to finance loans could come as well from financial markets. Financial markets are classified into money and capital markets. Capital markets provide medium- to long-term funds while money markets provide short-term funding. Since housing loans or financing is for the long term, funding is done through capital markets. Capital markets should operate freely but under the guidance of government policies. These markets function within the framework of government rules and regulations. An ideal capital market is one where finance is available at a reasonable cost, which facilitates economic growth, where market operations are free, fair, competitive and transparent. Such market should provide sufficient information to investors and allocate capital productively.

2.2 People and Access to Finance

People, the third pillar in the PPP framework, are the most important pillar in the system and a major determinant success factor for many reasons. People are the end consumer of housing and housing finance services. Accordingly, understanding their preferences, determinant attributes of their choices and the characteristics of the demand they generate is very important for the success of any housing finance system. Housing finance is a long-term relationship which could extend up to 30 years in which the financial institution has to maintain their relationship with customers. Such relationship should be established on sound basis by understanding the preferences and requirements of the customers, having complete information while people should be able to make the right choices.

Though as individuals, the culture of people is considered as a given in any business relationship, collectively, it could be considered as a parameter a system which could be influenced by policymakers and players with proper education and regulatory framework which enriches trust and mutual responsible decisions.

2.2.1 Culture

Differences in culture, as proxied by differences in several factors such as religion, language, and legal origins affect the development and operation of any financial sector. Culture reflects values and believes. Housing finance, as means of meeting a very basic need of everyone, is a cross-cutting subject which has significant social implications which are affected by social institutions. Culture also affects the development of the economic institutions, which cover the financial institutions as well. Greif (1994) illustrated that cultural beliefs are likely to motivate the introduction of different economic organisations.

In the review of literature about the relationship between culture and development of financial sector, focusing on the culture aspect leads to better understanding of the path dependence and social institutions. Kuran (2007) considers culture as a pair of distributions, one of attitudes and the other of behaviours.

To understand the role of culture in the housing finance system, one should understand the social institutions. An institution, as defined by Kuran (2007), consists of a set of social factors that produce interconnected social regularities. Being part of a system, its operation may depend on other institutions. Islamic law, which for many centuries gave the Middle East a distinct and persistent identity, formed a system of institutions. Its elements are directly relevant to the region's economic development which include a law of partnerships, inheritance regulations and the waqf (Kuran , 2007).

Another element identified in the literature review which stands as an important factor in the development of financial sector related to culture and religion is investor protection. Stulz and Williamson (2001) have shown that investor protection is related to culture. This relation is especially strong for creditor rights. Stulz and Williamson (2001) find that Catholic countries have significantly weaker creditor rights than other countries. This result holds when one controls for the origin of the country's legal system as well as for GNP per capita. However, Stulz and Williamson (2001) consider that openness reduces the influence of religion on creditor rights so that Catholic countries where international trade is more important have better protection of creditor rights. Stulz and Williamson (2001) therefore find strong support for the view that culture matters, but there is also evidence that the impact of culture is tempered by openness.

Though Stulz and Williamson (2001) found evidence that culture and creditor rights are related, they do not find such evidence for a shareholder rights index once they control for the legal origin of a country's legal system. Yet there are striking differences between the rights of shareholders across countries that are correlated with religion and language, but they are harder to explain than the differences in creditor rights. Stulz and Williamson (2001) showed as well that culture is related to the enforcement of rights, with Catholic and especially Spanish-speaking Catholic countries having a weaker enforcement of rights.

2.2.2 Financial Education

Increasing consumer financial literacy has become in the developed world a public policy objective to improve welfare through better decision-making. Creation of financial education programs designed specifically to enhance financial literacy has been viewed as a solution to mitigating financial problems that individuals and families face (US House of Representatives, Financial Services Committee, 2009). Huston (2010) considers that the recent mortgage crisis, consumer overindebtedness and household bankruptcy rates provide evidence to support this goal.

The terms *financial literacy*, *financial knowledge* and *financial education* are often used interchangeably in the literature and popular media. Few scholars have attempted to define or differentiate these terms. Unlike health literacy, which is typically measured using standardised tests, there are currently no standardised instruments to measure financial literacy. Literacy in the broadest sense consists of understanding (i.e., knowledge of words, symbols and arithmetic operations) and use (ability to read, write and calculate) of materials related to prose, document and quantitative information. The standard definition of literacy developed by the Literacy Definition Committee in USA and used by the National Adult Literacy Survey is ‘using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential’ (Kirsch, 2001). When operationalised, this definition covers three broad areas – prose (written information), document (tabular/graphical information) and quantitative (arithmetic and numerical information) – each with its own standardised testing instrument (Kirsch, 2001).

Marcolin and Abraham (2006) identified the need for research focused specifically on the measurement of financial literacy. Typically, financial literacy and/or financial knowledge indicators are used as inputs to model the need for financial education and explain variation. Marcolin and Abraham (2006) consider a successful measure of financial literacy will improve a researcher’s ability to distinguish when a deficiency in financial literacy may be responsible for welfare-reducing financial choices and will allow educators to identify education to achieve a desired outcome. Another important consequence of an instrument that effectively measures financial literacy is that researchers are better able to identify what outcomes are most affected by a lack of financial knowledge and skill.

It is increasingly apparent that financial mistakes can impact individual welfare as well as create negative externalities that affect all economic participants. Tracking variation and change in financial literacy rates is of interest to educators, policymakers, employers and researchers.

2.2.3 Social Institutions

Social institutions are of particular importance in the development of the financial sector. In the sociologist context, institutions do not refer to organisations such as churches, hospitals. Kuran (2007) defines an institution to consist of a set of social factors that produce interconnected social regularities. A *Social institution* is defined as a complex, integrated set of social norms organised around the preservation of a basic societal value.

Sociologists often reserve the term *institution* to describe normative systems that operate in five basic areas of life, which may be designated as the primary institutions in providing for the legitimate use of power. In shorthand form, or as concepts, these five basic institutions are the family, government, economy, education and religion. These institutions play important roles in regulating the distribution of goods and services, transmitting knowledge from one generation to the next and regulating our relation to the supernatural.

2.2.4 Quality of Government

Quality of government is cited as an important factor in the development of a housing finance system. There are many examples which evidence the importance of this factor. The foundation of the current American Housing Finance System was part of the New Deal introduced by President Roosevelt after the Great Depression of 1929–1939. The quality of the consecutive American administrations had a major impact on the development, successes and failures of the system.

Cooray (2011) examined the impact of two dimensions of the government, namely, size and quality, on two dimensions of the financial sector, size and efficiency, in a cross section of 71 economies. The study found that increased quality of the government as measured by governance and legal origin positively influence both financial sector size and efficiency. The size of the government as proxied by government expenditure and the government ownership of banks has a negative effect on financial sector efficiency, and a positive impact on financial sector size, particularly in the low-income economies.

The quality of government is a determinant of the development of housing finance. The British government is an example of a government that has played a role in encouraging people to get housing loans by introducing the first-buy special help schemes. The Help to Buy mortgage guarantee and equity loan schemes, which were introduced in 2013, are designed to help people with a small deposit amount secure a property on favourable terms. The equity scheme is a loan for up to 20% of the value of a new build home (or 40% in London) that the government gives interest-free for five years. The mortgage guarantee scheme involves the government guaranteeing a portion of the mortgage for the lender. It effectively enables a provider to offer to the borrower a higher loan to value mortgage with greater degree of confidence and is not restricted to new builds or first-time buyers. Borrowers need a minimum of a 5% deposit for either scheme, meaning for a house priced at

£200,000 or under, one can theoretically get a house with a £10,000 deposit. This is an example of how governments design schemes aimed at realising housing policy objectives through market means.

2.2.5 Legal Origins

The legal system in a country or its legal origin is presented as another factor in the development of the financial sector. La Porta et al. (1997) examined the relation between a country's legal origin and investor protection. Based on that study, there has developed a growing literature on law, governance and finance. La Porta et al. (1997) claimed that countries with English common-law origin provide the highest investor protection while countries with French law origin provide investors with the least protection.

Beck, Demirguc-Kunt and Levine (2003) also examined the association between legal origin, initial endowment and financial development. They show that both legal origin and initial endowments are important in determining institutional structure that contributes to financial sector development. Beck, Demirguc-Kunt and Levine (2003) considered that past work shows that legal origin helps explain financial development. They examined the mechanisms by which legal origin operates. The law and finance theory emphasises two channels. The political channel postulates that legal traditions differ in terms of the priority they give to private property rights relative to the rights of the state. Since private property rights form the basis of financial development, historically determined differences in legal origin explain financial development today. This channel holds that civil-law systems tend to promote the development of institutions that advance state power with negative implications for financial development. The other channel is the adaptability channel, which stresses that legal traditions differ in terms of their responsiveness to changing socioeconomic conditions. Since inflexible legal traditions produce gaps between legal capabilities and commercial needs, historically determined differences in legal tradition explain financial development today. The adaptability channel holds that French legal origin countries are more likely to develop inefficiently rigid legal systems than British common-law and German civil-law countries with adverse repercussions for financial development. The results provide relatively more evidence for the adaptability channel than for the political channel. Beck, Demirguc-Kunt and Levine (2003) find the following:

1. The exogenous component of legal system adaptability explains cross-country differences in financial intermediary development, stock market development, and private property rights protection even when controlling for the political channel.

Furthermore, the results are consistent with the view that legal origin does not explain financial market development beyond the legal origin's ability to explain cross-country variability in legal system adaptability. Thus, the results suggest that legal origin matters because legal traditions differ in their ability to adjust efficiently to evolving socioeconomic conditions. Legal systems that adapt efficiently to minimise the gap between the financial needs of the economy and the legal system's capabilities will foster financial development more effectively than more rigid legal systems.

2. The exogenous component of the political channel does not explain cross-country variation in financial development.
3. German civil-law and British common-law countries have significantly better-developed financial intermediaries and markets and better property right protection than French civil-law countries, which is fully consistent with the adaptability channel. In terms of policy implications, these tentative results advertise the benefits of efficient legal system adaptability.

2.2.6 Access to Finance

Allowing people access to finance is a basic element of the business model of housing finance, whether from a public policy perspective or business perspective. The World Bank defines access to financial services – financial inclusion – as implying an absence of obstacles to the use of these services, whether the obstacles are price or nonprice barriers to finance. It is important to distinguish between access to – the possibility to use – and actual use of financial services.

Exclusion can be voluntary, where a person or business has access to services but no need to use them, or involuntary, where there are price barriers or discrimination, for example, bar access. Failure to make this distinction can complicate efforts to define and measure access. Financial market imperfections, such as information asymmetries and transaction costs, are likely to be especially binding on the talented poor that lack collateral, credit histories, and connections. Without inclusive financial systems, these individuals with promising opportunities are limited to their own savings (World Bank, 2008).

2.2.7 Path Dependency

Path dependency has been presented as an explanation to the underdevelopment of financial institutions in general and the housing finance system in particular. *Business*

Dictionary defines “path dependency” as the tendency of a past or traditional practice or preference to continue even if better alternatives are available.

Greif (1994) claimed that the capacity of a societal organisation to change is a function of its history, since institutions are composed of organisations and cultural beliefs. Greif (1994) conducted a comparative historical analysis of the relationship between culture and institutional structure. He examined cultural factors that have led to pre-modern societies – one from the Muslim world and one from Latin world – to evolve along distinct trajectories of institutional structure. It indicated the theoretical importance of culture in determining institutional structures, in leading to their path dependence, and in foretelling successful inert-society adoption of institutions.

Greif (1994) thought that lacking an appropriate theoretical framework, economists and economic historians have paid little attention to the relationship between culture and institutional structure. This limits the ability to address a question that seems to be at the heart of development failures: why do societies fail to adopt the institutional structure of more economically successful ones? Greif (1994), through presenting historical examples, illustrates that collectivist and individualistic cultural beliefs are likely to motivate the introduction of different organisations.

2.3 Islamic Home Finance

Majority of MENA countries have Islam as the prevailing religion of the population. Accordingly, it is important to cover Islamic finance in the development of any housing finance system. Over the last decade, Islamic finance has enjoyed double-digit growth in the world in general, and in MENA in particular.

Islamic economics, of which Islamic banking is an important part, is basically based on some prohibitions and encouragements. The prohibition of Riba and permission to trade drive the financial activities in an Islamic economy towards asset-backed businesses and transactions.

2.3.1 Principles of Islamic Finance

The structure of Islamic finance revolves around the prohibition of return derived on loan/debt and the legality of profit. Riba – commonly known as interest – is any increase taken as premium from the debtor. It represents the return on transactions involving exchange of money for money, or any addition, on account of delay in payment. All transactions involving interest payments are strictly prohibited. A number of principles and rules stem from this.

2.3.1.1 Avoiding Interest

The institution of interest is repugnant to the teachings of revealed religions and from the purely religious point of view. None of the revealed religions has accepted ‘interest’ as the cost of using capital as commonly understood in conventional economics.

2.3.1.2 Avoiding Gharar

Al Gharar refers to the uncertainty or hazard caused by lack of clarity regarding the price in a contract or exchange. A sale or any other business contract which entails an element of gharar is prohibited.

2.3.1.3 Avoiding Gambling and Games of Chance

Games of chance, or Qimar or Maisar in Arabic, involves winning gains at the cost of others’; a person puts his money or a part of his/her wealth at stake wherein the amount of money at risk might bring huge amount of money or might be lost or damaged. Gambling is a form of gharar because the gambler is ignorant of the result (Ayub, 2007, p.76).

2.3.1.4 Alternative Financing Principle

In the absence of interest as a basis of financing, Islamic banks have a number of techniques and tools to do their business with. Briefly, they include the participation and sharing principle applicable in Musharakah, Mudarabah, and their variants; the deferred trading principle applicable in credit and forward sales (Salam), and a combination of techniques such as Shirkah and Ijarah.

2.3.1.5 Valid Gains on Investment

All gains on investments or principal of business are not prohibited. Profit has been recognised as a ‘reward’ of capital, and Islam permits gainful deployment of surplus resources.

2.3.1.6 Entitlement to Profit with Risk and Responsibility

The assumption of risk is a precondition for entitlement to any profit over the principal. One has to bear loss if one wants to profit.

2.3.1.7 Islamic Banks Dealing in Goods Not in Money

Conventional banks deal in money; they get money from the public as deposits and pay them interest; they extend loans and other forms of credit facilities and charge interest. In contrast, Islamic banks deal in goods and documents and not in money. They use money only as medium of exchange for purchasing the goods and for the purpose of leasing or selling onward, thereby earning profit or income.

2.3.1.8 Transparency and Documentation

Islamic banks and financial institutions are required to adopt transparency, disclosure and documentations to a greater extent than conventional banks. Lack of transparency about the cost/price and the payment mode may render certain transactions noncompliant.

2.3.2 Islamic Financial Products/Contracts

In the absence of interest as a basis of financing, Islamic banks have a number of techniques and tools to do their business with (Ayub, 2007, pp.77–79).

The major forms of Islamic finance are the following.

2.3.2.1 Murabaha to the Purchase Order

Murabaha to the purchase order involves the customer's promise to purchase the item from the institution. It is distinguished from Murabaha, which does not involve such a promise by the customer. It is the sale of an item by the institution to a customer (the purchase orderer) for preagreed price which includes a preagreed profit markup over its cost price, this having been specified in the customer promise to purchase. Normally, a Murabaha to the purchase order transaction involves the institution granting the customer a Murabaha credit facility (Ayub, 2007, p.136).

2.3.2.2 Sharikat al-milk (Partnership of Ownership)

Partnership of ownership is the combination of the assets of two or more persons in a manner that creates a state of sharing the realised profit or income or benefitting from an increase in the value of the partnership assets. This combination of assets for making profit necessitates bearing losses, if any. The ownership partnership could be created beyond the will of the partners' control. This partnership is also created by the wish of the partier such as two or more parties acquiring common shares in a particular asset.

2.3.2.3 Mudarabah

A Mudarabah contract is a form of Musharakah (partnership), which is distinguished in the following aspects:

1. The basis for earning a share of profit in Sharika is the required capital contribution of all parties, whether in the form of cash, commodities, services or liability in the case of reputation partnership and that the subject of the contract is based on single element, i.e., capital. The basis for earning profit in a Mudarabah, on the other hand, comes from two elements. The first element is the existence of capital that is subject to, and similar to the conditions of the Sharika capital. The second element is the work done by the Mudarib, which is different from the capital of the venture.
2. In Sharika, the work, as a general rule, is by done jointly by the parties, whereas in Mudarabah, it is the Mudarib who works (Ayub, 2007, p.249).

2.3.2.4 Musharakah

It is an agreement between two or more parties to combine assets or to merge their services or obligations and liabilities with the aim of making profit.

2.3.2.5 Salam

A Salam transaction is the purchase of a commodity for deferred delivery in exchange for immediate payment. It is a type of sale in which the price, known as the Salam capital, is paid at the time of contracting while the delivery of the item to be sold, known as al-Musalam fihi (the subject matter of a Salam contract), is deferred. The seller and the buyer are known as al-Musalam ilaihi and al-Musalam or Rabb al-salam, respectively. Salam is also known as salaf (lit borrowing) (Ayub, 2007, p.176).

2.3.2.6 Parallel Salam

If the seller enters another separate Salam with a third party to acquire goods, the specifications of which corresponds to that of the commodity specified in the first Salam contract so that he (the seller) can fulfil his obligation under that contract, then this second contract is called, in contemporary custom, parallel Salam or salam muwazi (Ayub, 2007, p.176).

2.3.2.7 Ijarah

The term *Ijarah* means leasing of property pursuant to a contract under which a specified permissible benefit in the form of a usufruct is obtained for a specified period in return for a specified permissible consideration (Ayub, 2007, p.160).

2.3.2.8 Ijarah Muntahia Bittamleek

Ijarah Muntahia Bittamleek is a form of contract which includes a promise by the lessor to transfer the ownership in the leased property to the lessee, either at the end of the term of the Ijarah period or by stages during the term of the contract, such as transfer of the ownership (Ayub, 2007, p.160). In Ijarah Muntahia Bittamleek, the method of transferring the title in the leased asset to the lessee must be evidenced in a document separate from the Ijarah contract document by the following means:

1. A promise to sell for a token or other consideration, or by accelerating the payment of the remaining amount of rental, or by paying the market value of the leased property;
2. A promise to give it as a gift for no consideration;
3. A promise to give it as a gift upon the payment of the remaining instalments (Ayub, 2007, p.148).

2.3.2.9 Istisna'a

Istisna'a is contract of sale of specified items to be manufactured or constructed, with an obligation on the part of the manufacturer or builder (contractor) to deliver them to the customer upon completion (Ayub, 2007, p.197).

2.3.2.10 Parallel Istisna'a

Parallel istisna'a takes effect through two separate contracts. In the first contract, the Islamic financial institution acts in the capacity of manufacturer, builder or supplier and concludes a contract with the customer. In the second contract, the institution acts in the capacity of a purchaser and concludes another contract with a manufacturer, a builder or supplier to fulfil its contractual obligations towards the customer in the first contract. By the process, a profit is realised through the difference in the price between the two contracts and, in most cases, one of the two contracts is concluded immediately, while the second contract is concluded later (Ayub, 2007, p.197).

2.3.3 Islamic Housing Finance

Islamic financial institutions (IFI) have introduced several housing finance products. The most common forms of Islamic housing finance are Murabaha, Istisna'a and Musharakah Mutnakisa.

2.3.3.1 Istisna'a Housing Finance

If the beneficiary has his own land and he seeks financing for the construction of a house, the IFI undertakes to construct the house at that open land on the basis of istisna'a. If the client has no land and he wants to purchase the land also, the IFI may undertake to provide the funds to buy land as well. Since it is not necessary in istisna'a that the price is paid in advance, nor is it necessary that it is paid at the time of delivery (it may be deferred to any time according to the agreement of the parties), therefore, the time of payment may be fixed in whatever manner the two parties wish. The payment may also be in instalments.

On the other hand, it is not necessary that the IFI himself constructs the house. The IFI can enter into a parallel contract of istisna'a with a third party or may hire the services of a contractor (other than the client). To secure the payment of the instalments, the title deeds of the house or land, or any other property of the client may be kept by the IFI as a security, until the last instalment is paid by the client.

In case the IFI undertakes to construct the house, then it will be responsible for the construction of a house in full conformity with the specifications detailed in the agreement. In the case of any discrepancy, the IFI will undertake such alteration at his own cost as may be necessary for bringing it in harmony with the terms of the contract.

2.3.3.2 Murabaha

Murabaha housing finance is simply an 'instalment sale' contract. The beneficiary selects the property, and the IFI purchases the property on behalf of the beneficiary from the seller. The IFI then sells the property to the beneficiary at an agreed-upon marked-up price. At the closing, the beneficiary acquires full title to the property and makes the initial down payment. The down payment towards the purchase price represents an initial investment in the property. The monthly payment is divided into two portions – acquisition and profit. As the beneficiary makes monthly payments, the acquisition balance is reduced, thereby increasing the investment in the home.

2.3.3.3 Ijarah Muntohia Bittamleek

In the Islamic finance industry, the term *ijara* is broadly understood to mean the 'transfer of the usufruct of an asset to another person in exchange for a rent claimed from him' or, more literally, a 'lease'. Ijarah Muntohia Bittamleek is a lease whereby the IFI buys and leases out the residential property required by the customer for an agreed rental fee. The contract provides an option for the beneficiary to acquire the ownership of the property at the end of a specified period.

2.3.3.4 Musharakah Mutanakisah

In Musharakah Mutanakisah, the beneficiary approaches the IFI, which agrees to participate with him in purchasing the required house. A percentage of the price is paid by the beneficiary, and the balance of the price is paid by the IFI. Thus, the IFI owns a share equal to the percentage of price extended while the beneficiary owns the balance. After purchasing the property jointly, the beneficiary uses the house for his residential requirement and pays rent to the IFI for using his share in the property.

At the same time, the share of IFI is further divided into equal units, each unit representing percentage of ownership of the house. The beneficiary promises to the IFI that he will purchase one unit after a defined period of time. Accordingly, upon payment of amounts due during the specified period of time, the beneficiary purchases one unit of the share of the IFI by paying the relevant percentage of the price of the house. It reduces the share of the IFI. Hence, the rent payable to the IFI is also reduced to that extent. At the end of the second term, he purchases another unit increasing his share in the property and reducing the share of the IFI and consequentially reducing the rent to that proportion. This process goes on in the same fashion until after the end of financing tenure, the client purchases the whole share of the IFI reducing the share of the IFI to 'zero' and increasing his own share to 100%.

This arrangement allows the IFI to claim rent according to his proportion of ownership in the property and at the same time allows him periodical return of a part of his principal through purchases of the units of his share.

2.3.4 Islamic Securitisation (Sukuk): Method and Structure

Sukuk is the Islamic version of bonds issued according to Islamic principles in securitisation. In a market-based Islamic housing finance, sukuks are used to raise funds from capital markets. The market for sukuks has grown tremendously in recent years at about 45%

a year. Sukuks provide sovereign governments and corporations with access to the huge and growing Islamic liquidity pool, in addition to the conventional investor base.

The most commonly used sukuk structure is that of sukuk al-ijara. The popularity of this structure can be attributed to a number of different factors; it is considered as the classical sukuk structure from which all other sukuk structures have developed, whilst others highlight its simplicity and its favour with sharia scholars as the key contributing factors.

To generate returns for investors, all sukuk structures rely upon either the performance of an underlying asset or a contractual arrangement with respect to that asset. The ijara is particularly useful in this respect as it can be used in a manner that provides for regular payments throughout the life of a financing arrangement, together with the flexibility to tailor the payment profile – and method of calculation –to generate a profit. In addition, the use of a purchase undertaking is widely accepted in the context of sukuk al-ijara without sharia objections. These characteristics make ijara relatively straightforward to adopt for use in the underlying structure for a sukuk issuance.

The growth of the sukuk market has led to the development of a number of 'hybrid' structures around the sukuk al-ijara model to provide additional flexibility – particularly when selecting underlying assets.

2.3.5 Conventional and Islamic Housing Finance: Similarities and Discussion

The relationship between conventional banks and their customers is essentially based on the debtor-creditor relationship between the depositors and the bank on one hand, and between the borrowers and the bank on the other. Interest is considered to be the price of credit, reflecting the opportunity cost of money. Islamic financing works within the sharia framework following certain restrictions, and the relationship between the financier and the customer has to comply with sharia as follows:

1. IFIs cannot provide finance for an activity which is prohibited by sharia (Islamic law) irrespective of its profitability and economic viability, e.g., business of liquor, pork and pornography.
2. IFIs cannot lend any amount in cash for interest. However, the need in this case is fulfilled either through supply of required asset or through profit and loss sharing.
3. Under the Islamic financial system, when financing is provided under profit and loss sharing although profit can be shared as per agreement between the parties

involved, however, loss must be shared according to capital contribution/ownership.

Islamic financial institutions compete with conventional banks in efficient ways through Murabaha, Ijara, Bai Muajjal, Bai Salam, Istasna, Musharaka and Mudaraba. An important feature of the Islamic financial system is the linkage between the financial and real sectors as IFIs cannot extend a credit facility without having support from the real sector. Financing is either made through sharing risk and reward or must be asset-backed. A basic principle pertaining to financial transactions in Islam is that there should not be any reward without taking a risk. This principle is applicable to both labour and capital. As no payment is allowed for labour, unless it is applied to work, there is no reward for capital unless it is exposed to business risk. Thus, financial intermediation in an Islamic framework has been developed on the basis of this principle. Consequently, financial relationships in Islam have been participatory in nature.

Chapter 3

CASES OF WORLD HOUSING FINANCIAL SYSTEMS (DEVELOPED AND EMERGING)

In this chapter, we introduce eight cases of housing finance systems, six in developed countries and two in emerging markets. The six cases represent successful and unsuccessful systems. For each case, we present the key economic and housing finance figures, a brief about the housing market, a description of the housing finance system with players and products, key cultural and demographic data and the key features of the system. The systems, which are presented and grouped under success stories, have been most often considered for application in countries in transition from central command to market economy. However, unsuccessful cases are equally important to consider as well. The analysis at the end of the chapter is within the overall objective of identifying attributes of a well-functioning housing finance system for the MENA region.

3.1 Literature Review

Home ownership is the most desired form of housing tenure around the world for reasons of security and certainty. Owning a house presents a struggle for families virtually everywhere: for example, in Tokyo, a typical house can cost around five to six times the yearly earnings of a family. Many families simply do not possess sufficient funds to purchase a house with equity. A universal alternative to equity-based financing for outright purchase before taking possession of a house is through debt financing. Housing finance systems struggle to create instruments that efficiently finance the purchase of owner-occupied housing. Design of mortgages depends on the nature of the housing system, the allocation of risk and the economic and institutional factors in a country.

Warnock and Warnock (2008) consider that while housing finance is a vital component of a well-functioning housing system, to date there has not been a systematic analysis of the depth of housing finance across a broad set of countries. Warnock and Warnock (2008) stress that no formal cross-country study of the size of the housing finance market exists. Existing international housing finance studies tend to be descriptive and highly informative but lack any formal empirical analysis and often focus on one or more country case studies (Warnock and Warnock, 2008).

A characteristic of a housing investment is its relatively big size and long investment horizon, requiring large amounts of long-term financing. The aim of a housing finance system is to provide funds to the producers and purchasers of housing, both rental and owner-occupied (Lea, 2008). This simple description has spawned an array of institutional arrangements, ranging from contractual savings schemes to depository institutions specialising in mortgage finance, to the issuance and sale and trading of mortgage securities.

All these arrangements have been created with the same purpose in mind: to channel funds from savers to borrowers. In any economy without a well-developed formal financial system, housing is either self-financed (i.e., out of savings) or directly financed between individuals (such arrangements are often referred to as informal finance). Direct finance can be by friends, relatives, small saving clubs or landlords (e.g., the chonsei system in Korea). Although often the only alternative for households seeking to better their housing circumstances, informal arrangements are typically inefficient and costly in part because the requirements of savers and borrowers are different (International Housing Finance Book, 2000).

Bahaa Eldin, Mohieddine and Nasr (2004) consider that there is no single model for mortgage finance systems. In developed countries, there is a wide range of mortgage finance models, including those operating through securitisation, those based on financing through bond markets, those operating through the banking system and those based on specialised retail housing finance lenders. However, there are some common features in most of these models. One of these features is the availability of long-term loans of 20 years or more from a number of competing institutions, provided requirements are met. Another feature is that the market has to be an active one, where loans could be used to purchase new property and second-hand ones. Moreover, the rate charged to market should be at market price, which is sufficient to cover the cost of raising funds, administration costs, risk and profit. Another common feature is that the procedures for purchasing and selling property are smooth and efficient (Bahaa Eldin, Mohieddine and Nasr, 2004).

The literature review reveals that there is lack of comprehensive studies about the attributes of a well-functioning housing finance system. The available studies focus on country issues of housing finance systems or fragments of the housing finance systems.

In the following section, certain attributes of a well-functioning market-based housing finance system which have been identified in the literature review will be covered and will be used in analysis of the case studies.

3.1.1 Efficiency

Diamond and Lea (1992) consider efficiency to be an important attribute of any well-functioning market-based housing system. The focus on efficiency is a reflection of the times: increasing international trade and competition in nearly every sector, including financial services. At the same time, renewed efficiency on national economic growth relative to other policy goals has prompted greater interest in achieving the economic rewards of increased efficiency in all areas of economic activities (Diamond and Lea, 1992). Major benefits of improved efficiency include reduction in the costs of credit intermediation and significant increases in the availability of funds and range of contract terms. Diamond and Lea (1992) prepared a study commissioned by Federal National Mortgage Association (FNMA commonly known as "Fannie Mae") to provide comparative analysis of housing finance systems in five countries with focus on efficiency with which the different mortgage markets deliver mortgage credit to homebuyers. In their study, Diamond and Lea (1992) defines efficiency as referring to intermediation efficiency. The goal of their analysis was to answer the question, 'Which country is pursuing institutional, transactional, subsidy, and risk allocation arrangements with the lowest public and private costs of providing housing credit?' Diamond and Lea (1992) used in their study six funding risks: credit risk, prepayment and interest-rate risk, liquidity risk, operating costs, and subsidies and taxes. For Diamond and Lea (1992), a perfect efficient market is one in which no new entrant could make extraordinary returns, despite having full access to all available subsidies, information and technology despite and enjoying full exemption from restrictions and regulations. Intermediation efficiency was measured by the actual all-in societal costs of providing housing finance relative to the minimum achievable in the absence of distortions and subsidies.

3.1.2 Affordability

There is still debate about housing affordability standards (Stone, 2006). Stone (2006) mentions two reports by Brownill, Sharp, Jones and Merritt, which made the logical case for a residual income approach: '*It is the amount of money left after housing costs have been met that is crucial in determining whether the costs of housing are really affordable*'.

The paper of Christine Whitehead (1991), titled 'From Need to Affordability', began at a fairly high level of abstraction, concluding that affordability means '*the opportunity cost of housing vis-à-vis other goods and services'.* The 'opportunity cost' language is essentially the logic of residual income. Her subsequent discussion of definitions of affordability standards compared residual income and ratio approaches, suggesting an equity argument against the latter: the standard may be defined in terms of the absolute amount of residual income remaining once the housing has been purchased, i.e., it is set at a level which allows the household to pay for the housing and still purchase a socially acceptable bundle of other goods. Alternatively, the standard may be defined in terms of a relative measure specifying the acceptable proportion of income to be spent on housing. This implies an acceptance of the underlying distribution of income and a view that housing should represent no more than a given element within that income. Hancock (1993) delved into a more formal theoretical analysis of affordability, arguing ‘from first economic principles that is more logical to use some form of residual income definition than one based on a prescribed ratio of housing costs to income. Her analysis of the residual income and ratio approaches led her to conclude that ‘any statement about affordability has essentially to be a statement about opportunity-cost’. If the statement wishes to take a view about the affordability of housing, then it has to specify what opportunity-cost it considers excessive. The value of the foregone goods and services is measured in terms of their total cost and not in terms of the fraction of consumers’ income absorbed (Hancock, 1993).

The said definitions of affordability seem to be irrelevant to the majority of MENA countries. Other studies define affordability of housing finance as related to average price of a house compared with the average annual income per capita. Though assessing affordability based on residual income and buying costs seems to overlook that the comparison is between stocks (the house price) and flows (income), however, it is meant to simply hypothetically indicate how many years it takes one to buy a house based on average house price if one dedicates 100% of their annual income. Hence, we are converting a stock into flow (for example, a stream of payments financially equivalent to the house price at that time) or an income into stock (present discounted value of all future expected incomes) for the sake of simplicity. Such definition based on price income ratio could be more relevant to MENA where the price of an average level apartment could reach up 100 times the average annual per capita income compared to as low as five to six times in many developed countries. What complicates the matter more is the scarcity of economic data or the inaccuracy of available data.

There are arrays of reasons for unaffordable housing finance including lack of well-defined legal procedures for enforcing claims, curing defaults and evicting former owners of foreclosed property serve to stunt development of housing finance. Similar reasons may result in lack of mortgage and property insurance. Furthermore, restricted availability of usable land and a lack of basic infrastructure drive up supply costs for affordable housing (Ebrac and Notha, 2002).

3.1.3 Accessibility

The other face of affordability is access to mortgage finance by the different social classes. Access to finance has been a concern for international development organisations and governments as well for some time. IFC has been regularly publishing a report about access to finance which covers housing finance systems. Ebrac and Notha (2002) believe that lower-income households have limited access to mortgage markets. While access to mortgage financing by low-income families is limited even in some developed financial markets, limited access even by middle-income families is a fact in many developing countries, including those in the MENA region. Homeownership prospects for such households may be limited for a number of reasons. First, households may be constrained in their financing in two ways: inability to afford a minimum down payment – especially in the case of low-income households – and inability to access capital markets for long-term mortgage loans – in the case of both low- and middle-income households in most developing countries. Reducing these liquidity constraints while maintaining an acceptable level of credit risk should broadly define the core of the policies that promote affordable mortgage availability. Second, whether actually justified or not, a large portion of households may be perceived as poor credit by lenders. Finally, private mortgage markets may not permit access to affordable mortgages because of market failures. Mortgage market failure in providing financing for some households reflects high information costs to assess and differentiate credit risk. This may result in adverse selection and credit rationing in favour of high-income households by the existing mortgage lending institutions. Consequently, in many developing countries, as well as those in the MENA region, housing markets tend to have an ample supply of high-income housing but a short supply of low- and middle-income housing.

3.1.4 Market-based

In market-based housing finance, funds are raised directly on the capital markets where supply and demand interact to set the interest rate based on the highest possible level of efficient mechanisms for setting the cost of funding for borrowers and return on funding for lenders. The demand side raises funds through securitisation or issuance of covered bonds while the supply provides funds through purchase of bonds in their different forms.

Securitisation is produced through the pooling of a number of mortgage loans by a financial intermediary, typically the originator of the loans or investment banks. Loan securitisation allows banks to transfer credit risk partially to the market while achieving capital relief. As a result, capital is freed up and can potentially generate further funding capacity and on-lending to beneficiaries.

Covered bonds are asset-backed debt instruments secured by a priority claim on property but remain on the lender’s balance sheet. Covered bonds offer an alternative cost-effective form of wholesale funding which remains resilient even in times of crisis, as well as investor diversification. Covered bonds have the potential to enable the channelling of funds to borrowers in what is thought to be quite an efficient and simple way and can also be described as an indirect mortgage financing instrument. Given that covered bonds stay on the issuing bank's balance sheet and do not provide the possibility of risk transfer and regulatory relief offered by securitisation, they involve asset encumbrance considerations which can restrict their use in deleveraging environments. Covered bonds are either governed by specific legislation (statutory framework) or on general contractual rules and structured programs in markets where a relevant legislative framework is absent.

Market-based housing finance has many advantages. Experience from developed countries suggest that the process of financial liberalisation and shift from directed credit to market allocation provides significant impetus to the growth of housing finance (Harvard, 2005). Housing finance has traditionally been an area of intervention by governments, especially through the creation of special circuits of funding flows. Diamond and Lea (1992) analyse these circuits in five developed countries (Denmark, France, Germany, United Kingdom and the United States) and track their evolution through the 1980s under the pressures of inflation, interest rate volatility, deregulation and international financial markets. All five systems changed significantly over the 1990s, with three of the five showing dramatic increases in either efficiency as their reliance on special circuits declined. Diamond and Lea (1992) found that whatever the process of change, it was clear that the decline of the special circuits in the 1980s was accompanied by a multitude of changes in housing finance arrangements and performance. Competition increased, leading to more diversity in mortgage contract selection and innovation in securities design. Integration of specialised circuits in the general capital markets diversified funding sources for housing finance, helping intermediaries meet consumers' demand. As a result, most constraints on the supply of mortgage credit have disappeared, and the penetration rate – the ratio of mortgage debt to GDP – increased in four of the five countries in the study. Mortgage pricing became more reflective of the risks and costs of provisions although in some countries this has meant an increase in cost to borrower, relative to the government borrowing rate.

Warnock and Warnock (2008) also examined also the extent to which markets enable the provision of housing finance across 62 countries. Across all countries, controlling for country size, Warnock and Warnock (2008) found that countries with strong legal rights for borrowers and lenders (through collateral and bankruptcy laws), deeper credit information systems, and a more stable macroeconomic environment have deeper housing finance systems. Warnock and Warnock (2008) believed that the same factors also explain the variation in housing finance across emerging market economies. Warnock and Warnock (2008) found that across developed countries, which tend to have low macroeconomic volatility and relatively extensive credit information systems, variation in the strength of legal rights helps explain the extent of housing finance. Warnock also examined other potential factors – the existence of sizable government securities market – that might enable the development of emerging markets 'housing finance systems'. But Warnock and Warnock (2008) found no evidence supporting that.

Bahaa Eldin, Mohieddine and Nasr (2004) mentioned that the mortgage finance market is only a piece of a puzzle. Three submarkets are considered as essential parts of the puzzle: the real estate market, the primary and the secondary mortgage markets. A mortgage market is ultimately one that allows the long-term payment for a real estate purchase. Bahaa Eldin, Mohieddine and Nasr (2004) believe there can be no such market if the market for the underlying asset – the real estate property – is not properly functioning. Hence, an efficient and comprehensive real estate registry system must be the prime requirement. Such system must be

1. efficient in the sense that it actually allows the recording of the transfer of ownership in a timely manner;
2. inexpensive, in that registration fees must not be in themselves a prohibitive item when considering whether to or not register a property;
3. comprehensive, so that all properties become either registered or capable of being registered;
4. definite in the sense that once registration has been affected, it may not be challenged, annulled or in doubt.

3.1.5 Stability

Housing finance was once an underdeveloped segment of domestic financial markets. It now occupies a very significant place not only in the financial system of individual economies but in the global financial system as well. For example, US mortgages are now financed through securitisation on a significant scale by Chinese and Indian savers, among others. The US Treasury estimates that nearly 15% of US agency securities were held by overseas investors in 2005. The same applies to other parts of the world whereby financial institutions are looking for sources of funds across the regions to secure the resources needed to meet domestic housing finance demand.

The level of mortgage debt to GDP varies across countries in the world. It ranges from less than 1% in certain countries to more than 100% of the GDP in other countries. Given the relative size of the market to the financial sector and the economy and the relationship of housing finance and the housing sector, the stability of the housing finance system affects the economic stability and the stability of the financial sector as well.

Housing booms and busts are intimately linked as well with the provision of credit. A report prepared by IMF found that in some emerging European countries, mortgage debt grew by 25 to 45 percentage points of the GDP over the decade 1999–2009. In Estonia, the residential mortgage debt to GDP ratio grew from around 4% in 1999 to more than 44% in 2009, while in Latvia, it grew from around 2% to more than 37% during the same period. Based on 2004–2005 data, the share of households with a mortgage ranged from approximately 45% in the United States to 40% in the UK and 20% in the Euro area. Accordingly, the housing finance system has significant influence not only on the national economy but on the regional and global economies as well. The current global financial crisis started in the United States, and it turned into an economic crisis and was caused by the subprime lending in the housing finance sector in the United States. Also, the failure of the saving and thrift associations back in 1990s was due to failure of the housing finance system.

Accordingly, one of the most important attributes of a well-functioning housing finance system is being stable by extending credit on sound basis to avoid any shocks to the housing or financial sectors or the economy in general.

3.1.6 Market Penetration

Market penetration is a measure of the amount of sales or adoption of a product or service compared to the total theoretical market for that product or service (Investopedia). In a housing finance system, the percentage of mortgage or housing finance debt (MD) to GDP is an indicator of the degree of market penetration. A well-functioning housing finance system should witness proper growth rate. However, penetration rate should not only be at the macro level, but should be about the different social and economic classes which lead to the issue of access to finance.

Country Overview

The following table presents the area of each of the countries covered in this chapter:

Total Area (000 KM2)

Country	USA	Canada	Denmark	Germany	Ireland	Spain	Malaysia	S. Korea
Area	9,389	9,984.67	43.094	35.702	70.273	505.992	329.874	100.21

Table 3-1: Area of Countries

The following table presents the population of each of the countries presented in this chapter over the period 2003- 2012:

Total population (mln)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	290.6	293.2	295.9	298.7	301.6	304.4	307.2	309.3	311.7	314.1
Canada	31.6	31.9	32.2	32.5	32.9	33.3	33.6	34.01	34.34	34.75
Denmark	5.4	5.4	5.4	5.4	5.4	5.5	5.5	5.548	5.571	5.592
Germany	82.5	82.5	82.4	82.3	82.2	82	81.8	81.8	80.3	80.5
Ireland	4	4	4.1	4.2	4.3	4.4	4.4	4.56	4.577	4.587
Spain	42	42.7	43.3	44.1	44.9	45.6	46.2	47.02	47.19	47.27
Malaysia	25	25.5	26	26.4	26.8	27.3	27.8	28.12	28.57	29.02
S. Korea	47.86	48.07	48.14	48.37	48.6	48.95	49.18	49.41	49.78	50

Table 3-2: Total Population

Source: Hypostat 2013

The following table presents the GDP of the countries presented in this chapter in current prices over the period 2003 – 2012:

GDP, current prices (U.S. dollars bn)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA(US$)	12,214	16,532	18,187	18,404	17,546	17,403	16,166	15,803	15,760	14,120
Canada**	868.3	994	1,133	1,279	1,436	1,499	1,319	1,613	1,789	1,824
Denmark	193	202	212	225	233	241	230	241	246	250
Germany	2,220	2,270	2,300	2,393	2,513	2,561	2,460	2,580	2,703	2,754
Ireland	144	155	169	183	196	186	168	164	171	172
Spain	803	861	930	1,007	1,080	1,116	1,079	1,080	1,075	1,055
Malaysia**	110.2	124.8	138	156.9	186.7	221.6	207.4	225	298	314.4
S. Korea	680.5	764.9	898.9	1,012	1,123	1,002	901.9	1,094	1,202	1,223

Table 3-3: GDP Current Prices

Source: Hypostat 2013

** Source: Housing Finance Network

The following table presents the annual real DGP growth in the countries presented in this chapter over the 2003 – 2012:

Real GDP Growth (per cent change on the previous year)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	2.5	3.6	2.9	2.8	2	0.4	-2.7			
Canada	1.9	3.1	2.9	3.1	2.7	0.4	-2.5	3.1	3.1	1.7
Denmark	0.4	2.3	2.4	3.3	1.6	-1.2	-2.4	1.6	1.2	-0.1
Germany	-0.4	0.7	0.9	3.9	3.4	0.8	-5.1	3.9	3.4	0.9
Ireland	4.5	4.7	6.4	5.7	6	-3	-7.5	0.4	0.4	2.6
Spain	3.1	3.3	3.6	3.9	3.7	0.9	-3.8	0.0	-1	-2.6
**Malaysia	5.8	6.8	5.3	5.8	6.3	4.6	-3.6	7.4	5.3	5.5
S. Korea	2.9	4.9	3.9	5.2	5.5	2.8	0.7	6.5	3.7	2.3

Table 3-4: GDP Growth 2003 - 2012

Source: Hypostat 2013

** Source: Housing Finance Network

The following table presents the inflation rate (end of period consumer prices) over the period 2003 – 2012:

Inflation, end of period consumer prices (per cent change on the previous year)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	2.3	2.7	3.4	3.2	2.9	3.8	-0.4	1.6	3.1	2.1
Canada	2.7	1.8	2.2	2	2.1	2.4	0.2	2.1	3.4	1.8
Denmark	2.1	1.2	1.8	1.9	1.7	3.4	1.7	2.3	2.76	2.41
Germany	1	1.8	1.9	1.8	2.3	2.7	0.2	1.2	2.5	2.1
Ireland	4	2.3	2.2	2.7	2.9	3.1	-1.6	-1.6	1.2	1.9
Spain	3.1	3.1	3.4	3.6	2.8	4.1	-0.3	1.6	3.2	2.44
Malaysia	1.1	1.4	3	3.6	2	5.4	-0.1	1.7	3.2	1.7
S. Korea	3.42	3.04	2.62	2.09	3.61	4.14	2.8	3.03	4.16	1.43

Table 3-5: Inflation 2003 - 2012

Source: Hypostat 2013

The following table presents the unemployment rate in the countries presented in this chapter over the period 2003 – 2012:

Unemployment (per cent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	6	5.5	5.1	4.6	4.6	5.8	9.3	9.1	8.6	8.1
Canada	7.6	7.2	6.8	6.3	6	6.2	8.3	8	7.4	7.2
Denmark	5.7	5.8	5.1	3.9	2.7	1.7	3.5	7.1	5.9	5.4
Germany	9.8	10.5	11.3	10.2	8.7	7.5	7.8	7.1	6	5.5
Ireland	4.7	4.5	4.4	4.4	4.5	6.1	12	13.9	14.6	14.7
Spain	11.5	11	9.2	8.5	8.3	11.3	18.2	20.1	21.6	25
Malaysia	3.6	3.5	3.5	3.3	3.2	3.3	3.7	3.4	3.1	3
S. Korea	3.6	3.7	3.7	3.4	3.2	3.2	3.6	3.7	3.4	3.2

Table 3-6: Unemployment Rate 2003 - 2012

Source: Hypostat 2013

Housing Finance

In this section, we present the main statistics related to housing finance in the countries presented in this chapter.

The following table presents the homeownership rate in the countries presented in this chapter over the period 2003 – 2012:

Owner-occupied units (per cent of total)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA		69.2**	-	-	-	-	-	-	-	-
Canada	-	-	-	68.4**	-	-	-	-	-	-
Denmark*	66	67.2	66.6	67.4	67.1	66.5	66.3	66.6	67.1	64.3
Germany*	n/a	n/a	53.3	n/	n/a	n/a	n/a	53.2	53.4	53.3
Ireland*	92	81.8	78.1	78	77.3	73.7	73.3	70.2	69.6	69.9
Spain*	89	n/a	n/a	n/a	80.6	80.2	79.6	79.8	79.7	78.9

Table 3-7: Owner Occupied Rates

*Source: Hypostat 2013

** Source: Housing Finance Network

The following table presents Total amount of home mortgage loans outstanding at the end of year as % of GDP in the countries presented in this chapter over the period 2003 – 2012:

Total amount of home mortgage loans outstanding at the end of year as % of GDP (current prices)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	57	49	58.2	57.8	63.4	72.9	70.6	70.9	75.5	75
Canada	41.5	42.6	44.6	45.7	47.8	50.3	53.9			
Denmark	81.91	85.6	93.2	98.7	104.4	106.9	116.6	114.5	114.8	114.1
Germany	52.1	51	50,5	49.5	46	44.7	46.6	44.7	43.1	43
Ireland	41.2	49.9	58.8	67.5	71.4	79.6	88	63.2	59.5	57.1
Spain	38.9	44.7	51.1	56.7	59.8	60.4	62.9	62.9	62	60.8
Malaysia*				27.2	26.2	25	29.5	29.9	30.5	32.4

Table 3-8: Mortgage Penetration Rates

Source: Hypostat 2013

* Source: Cagamac Presentation

The following table presents the total Outstanding Mortgage Debt per capita, Euro

in the countries presented in this chapter over the period 2003 – 2012:

Total Outstanding Mortgage Debt per capita, Euro (000)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA *	37.43	36.87	47.68	47.38	48.96	55.15	49.08	47.66	50.06	44.09
Denmark	37.77	41.24	47.17	52.80	57.55	60.46	62,51	64.04	64.96	65.36
Germany	17.18	17.14	17.18	17.44	16.97	16.78	16.77	16.86	17.01	17.26
Ireland	20.22	25.79	32.20	39.07	42.76	44.09	43.31	30.44	29.66	28.83
Spain	9,098	10.98	13.32	15.76	17.51	17.99	17.84	17.79	17.38	16.68

Table 3-9: Total Outstanding Mortgage Debt Per Capita

Source: Hypostat 2013

* US$

The following table presents the total number of dwellings in the countries presented in this chapter over the period 2003 – 2021:

Total Dwelling Stock (Million Doweling)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA*	120.8	122.1	123.9	126.0	127.9	130.1	130.1	130.5	132.2	132.7
Canada	-	-	-	13.56	-	-	-	-	14.56	-
Denmark*	2.6	2.61	2.64	2.65	2.67	2.69	2.72	2.77	2.78	2.79
Germany*	39.14	39.362	39.55	39.75	39.91	40.05	40.18	40.47	40.63	40.80
Ireland*	1.57	1.65	1.733	1.84	1.91	1.97	1.99	2.01	2.00	2.01
Spain*	21.90	22.38	22.88	23.45	24.02	24.59	24.93	25.13	25.22	25.27

Table 3-10: Total Dwelling Stock

*Source: Hypostat 2013

The following table presents the total number of building permits in the courtiers presented in chapter rover the period 2003- 2012:

Total Number of Building Permits (000)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA*	1,889	2,070	2,155	1,838	1,389	905	583	604	624	829
Canada**	218.4	233.4	225.4	227.3	228.3	211	149	189.9	193.9	214.2
Denmark *	274.7	297.7	35.91	36.28	23.21	16.31	9.026	17.20	17.42	12.73
Germany *	296.8	268.12	240.46	247.54	182.33	174.59	177.93	187.66	228.,31	241.09
Ireland*	20.91	274.8	25.31	22.,74	22,21	17,436	10,338	6,319	4.745	3.626
Spain*	471	543.5	603.63	734.97	633.43	267.876	130.418	91.509	75.89	57.486

Table 3-11: Total Number of Building Permits 2003 - 2012

*Source: EMF Hypostat 2013

** New House Starts: Canada Housing and Mortgage Corporation 2014

The following table presents the total number of housing completion in the courtiers presented in chapter rover the period 2003- 2012:

Housing Completion ('000)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	1,678	1,842	1,932	1,979	1,502	1,120	794	651	585	649
Canada *	199.2	215.6	211.2	215.9	208.8	214.1	176.4	186.8	175.6	180
Denmark	23.785	26.350	27.399	29.084	31.582	27.194	19.086	11.899	12.732	16.950
Germany	268	278	242	249	210	175	158	159	183	200
Ireland	68.819	76.954	80.957	93.419	78.027	51.724	26.420	14.602	10.480	8.488
Spain	367	398	429	488	552	531	315	198	115	114

Table 3-12: Housing Completion 2003 - 2012

Source: Hypostat 2013

- Canada Housing and Mortgage Corporation 2014

The following table presents representative interest rates on new residential loans (per cent) in the courtiers presented in chapter rover the period 2003- 2012:

Representative Interest Rates on New Residential Loans (per cent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	5.82	5.84	5.86	6.41	6.34	6.04	5.04	4.69	4.46	3.66
Denmark	4.93	4.82	4.06	4.89	5.81	6.27	3.90	3.27	3.40	2.98
Germany	4.91	4.74	4.25	4.61	5.09	5.22	4.26	3.71	3.87	3.10
Ireland	3.82	3.44	3.42	4.06	4.93	5.17	3.14	3.13	3.46	3.28
Spain	3.61	3.24	3.22	4.05	5.10	5.67	3.25	2.35	2.53	3.37

Table 3-13: Representative Interest Rates on New Residential Loans

Source: Hypostat 2013

The following table presents the nominal house price index in the courtiers presented in chapter rover the period 2003- 2012 (2006 = 100):

Nominal House Price Index (2006 =100)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
USA	78	85	94	100	100.2	92.3	87	84.4	80.9	83.6
Canada**			109.2	113.1	116.9	122	121.6	123.3	125.6	127.1
Denmark	60.1	68.6	83.8	100	100.2	94	83.1	86.3	83.2	79.7
Germany	95.7	96.4	99.8	100	99.8	102.8	102.3	102.9	105.5	108.7

Ireland	n/a	n/a	87.2	100	107.3	99.8	81.1	71.	61.2	54.2
Spain	69.3	81.3	91.7	100	104.8	101.4	95.1	91.7	85.5	76.9
S. Korea	75.9	76.4	77.2	82.3	90.6	97	97.8	100	104.9	106.2

Table 3-14: Nominal Housing Prices

Source: Hypostat 2013

** 2002 = 100

3.1.7 Housing Finance Systems: An Overview

3.1.7.1 Developed Countries

3.1.7.1.1 United States of America

The United States of America is a federal republic consisting of 50 states and a federal district. At 9.83 million square kilometres, and with around 325 million people, the United States is the third-largest country by both land area and population. It is one of the world's most ethnically diversified nations, the product of large-scale immigration from many other countries.

The American housing finance system, which has been considered to be archetype for any modern housing system, was believed to be behind the meltdown in the US financial system which started in 2008. The global financial crisis turned into the worst economic crisis since the Great Depression of 1929. Most countries in the world were adversely affected by the crisis, with many experiencing recessions. Even some smaller countries were threatened by bankruptcy. The IMF estimated that the loss to global wealth was not less than $15 trillion, 59 million people lost their jobs worldwide and governments had to pour trillions of dollars in their economies to stabilise them (Chang, 2011). Accordingly, it could be controversial to classify the US housing finance system as an example of complete success with a couple of well-known major crises, the saving and thrift institutions in 1990s and the global financial crisis. However, the system still has its successes, which are worth considering.

Up to 2012, the economy has not recovered from the 2008 financial crisis and the ensuing recession. Spending at the national level rose to 25% in 2010, and gross public debt surpassed 100% of the GDP in 2011.

Total outstanding residential mortgage debt in the United States was $11.48 trillion at the end of 2011, and residential mortgage loans as percentage of the GDP stood at 76.1% in

2011 down from 76.5% in 2010. This is significantly higher than the average in the EU's 27 member countries, which was 51.7%. Per capita mortgage debt is approximately €26,420.

The following figure illustrates the number of building permits and housing completion in the United States for the period 2001–2011:

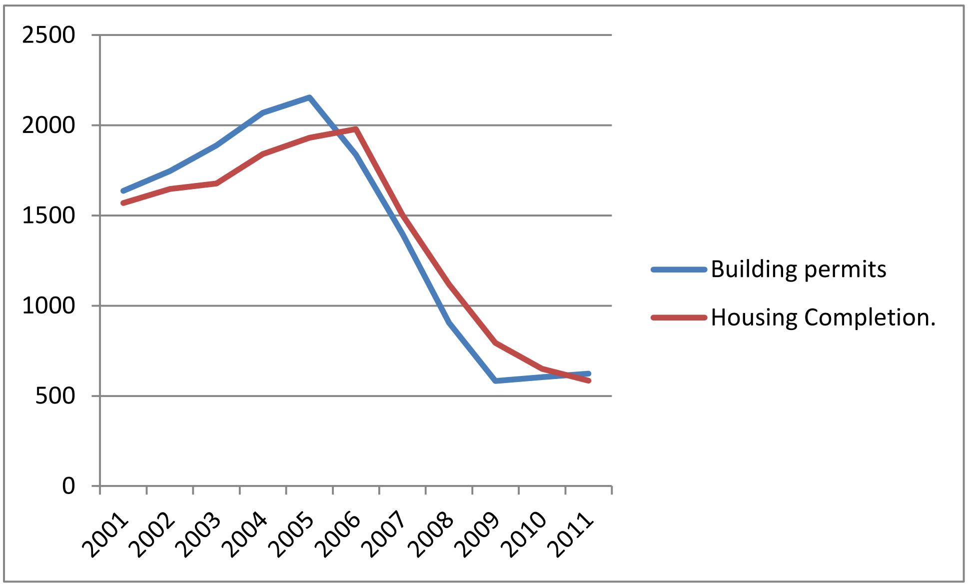


Figure 3-1: Building permits and housing completion in the United States, 2001–2011

The following figure presents the house price index and total mortgages as percentage of GDP for the period 2001–2011:

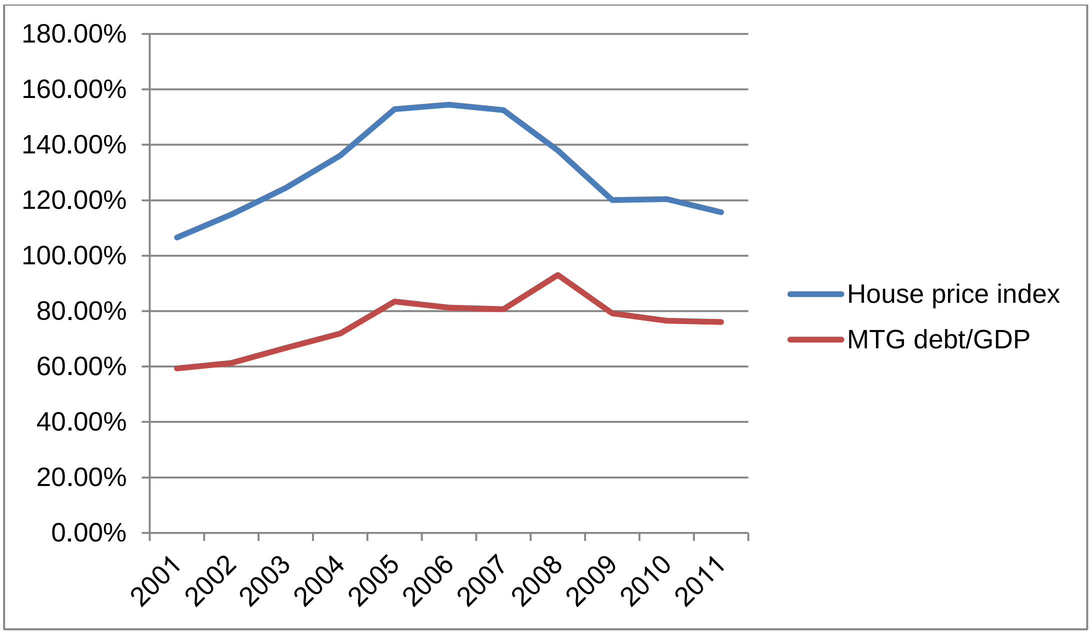


Figure 3-2: Housing price index and mortgage debt to GDP in the United States, 2001–2011

a. The Housing Sector

The total number of housing units in 2011 was 132 million at an annual growth rate of 10% between 2001 and 2011. The homeownership rate at the same point in time was 69%, having grown from 63% in 1965. Over the last 10 years, an average of 1 million homes were constructed each year, with lowest levels of growth of one per thousand between 2008 and 2010 reflecting the impact of the property and financial system crash.

The housing market suffered a severe decline over the past two and a half years. Further, there is no question that values dropped anywhere from a modest 10% in markets to 50% in markets that were overheated. With large numbers of homeowners still experiencing economic distress, more homes will undoubtedly be liquidated at below-purchase prices, putting further downward pressure on housing prices. With hindsight, it is easy to conclude that housing prices have generally plummeted from lofty values.

The average price of a single-family house in the United States was $243,400 at the end of 2003. The average growth in the price of single-family houses between 1995 and 2004 was 6% compared with 4% in the previous 10-year period. The year 2003 marked the fourth consecutive year in which house prices rose more than 7.5%, on average, across the nation. This is significantly above the general rate of consumer inflation during the same period which was 2.5%. This strong growth is even more notable given the recession in 2001 but again reflects the significant impact of low interest rates on the housing market. Some indices estimate that the average price of American homes jumped by 13% in the year to the third quarter 2004 – the fastest increase on record in real terms. Such rapid house price inflation and the massive increase in turnover are seen as evidence of a housing bubble as speculative activity takes hold.

b. Housing Finance System

The American housing finance system is a marvel in its size, scope and efficiency. It has evolved from an informal/communal institutional arrangement to one of the most well-functioning and extensive intermediation system in the world. In the 1990s, one particular aspect of the US system – mortgage securitisation – came into fashion worldwide. It is credited as a major factor leading to increasing the homeownership over time to the current rate of 69% but to the worst financial and economic crisis since the Great Depression. Banks and financial markets in the whole world were adversely affected by the US real estate and housing finance crisis, which was due to the practice of securitising American real estate mortgages. With securitisation, asset classes are available (mortgage-backed securities or MBS) and collateralised debt obligations (CDO) that can be traced on capital markets, and international investors had big appetite for MBSs and CDOs.

The main players in housing finance are banks and mortgage brokers with a market share of 68%. Covered bonds represented 0.1% of the total residential mortgage debt while backed securities to residential loans represented 64%. The two ‘government sponsored’ entities, Federal National Mortgage Association (FNMA commonly known as “Fannie Mae”) and Federal Home Loan Mortgage Corporation (FHLMC, known as “Freddie Mac”), played major role in establishing securitisation in the United States. Loan to value could reach up to 100%. Typical loan tenure is 30 years while the prominent interest type is fixed (IMF, 2011).

The housing finance system in the United States relies heavily on the secondary market. Mortgage companies (usually subsidiaries of commercial banks), commercial banks, credit unions, thrift, life insurance companies, and pension funds originate loans and sell them to raise funds for the next batch of lending.

The secondary market, where securities backed by mortgage loans are bought and sold, is dominated by the government-sponsored agencies (GSEs) Fannie Mae and Freddie Mac, who account for about 40% of the market. These institutions either buy loans from mortgage lenders which they fund for the sale of bonds in the market or offer a securitisation function where securities based on a specific mortgage pool are issued and then sold by the originating institution to raise funds for future mortgage lending.

The lenders mortgage insurance (LMI) or mortgage guarantee insurance in the United States protects against lender or investor loss by reason of borrower default (credit failure) accompanied by insufficient recoverable value in the property securing the insured loan (Housing Finance Network, USA).

c. The Road to and Causes of the Crisis

Low interest rates and large inflows of foreign funds created easy credit conditions for a number of years before the crisis, fuelling a housing market boom and encouraging debt-financed consumption – which in turn increased housing prices. The housing finance industry did its best to support and prolong the boom by loosening qualifications guidelines for mortgages. Subprime mortgages, which were issued by lending institutions to borrowers with low credit ratings, and other exotic mortgage products, such as the so-called ninja loans (no income, no job, no assets), aimed at people who would normally not qualify for a mortgage – people with bad credit history, migrants or unstable income – thus high-risk borrowers. Subprime mortgages did become the mainstream as home prices accelerated across the country – but not the household incomes – and a growing number of affluent families turned high-rate loans to buy expensive homes they would not qualify for under conventional lending standards. In 2005, for example, the median down payment for first-time homebuyers was only 2% with 43% of those buyers making no down payment whatsoever. But borrowers had an incentive to take out risky loans with a high LTV ratio. First, the buyer was (and still is) able to deduct interest from their taxable income on the first $1 million of a home mortgage, and second, mortgage is typically nonrecourse debt secured against the property. For a nonrecourse loan, the borrower is not personally liable, so the lender's recovery is limited to the collateral in the case of default. The reason why banks and other mortgage lenders loosened their underwriting standards so much can be clearly attributed to the characteristics of securitisation. The process of securitisation involves that the mortgage lender does not keep the loan on its balance sheet but sends it to the capital markets – and with it the associated credit risk as well. This principle is called 'originate-to-distribute', and it clearly reduces the incentive for careful selection and control of debtors. The reason, however, why international investors considered the securities backed by such loan pools as low-risk investments must be attributed to the rating agencies' 'overly optimistic credit rating' and the insurance schemes many of which collapsed when the crisis hit. MBSs and CDOs based on risky subprime mortgage loans were given investment grade ratings (Housing Finance Network, 2012).

d. Demographic and Cultural Factors

One-third of the American population, which is almost 5% of the world's population, is under 25 years of age, but the median age is 35 reflecting the bulge in the population from the 'baby boomers'. The total number of households in 2004 was estimated at 108 million with an average of 2.57 persons per household. The annual rate of growth of households over the period 2000 – 2005 was around 1% (US Factsheet, 2005). High rate ownership, a culture of consumption, the level of financial literacy and insolvency laws which give delinquents the chance for a fresh start all contributed to a reckless culture among a certain category of borrowers.

e. Discussion and Analysis

The US case is a clear example of the responsibility of government as a regulator and the private sector as well for what led to the crisis. Analysis of the American housing finance system is very important to any country which is considering market-based housing finance. In this regard, the following could be noted.

The US HFS could be considered a controversial case between success and failure. The government role, the private sector participation and the growth realised over the years make this system a role model which could be learnt from. However, the failure to regulate and the lack of governance in certain financial institutions could show what could go wrong in HFS. The US HFS, though considered a market-based system, is heavily subsidised with tax exemptions and expenditures. The cost of such tax exemptions, taking into consideration interest deductibility and capital appreciation exempted from tax, is estimated to be $300 billion annually (Acharya, 2011).

The HFS in the United States today, which claims to deliver affordable loans and competitive mortgage securities to investors, is the result of a long evolutionary process of the partnership between public and private participants. The US HFS will likely continue to evolve, both in public-sector responses to economic shocks and through innovations that profit-motivated participants develop to gain competitive edges. The government had a clear role in developing by far the largest housing finance system in the world. However, this role focused on growth in homeownership rather than on quality of the loans.

The system was used beyond its main purpose, which is financing the purchase of houses, to create demand in a consumption-oriented economy. The securitisation was meant just to provide sources of funds without real protection for investors.

A high ownership rate compared with other developed countries, along with bankruptcy laws, which gave defaulters the chance for ‘fresh start’ without any cultural implication, contributed to the failure of the system in 2008. Subprime lending was first covered with legislation with limited number of cases, and then it became the mainstream.

In short, supportive government policies were implemented regardless of what is considered sound criteria for underwriting. The government policy encouraging homeownership led to compromising the underwriting standards. The critical risk of LMI was significant. There was a lack of a national regulator for housing finance and a lack of national criteria for underwriting. Moreover, the perception of GSE as enjoying public guarantee led to the taxpayer bearing the cost of reckless lending by certain lending institutions. Governance in certain financial institutions was a measure of weakness in the system which contributed to the crisis. Financial engineering was abused. Rating agencies were implicated leading to the crisis.

As expected, the American government has made several interventions to remedy and alleviate the impact of the crisis. The government launched the Home Affordable Refinance Program, also known as HARP, as a federal programme, set up by the Federal Housing Finance Agency in March 2009 to help underwater and near-underwater homeowners refinance their mortgages. HARP has also expanded the eligibility criteria for MHA to be able to offer assistance to more struggling homeowners.

3.1.7.1.2 Canada

Canada is a North American country. It is the second largest country in the world with a total area of 9,984,670 square kilometres. In 2012, its population was 34.4 million (Bhushan, 2010). Crises create winners and losers. The WEF findings are further corroborated by very positive external reviews of Canada's financial system by the IMF (2008) and the OECD (2008). The Canadian economy is the eighth largest in the world. It accounts for about 2% of the world output. GDP stood in 2012 at $1.4 trillion, and per capita GDP in PPP terms was estimated at $40,541. The unemployment rate was 7.4% while inflation was 2.9%.

In the peak of the global financial crisis in 2008–2009, Canadian banks were rated as having the 'soundest banking system in the world' two years in a row by the World Economic Forum (WEF). This rating by WEF was further corroborated by very positive external reviews of Canada's financial system by the IMF (2008) and the OECD (2008) (Bhushan, 2010).

Historically, the housing finance sector has not been a major source of risk to financial institutions in Canada and, more generally, to the stability of the Canadian financial system as a whole.

In Canada, the purchase of a home typically means getting a mortgage. The Canadian housing finance system, though it is less than one-eighth the American system, offers several best practices to other countries. Mortgage insurance plays an important role in the functioning of the system by helping consumers purchase homes with a minimum payment of 5% at interest rates comparable to those paid by buyers who extend 20% of the house price or higher as down payment (*Canadian Housing Observer*, 2012).

The Canadian housing finance system, with a total residential mortgage credit of C$1.112 trillion by January 2102, an increase of 7.4% from January 2011(Canadian Housing Observer, 2012) with a rate of default of less 0.4%, is considered a model from which developed and developing countries can learn. The per capita residential mortgage outstanding was C$29,910 in 2008 (Bhushan, 2010).

a. Housing Sector

The housing market plays an important role in the Canadian economy. Housing-related economic activity accounted for C$407 billion in 2009 – over one-fifth of the GDP. In 2009, there were approximately 71,000 residential construction firms and 158,000 specialty trade contractors worked in residential construction (Bardhan et al., 2012). The combination of low mortgage rates, strong growth in personal incomes, confidence and robust employment growth has made the housing market one of the fastest-growing sectors of the Canadian economy. New house building has also been boosted by favourable economic conditions.

The total residential dwelling stock in Canada is 13.319 million in 2011, according to CMHC (2012). The number of homes built in Canada from 2001 to 2011 exceeded the net increase in households by about 225,000. Available evidence suggests that the excess of housing completions over household formation is due to growth in the number of second homes, as well as ongoing replacement of homes lost to, for example, fire, demolition or conversion to other uses. Owner occupation rates have increased steadily over time but markedly between 1996 and 2001 where the owner occupation rate increased from 63.6% to 65.8%.

b. Housing Finance

Canada has one of the most sophisticated housing finance systems in the world (Bhushan, 2010). The Canadian system is characterised by a well-functioning mortgage guarantee system. To manage the risks associated with housing finance, Canadian financial institutions rely on a combination of criteria, including flow measures of creditworthiness similar to the eligibility criteria used for insured mortgages and ‘risk rating measures’ such as the FICO score, which is a credit score developed by a company, FICO, which specialises in predictive analysis. The score summarises the credit history information of the borrower. FICO covers a range of information in its credit analysis to set the personal FICO score.

The Canadian housing finance market is national. Lending conditions and mortgage products are similar across the country while the system is largely dominated by domestic lenders, especially by a few well-capitalised banks. The mortgage credit culture in Canada is rather conservative, with a large majority of mortgages at fixed interest rates and a preference for mortgage terms of five years. Interest-bearing term instruments sold to savers remain the primary source of funding for mortgage loans, which subsequently remain largely on the balance sheet of lenders (Traclet, 2005).

By federal law, financial institutions are allowed to extend conventional mortgages up to 75% of the value of a residential property. For high-ratio mortgages – mortgages where the down payment is less than 25% of the value of the property, mortgage insurance is required to protect lenders against borrower default.

The structure of the Canadian housing finance system has been historically influenced by the federal government. While this influence was direct in the two decades following World War II (direct mortgage lending by the government and interest rate ceilings regulation), it became gradually more indirect with the overriding objective of increasing the supply of mortgage money available from private lenders (Traclet, 2005). The government plays its role through regulation and CMHC, which is fully owned by the government. The principal activities of CMHC are mortgage insurance (MI) and securitisation (Bhushan, 2010).

The Canadian residential mortgage financing market is presently dominated by six chartered banks. In 2012, banks provided more than 75% of total mortgage loan approvals. The second largest group of mortgage lenders is credit unions and caise populaires, holding 12% of the mortgages outstanding on their balance sheets. Other types of mortgage lenders are life insurance companies and pension plans, together accounting for 2%, trusts and loan companies holding 3%, and nondepository and other financial institutions holding 4% (Bhushan, 2010).

The risk management practices of Canadian lenders are supervised by the Office of the Superintendent of Financial Institutions (OSFI), which provides assessment criteria for risk management. Both OSFI and the Canadian Deposit Insurance Corporation (CDIC) provide risk management guidelines in the context of their respective standards of sound business and financial practices.

The regulation of housing finance activities in Canada, although set by different legal frameworks and under the charge of different regulators according to the type of mortgage lender, provides consistent requirements among lenders, notably in terms of the disclosure requirements to provide consumer protection. Regulation also provides protection to lenders against borrower default, as failure to abide by the terms of a mortgage loan agreement may permit the mortgage holder to take legal action to foreclose the mortgaged property (Traclet, 2005).

Mortgage insurance can be provided by either a government agency or a private insurer approved by the superintendent of financial institutions. While the Bank Act states that the insurance should cover the amount of the loan that exceeds 75% of the value of the property, in practice mortgage insurers cover the total amount of the loan. The accessibility to insured mortgages is restricted by the use of eligibility criteria: the mortgagor must satisfy two flow measures of creditworthiness and must be able to pay closing costs equivalent to at least 1.5% of the purchase price. Approximately 50% of the Canadian mortgages are insured, while about 43% of all mortgages are directly insured by the government through CMHC. CMHC dominates the MI market, with over 70% market share, for all loans with LTVs greater than 80%. CMHC insures the loan value in full and upfront. Finally, financial institutions offer income protection insurance to their clients, in the form of mortgage life protection – to pay off the outstanding balance in the event of death (generally with a ceiling) – and accident and/or illness mortgage protection – to pay the regular mortgage payments in the event of a disability (generally subject to a monthly ceiling and to a maximum period of time).

Mortgage funding depends on a variety of sources including deposits from customers and funds raised in the capital market. Key capital market-based funding sources are securitisation, covered bonds and other corporate debt. Deposit-taking institutions traditionally rely on guaranteed investment certificates (GICs) and other similar interest-bearing term instruments sold to savers to fund mortgage loans. Finally, subprime mortgage lenders securitise a greater share of their mortgages than major banks do.

Securitisation got its start by the public sector at CMHC in 1987. However, only about 30% of mortgages have been securitised in 2009 (Bhushan, 2010).

c. Demographic and Cultural Facts

As in many other developed countries, the rate of population growth in Canada is slowing and the population is ageing. Immigration is the main source of population growth. The rate of household formation is slowing from about 225,000 per year in the 1970s to around 150,000 in the late 1990s, but the proportion of single-person households is also increasing, offsetting this effect slightly. The average size of households fell from 3.9 persons in 1961 to 2.6 persons in 2001. The housing finance system is supported by strong credit culture. It is estimated that close to 75% of Canadian consumers have a good credit rating – above 700 – which translates into low delinquency rates (below 2% for FICO scores of 750 and up). The Canadian government introduced in 2011 the Financial Literacy Leader Act, which provides for the creation of the position of financial literacy leader within the Financial Agency of Canada. The leader is to be appointed by the governor in council to exercise leadership at the national level to strengthen the financial literacy of Canadians (Canada Factsheet).

While the government's influence in the housing market is limited, it is more significant in the housing finance system, essentially through the Canada Mortgage and Housing Corporation (CMHC). The various government initiatives in this area have aimed to increase the supply of mortgage loans from private lenders. These initiatives have affected the Canadian housing finance system, as reflected by the current significant share of high-ratio mortgages – i.e., mortgages where the down payment is lower than 25% of the value of the property and which must be insured – and by the recent trend towards increasing off-balance sheet funding based on mortgage-backed securities created from insured mortgages (Traclet, 2005).

There is no tax relief on mortgage interest or principal payments. Principal residences are exempt from capital gains taxes, but capital gains on other housing assets are taxable at 50% (Canada Factsheet, 2006).

d. Discussion and Analysis

In terms of players, the federal government has taken the lead in the development of the system. The structure of the Canadian housing finance system has been historically influenced by the federal government. While this influence was direct in the two decades following World War II, it became indirect through the mortgagee guarantee system. Regulators have managed to set sound securitisation rules, which put this instrument along others in providing long-term sources of funds to the HFS.

The private sector is dominated by limited number of players comprised of national banks.

The available products are well standardised. The Canadian housing finance market is national where lending conditions and mortgage products are similar across the country.

This makes supervision more efficient and effective. There is a strong federal government role, which manifests itself through regulation and mortgage insurance, which is based on rigorous eligibility criteria and robust underwriting criteria which are set by law and enforced by regulators.

The dependence on mortgage insurance fostered standardisation of underwriting criteria, lowered cost of borrowing and assisted financial institutions in managing their risks.

The strong and dynamic housing sector has backed the housing finance sector by keeping supply flowing to minimise risk of bubbles caused by demand not being met by supply.

There is no tax relief as in the United States which cost US treasury billions of dollars while fuelling demand for housing.

In terms of culture, the conservative borrowing culture is supporting the system well with the FICO score objectively measuring credit rating of individuals.

3.1.7.1.3 Germany

Germany is a parliamentary republic in west central Europe. The country consists of 16 states and covers an area of 357,021 square kilometres. With 81.8 million inhabitants, Germany is the most populous member state in the European Union. It is the major economic and political power of the European continent and a historic leader in many theoretical and technical fields.

German housing finance system is characterised by a track record of 200 years of stability, very stable mortgage bonds which covered 19.2% of the outstanding residential lending in 2011 and moderate homeownership, which was 43.2% in 2011 compared with European average of 68.9%.

Germany has the world's fourth largest economy in terms of GDP. The country has developed a very high standard of living and features a comprehensive system of social security. In 2012, GDP was $3.197 trillion in terms of PPP while GDP per capita was $39,028.At the end of 2011, the total residential mortgage outstanding amounted to 46.5% of German GDP (Hypostat, 2011), compared with European ration of 51.7% of residential mortgage debt to GDP.

The following figure presents the number of building permits and housing completions in Germany over the period 2001–2011:

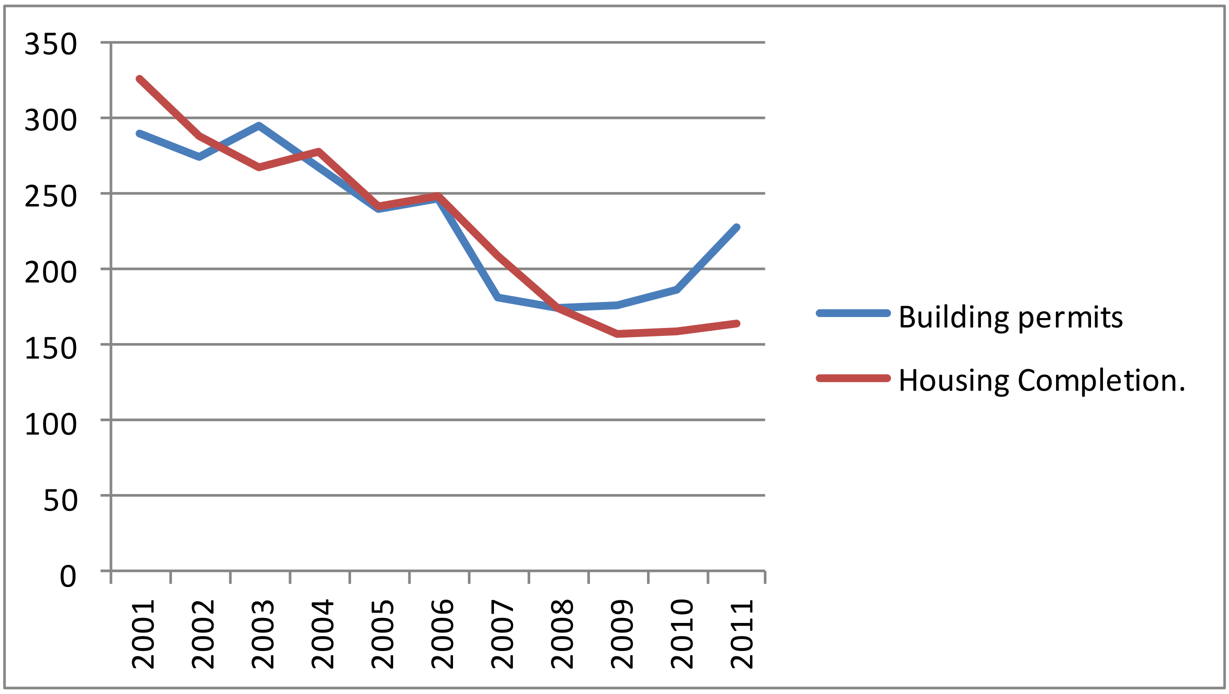


Figure 3-3: Building permits and housing completion in Germany, 2001–2011

The following figure presents the house price index and total mortgage debt as percentage of GDP in Germany over the period 2001–2011:

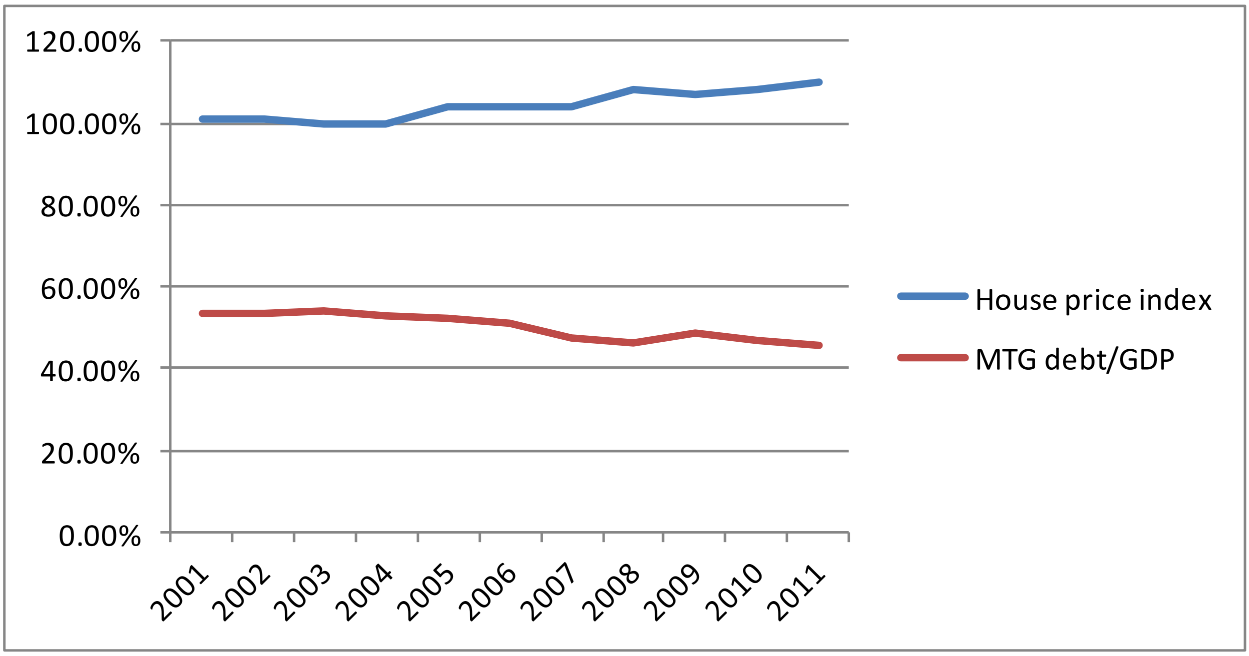


Figure 3-4: House price index and mortgage debt to GDP in Germany, 2001–2011

a. Housing Sector

The current global housing market crisis has left Germany largely unaffected. Germany's housing market is an outlier in two aspects. The first is homeownership, which is low despite the country being among the wealthiest in world. The second aspect is that house prices have fallen for the most of the last 15 years, after witnessing years of descent after the unification of what used to be West and East Germany. The massive residential building programs after the World War II which aimed at bridging the 6 million housing gap by providing housing geared towards the rental market left its footprint on the housing market (Bardhan et al., 2012). In terms of affordability, the average house price–to–income multiple, ratio of the average house price to net household income, was 5 to 6:1 in 2009 .

b. Housing Finance

The main characteristic of the German housing finance system is the reliance on specialised banks (mortgage banks, Bauspakrkassen), regulation and strong supervision of financial institutions in general and mortgage banks specifically.

Players: The system has two types of specialised institutions. The first one is the mortgage banks (Hypothekenbanken) while the second is building societies (Bausparkassen). The rationale for the creation of mortgage banks is to build stable banks that can be supervised more easily than universal banks, to give banks incentive to grant mortgage loans and eventually to channel private savings into the housing market.

The German banking sector has managed to show relative stability during the global financial crisis. There is a wide range of private, cooperative, public banks, Bausparkassen and insurance companies which provide mortgage lending. The following is a list of financial institutions that provide residential mortgage lending along with their market share:

Institution	**Market Share%**
Mortgage Banks	23
Regional Banks	9
Big Banks	6
Landesbanken	8
Saving Banks	27
Cooperative Banks	15
Building Societies	10
Specialised Credit Institutions	3

Table 3-15: Market Share of Different Financial Institutions

Supervision: The Federal Financial Supervisory Authority regulates banking practices in Germany. There are different distribution channels available for consumers, branch networks, intermediaries and e-commerce.

Products: In terms of products, the housing finance in Germany is characterised by long-term financial arrangements. There is a standard product range with most lenders competing on price and convenience. There are various types of products, annuity mortgage, redemption-free mortgage loans, contract saving scheme, capital and risk life insurance contracts.

The usual maximal loan-to-value (LTV) ratio amounts to 80%. Yet mortgages exceeding an LTV ratio of more than 60% (the legal limit for a first lien) are offered by most banks only at the price of an interest increase. This is because mortgages with an LTV of less than 60% can be refinanced at better conditions by the bank. However, Bausparkassen can hypothecate up to an LTV of 80% at favourable conditions, and their loans are usually placed as second-lien mortgages so that it can be conveniently combined with a first-lien mortgage. Hence, housing finance in Germany is typically made up of three elements: (1) equity that the customer has at their disposal (20%–30%), (2) a mortgage provided by a (mortgage) bank (50%–60%), and (3) a loan provided by a Bausparkasse (20%–30%). The average LTV ratio is around 70%, and 60% of the loans are fixed-interest loans (i.e., fixed for more than five years).

Mortgage loans have an original maturity of 25–30 years. There are standard mortgage loans with an initial fixed period of 5–10 years accounting for 39% of the gross lending. There is also a floating or a fixed interest rate, usually over 5 or 10 years; after that, interest rate conditions are renegotiated.

Long-term fixed-rate reset mortgages dominate the market while variable mortgages only account for a small proportion. An active forward-rate market allows borrowers to lock-in rates up to three years before reset.

One of the characteristic features of the German financing system for housing is the cooperation between several types of institutions to offer such 'all-in-one' package. Usually, a bank, a Bausparkasse, a mortgage bank and an insurance company are often united in one group of such institutions or have concluded an agreement for regular cooperation. This cooperation combines various elements regarding the available methods and financing institutions, while the customer is at the same time only involved in one very simple procedure. Such a package comprises, for instance, a share of 35%–40% of the 'appropriate costs' of a house in the form of a fixed interest rate loan, which is refinanced via the capital market through the issuance of mortgage bonds. A further share of 25%–30% is financed by the Bausparkassen. The remaining funds are provided by the saver's own capital (including savings accumulated by him in the funds of a Bausparkasse). The state encourages the accumulation of capital by granting bonuses or tax advantages to building savers. The beneficiary may receive up to 10% of the savings accumulated annually up to a certain cap. The encouragement of contractual saving provides the builder or buyer not only with a much sounder but also a cheaper method of financing, Bausparsystem (Shaefer and Zehnder, 1992).

Bausparkassen offer a specialised product. It is a 'contractual saving scheme' whereby the financial institutions take midterm savings and lend them as long-term loans. This system is conducive to the supply of long-term funding and the capacity of lenders to lower credit risk. The government grants bonus for these schemes. The saving period is at least seven years to be eligible for government bonus. The saving period gives the best input for credit records about savers and borrowers (Institute of Economic Research and Policy Consulting – Ukraine, 2003).

Funding: Bonds, or Pfandbriefe, play an important role in German mortgage funding. At the end of 2010, Mortgage Pfandbriefe funding accounted for more than €228 billion. In 2010, banks issued about €87 billion of new Pfandbriefe of which €45 billion is Mortgage Pfandbriefe. In terms of the whole German fixed-income market, Pfandbriefe had a market share of almost one-fifth of the total outstanding mortgage lending.

The strict German Pfandbrief Act limits the funding through Pfandbriefe to only 60% loan-to-value (LTV). There are also other funding instruments available which are mainly based on general balance sheet funding such as deposits of customers, unsecured bank bonds and special-purpose savings deposits (Bausparkassen). MBS only plays a marginal role with regard to the funding of residential mortgage loans (RMBS) because of the financial market crisis, they disappeared from the German fixed-income market.

The German government supports homeownership by paying Bauspar customers on Bauspar deposits a maximum government premium of €45.06 (married customers €90.11) per annum. Furthermore, the state-owned bank KfW offers subsidised mortgages (Housing Finance Network). Mortgage banks and bonds in Germany are subject to the following principles: The first is the cover principle whereby a mortgage bond has to be covered at all times by a mortgage loan at least equal to the nominal value of all outstanding issues and yielding at least an equal interest yield. The second one is the matching principle, whereby assets and liabilities which secure loans are specifically matched to the financing of bonds.

The mortgages must be recorded by the bank individually in a register. Securities refer to them individually (Institute of Economic Research and Policy Consulting – Ukraine, 2003).

c. Demographic and Cultural Facts

The German system is characterised by a low homeownership rate and an outstanding mortgage loan to GDP lower than the European average. Germany faces significant demographic challenges to sustained long-term growth. Low fertility rates and declining net immigration are increasing pressure on the country's social welfare system and necessitate structural reforms. The low homeownership rate and the declining population alleviate the pressure on the housing finance system.

d. Discussion and Analysis

The success of the German model reflects the economic and social structure of Germany and the contribution of the different players, public and private. The role of the state is to ensure the functional capability of the housing market and affordability of mortgage finance. Sound regulation, supervision by regulators and underwriting criteria supported by credit history of the borrowers through the saving scheme contribute to the success of the system.

In terms of players as well, the advantages of specialised banking principle can be seen in its transparency, safety and stability, homogeneity, and liquidity. Bausparkassen is based on a self-contained financial system whereby savers are amalgamated to form a self-help community. This system is independent of the capital market and interest rate fluctuation.

In terms of products, the main product is contractual saving. The syndication process in which different institutions mobilise along with the state to provide housing finance is also another feature in which several institutions participate to provide market needs.

Sound and conservative borrowing culture supports the system in addition to low homeownership, which is one of the lowest in developed countries, and keeps the system in check. The presence of a strong supply of rental housing supports the system and alleviates the pressure of demand driven by housing need.

The Germany system offer many best practices which could be adopted by MENA countries in terms of the role of the players, diversity of products, the integration in the roles of the financial institutions to serve the market. The system reflects the sound role of the state and society.

3.1.7.1.4 Denmark

Denmark is a constitutional monarchy in the Scandinavian region of Europe. It occupies an area of 43,094 square kilometres. With a population of 5.6 million, Denmark ranks as having the world's highest social mobility, the highest level of income equality, and has one of the world's highest per capita income. For 2013, Denmark is listed 15th on the Human Development Index.

Denmark is a small open economy characterised by stable growth and low unemployment and a social welfare system. In 2011, Denmark's GDP amounted to €206 billion, and GDP per inhabitant (in PPP terms) was about €37,152. During the past five years, the Danish economy has had an average growth rate of 2.3%. Unemployment rate was 8% in 2012, inflation 2.8% and income per capita $37,152 (The Heritage Foundation, 2012).

The Danish mortgage system was established at the end of the 18th century to satisfy the vast demand for housing finance, which arose after the great fire of 1795 (Pannell, 2003). The system was copied from Germany as a result of capital shortage for long-term loans for housing; the conversion of property into liquid funds was restrained by weak legislation and regionally fragmented capital markets. In addition, central and local government finances were not in a position to support housing (UN, 2005).

The basic idea was and still is to safeguard investors' interests through investments based on pooled mortgages rather than a single mortgage (Pannell, 2003).

Currently, the residential mortgage debt–to–GDP ratio is 103.7%. This ratio has seen an impressive growth over the last five years, being 85% in 2005. While 2009 has been the year with the lowest level of activity in the housing market since 2004, the low interest rates led to an increase in remortgaging; this reached levels similar to those observed in 2005. The total value of outstanding residential mortgage loans in Denmark is DKK 1.7 trillion (€231.2 billion), a figure which has been rising over the last five years. At the same time, the total number of new loans has approximately halved since 2005 to 291,659 in 2009, and the representative interest rate on new mortgage loans has fallen to 5.2%, close to 2006 levels.

The total outstanding residential mortgage market in Denmark amounted to €299 billion, which represented 100.9% of the GDP in 2011. Mortgage debt per capita was €43,520 in 2011.

The following figure presents the growth in number of building permits and housing completion in Denmark over the period 2001–2011:

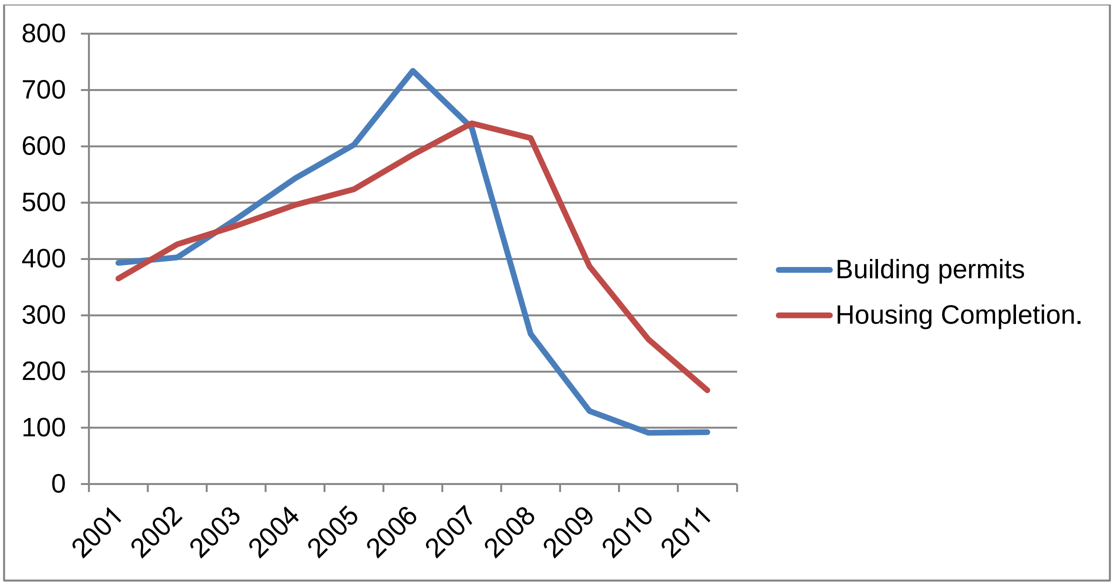


Figure 3-5: Building permits and housing completion in Denmark, 2001–2011

The following figure presents the house price index and total mortgage debt as percentage of GDP over the period 2001–2011:

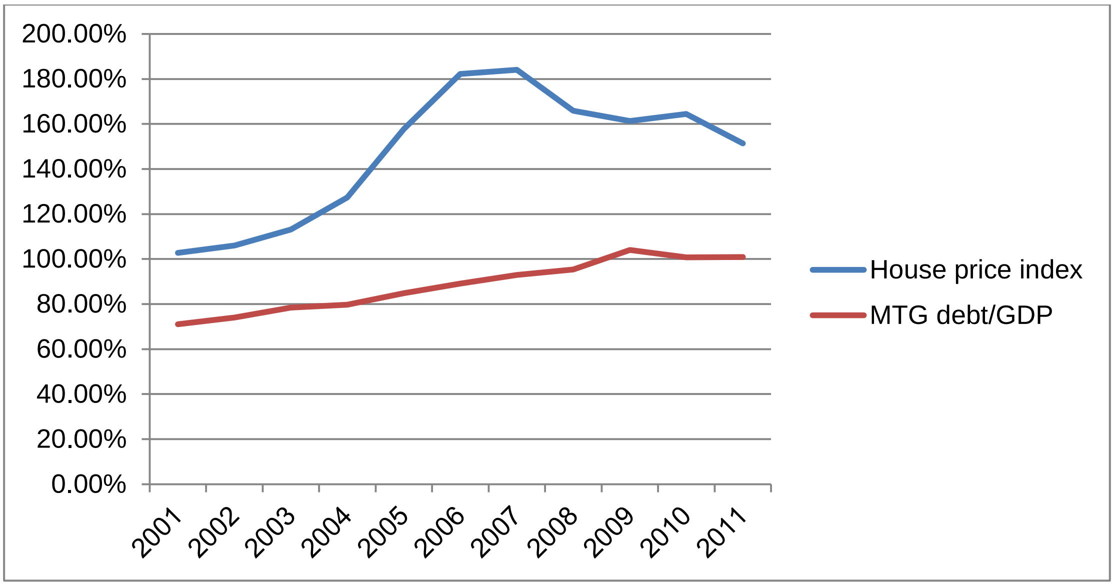


Figure 3-6: Housing price index–mortgage debt/GDP in Denmark, 2001–2011

a. Housing Sector

There are approximately 2.7 million dwellings in Denmark. The rate of housing starts, which was very high in the mid-2000s (34,460), has faced a steady decline over the past five years. This same pattern has been observed in the number of building permits issued. A little more than half of the dwellings in Denmark are owner-occupied (53.7%). Therefore, the rental sector is quite developed in the country. While the proportion of dwellings rented from private landlords is 21.1%, the proportion rented from government or social landlords is actually 22.6% (Denmark Factsheet). This indicates that an important section of the dwellings is dedicated to those most in need where intervention comes not only from the government but also from mortgage banks, which finance social housing on a regular basis as well.

b. Housing Finance

The mortgage finance system is considered a model in terms of its depth, stability and efficiency. It is dominated by specialised mortgage lenders which cover approximately 90% of the market. These specialised lenders were established as association of borrowers and then evolved into financial institutions. These institutions introduced an intermediary between the individual debtor (or owner of property) and the creditor (or investor). This intermediary was an association of borrowers who all accepted joint liability for each other's loans. The acceptance of this mutual solidarity heightened the creditworthiness of every borrower. The association of borrowers could pool the credit demands of the individual borrowers and issue bonds to the investors to refinance the loans. These bonds were covered by the mortgages of the individual debtors and a mutual solidarity pledge of all debtors. In addition, these associations were able to accumulate their own funds, which served as a cover for their issuance of bonds. Gradually, they transformed themselves into mortgage banks (UN, 2005).

The most important element in the development of the Danish system was the introduction of a comprehensive mortgage system so that borrowers did not have to raise loans from several mortgage institutions (Realkreditadet, 1999).

Mortgage lending is regulated by the Financial Business Act and the Act on Mortgage Credit Loans and Mortgage Credit Bonds. However, it is expected that, following the economic crisis, new regulation will be introduced.

The legal framework has many elements (LTV, valuation rules), but there is the so-called balanced principle under which mortgage banks grant loans against mortgage on real property by issuing covered bonds. This principle actually eliminates the mortgage lender's funding risk and is the central pillar of the Danish system for mortgage finance. The purpose of the balance principle is to control and limit the financial risks of credit institutions caused by differences (imbalances) between interest and principal payments from borrowers to credit institutions on the one hand and interest payments and redemptions from credit institutions to bondholders on the other. A credit institution's choice of bond type for the funding of mortgage loans has no bearing on its risk management and thereby only a minor bearing on the product range. In the event of imbalances in the payment flow, mortgage banks assume a risk that may be reduced by adhering to a balance principle.

Thus, mortgage banks act as intermediary between payments to/from borrowers and payments to/from bond investors. By definition, a balance principle is a means of managing and limiting the financial risks incurred by credit institutions as a result of imbalances between payments from borrowers and payments to bondholders. Consequently, the balance principle defines the scope for product development by credit institutions. In a wide setting, credit institutions may design more individualised products, but this also implies greater reliance on efficient financial markets.

The balance principle therefore limits the risks a credit institution may assume as imbalances may entail a number of financial risks to the credit institution:

1. Interest rate risk caused by differences between interest rates on loans and bonds.
2. Foreign exchange risk caused by differences in the currency denomination of loans and bonds.
3. Option risk caused by differences in conditional loan and bond payments (e.g., interest rate caps or prepayment options).
4. Liquidity risk caused by payments to bondholders falling due before payments from borrowers.
5. Refinancing risk caused by differences between the terms for the new bonds issued for continued funding of existing loans (refinancing) and the continuing loan terms.

The Danish system offers a particularly wide range of mortgage products. These include variable rates, capped rates, a full spectrum of fixed rates, euro-denominated loans and equity release mortgages. Irrespective of the type of mortgage, the Danish system deliberately makes it easy for borrowers to refinance their mortgages. With callable fixed-rate mortgages, the borrower may redeem his/her mortgage by repaying the loan at par.

Mortgage loans for social and affordable housing are currently publicly guaranteed, and their interest and instalment payments are subsidised by the authorities, as are low income families' rents. However, more generally, all mortgage loan interest payments, which include all payments and not just the mortgage interests, are deductible in the taxable income of the borrower in Denmark.

The mortgage banks cover more than 90% of all credits to the housing sector in Denmark. The main products they offer are fixed-rate loans up to 30 years, adjustable-rate mortgages and floating-rate loans, with or without interest rate caps (IUHF, 2010). The commercial banks and the savings banks provide bridging finance for the purchase of housing and for projects under construction, but once a new owner is registered in the public register, and once the value of a new project has been assessed, the owner will turn to the mortgage bank for permanent financing, since the costs are lower than for bank credits. The mortgage banks also play an important role as a source of finance for fixed enterprise investments. Their position in the market is supported by the fact that the structure of private enterprise in Denmark is dominated by small and medium-sized enterprises. Unlike bigger companies, they cannot issue corporate bonds and instead rely on funding of their fixed assets through mortgage credits (UN, 2005).

In 2009, 80% of homeowners who took out new loans chose adjustable-rate mechanisms (ARM) instead of fixed-rate loan, making the variable rate mortgage loans the most common type of loans in Denmark.

Mortgage banks in Denmark completely finance their lending activities with covered bonds secured by the mortgage. The Danish mortgage bonds are supported by extremely strong legal framework and strong supervision of mortgage banks by the Danish Supervisory Authority to ensure low risk for investors (Pannell, 2003).

The Danish mortgage bond market is one of the largest in the world, both in absolute terms and relative to the size of the economy with the largest issuance of covered bonds against mortgages on real property in Europe. This sets Denmark apart from what is usual in other parts of the Western world. It is more than four times larger than the Danish government bond market – and mortgage bank lending exceeds commercial bank lending. The market value of all Danish outstanding mortgage bonds (traditional mortgage bonds, covered bonds and covered mortgage bonds) exceeds €310 billion. The market value also exceeds the total Danish GDP (Realkreditradet, 1999).

In cases of default, mortgage banks generally try to assist borrowers by postponing payments, refinancing or reaching agreements of mortgage forbearance or sale of property. Only when no solutions are found does a forced sale procedure start at the enforcement court, which typically takes no more than six months. If, following the enforcement court's decision, the mortgage bank takes over the property, it tries to resell the property as soon as it is possible so as to return it to the market.

c. Demographic and Cultural Facts

In 2004, Denmark had a total population of 5.4 million, equivalent to 0.08% of the total world population.

The Danish population has been steadily increasing at average rate of 0.4% over the period 1994 -2004 thanks to the net migration. The largest group is aged between 21 and 44 years (29.5%), closely followed by those aged between 45 and 64 (27.1%) and the under-21 group (26.7%). The housing tenure is medium whereby a little more than half the population are owner-occupied (53.7%) (IUHF, Denmark Factsheet - 2005).

d. Discussion and Analysis

The Danish system is based on solid social and economic foundations. The system started after a major crisis, the Great Fire of Copenhagen of 1795 which destroyed the city. This means that crisis could lead to creative solutions. The system is very efficient; this is manifested in the spread, difference, between the cost of deposits and the lending rate. In terms of players, the government has initiated the system and continues to support through regulation and economic stability. The private sector players are responsible lenders offering a quite efficient cost of borrowing. Major private players have wide public ownership which further dedicates the social aspect of the system.

Specialisation facilitates supervision and efficiency. The balancing principle led to the development of what is considered to be a very successful bond market. Diversity of products caters to the needs of the different market segments. Because of its efficiency, the social aspect of the mortgage banks, the system is affordable to people. The system is highly dependent, more than 90%, on the secondary market without single failure for over 200 years.

In cases of default, mortgage banks generally try to assist borrowers by postponing payments, refinancing or reaching agreements of mortgage forbearance or sale of property.

3.1.7.2 Debacle Cases

3.1.7.2.1 Ireland

Ireland is a republic in west Europe with total area of 70,273 square kilometres occupying five-sixths of the island of Ireland in the North Atlantic Ocean, west of Great Britain. The Irish population is 4,722,028 (2011 estimate). Ireland ranked among the worst countries affected by the global financial crisis in terms of its impact on its aggregate output. The cumulative nominal GDP declined by 21% from its peak in Q4 2007 to the trough of Q3 2010. The Irish government had to intervene to bail out the banking sector and guarantee its deposits, estimated to be €400 billion, and nationalise one bank. The EU and IMF had to extend a package of €67 billion to bail out the Irish economy. The main factor behind these developments has been the devastating boom-bust cycle in the Irish property market and the collapse of the housing finance system. This makes the Irish case very important for the development or reform of any housing finance system.

Ireland is a small, modern, trade-dependent economy. Its GDP was €166 billion in 2011 while GDP per capita was €34,615. GDP growth averaged 6% in 1995–2007. Unemployment rate in 2011 was 14.4% compared with the European rate of 9.7%, and inflation was 1.2% compared with the European rate of 3.1% (Hypostat, 2011).

Ireland entered into a recession in 2008 for the first time in more than a decade, with the subsequent collapse of its domestic property and construction markets. Public debt went up from 44% in 2008 to 113% of the GDP in 2012 after the global financial crisis and the crash in the property and housing finance system. In the wake of the collapse of the construction sector and the downturn in consumer spending and business investment, the government had to take austerity measures to contain the budget deficit and the growing public debt. In 2009, in continued efforts to stabilise the banking sector, the Irish government established the National Asset Management Agency (NAMA) to cleanse bank balance sheets by transferring development related loans to NAMA.

a. Housing Sector

The past 15 years have been an extreme cycle in the Irish housing market. The cycle, however, has had three distinct phases. Property prices rose more rapidly in Ireland in the decade up to 2007 than in any other developed economy. The house price index went up from 109 in 1994 to 373 in 2004 with an average annual growth rate of 12.86%. Since their 2007 peak, average house prices have fallen 47%. The initial period of house price appreciation in the 1990s can be largely justified in terms of strong economic fundamentals concerned with what was called the Celtic Tiger economy. Furthermore, demographic and cultural factors added to the increased demand while supply constraints added to the rises of prices observed. The second phase, from 2001 to 2006, displayed quite different dynamics. The price increases were not supported by the extent of the economic growth. The primary driving force during this period was liberalisation in the mortgage market. During the second phase, not only were households becoming increasingly indebted with respect to housing, but they were extremely reliant on the market with respect to their wealth as well. Both banks and the government became remarkably reliant on the housing sector in terms of their revenue (Bardhan, Edelstein, Kroll, , 2012).

Since 1946, housing stock has risen steadily, with growth in new house completions at record levels year on year since 1994 in response to a sudden increase in demand due to demographic and economic growth. The annual rate of growth peaked at 25% in 1994, falling to 5% in 2001 and rising again to 12% in 2004. The volume of housing units completed in 2004 was just under 77,000 (a 12% growth rate) and it rose again by 5% in 2005 to 81,000 units.

When average annual household formation levels and the average annual new house completions over the past number of years are compared, it is clear that more houses were built than were needed to cater to new households alone. There are no official data available, but market estimates are that 50% of new houses built in recent years were to satisfy demographic demand, 20% for second dwellings, 20% for residential investment and 10% was a combination of pent-up new migrant and obsolescence demand.

b. Housing Finance

Banks and building societies have been the main players in the housing finance system in Ireland. The Central Bank Reform Act 2010 created a new single unitary body – the Central Bank of Ireland – responsible for both central banking and financial regulation. The new structure replaced the previous related entities, the Central Bank and the Financial Services Authority of Ireland and the Financial Regulator. Housing finance witnessed unprecedented growth between 1994 and 2004 whereby the residential mortgage outstanding went up from €10.5 billion to €77 billion, which is more than a sevenfold growth.

Mortgage interest rates steadily decreased between 1994 and 2004 from 7.2% to 3.2% in 2004. The annual net lending against residential property went up from €1.2 billion in 1994 to €17.7 billion.

In response to strong and pent-up first-time-buyer demand in the late 1990s, the Irish government removed tax relief for loan interest payments for investors in 2000 which dampened demand for new investors in the market. Year-on-year growth in residential mortgage credit fell from 25% in June 2000, to 21% in June 2001 and 18% in December 2001. This policy was reversed in 2002 with consequential increase in house price inflation as new investors swelled demand. Since then, the rate of growth in mortgage credit has increased steadily to annual average growth of 26% in 2005, almost double the annual average growth rate of 13.6% a decade ago. 100% LTV mortgages were made available for a specific segment of the first-time-buyer market in July 2005. The value of the Irish mortgage market was €99 billion at the end of 2005, including securitisations of €4.76 billion (IUHF, Ireland Factsheet, 2006).

In the 1995–2006 Celtic Tiger period of growth, development capital was raised in the interbank market, typically on a three-month basis, but with repayment not expected until two or three years later. Inadequate and/or lax supervision of the Irish banking system had allowed excessive borrowing by the Irish banks on the corporate and international money markets. Much of the capital invested in Irish banks was from abroad with German banks having placed over $200 billion in total.

At end-December 2012, there were 792,096 private residential mortgage accounts for principal dwellings held in Ireland, to a value of €110.8 billion. Of this total stock of accounts, 94,488, or 11.9%, were in arrears of more than 90 days. The outstanding balance on mortgage accounts in arrears of more than 90 days was €17.5 billion at end-December, equivalent to 15.8% of the total outstanding balance on all mortgage accounts.

The government depended on revenue from property taxes. The main sources of revenue related to property were stamp duty tax, capital gain tax and VAT. The average annual growth rates for these three sources were 19.4%, 32.3% and 10.6%, respectively, but in addition, after 2003 they accounted for an excess of 40% of all revenue. According to Addison-Smyth and McQuinn (2009) at the peak of the market in 2006, stamp duty in total accounted for 8.2% of government revenue, and the residential market accounted for 80% of that figure (Addison-Smyth and McQuinn , 2009).

The following figure presents the growth in number of building permits and housing completion in Ireland over the period 2001–2011:

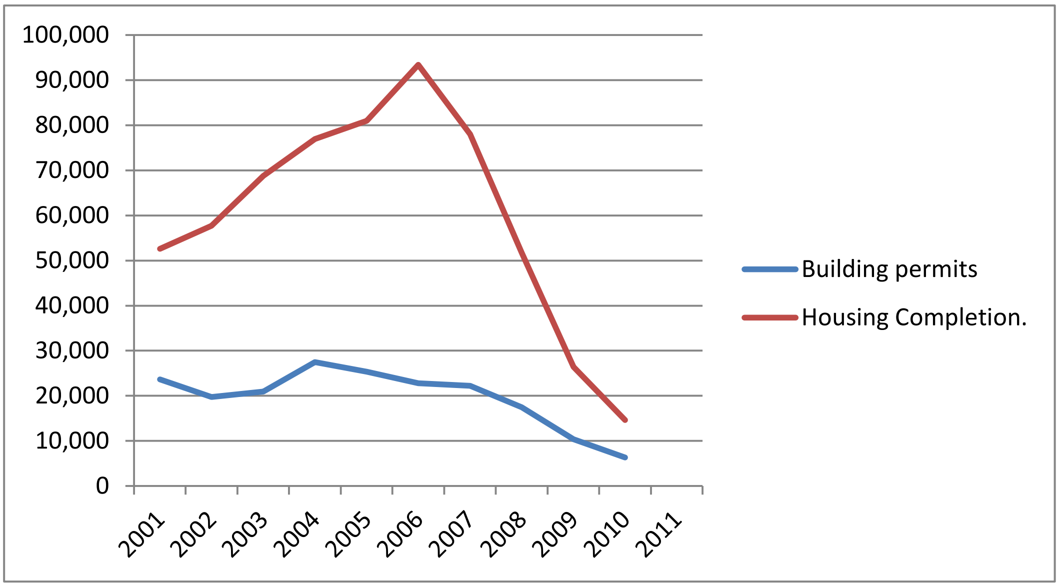


Figure 3-7: Building permits and housing completions, 2001–2011

The following figure presents the house price index and total mortgage debt as percentage of GDP in Ireland over the period 2001–2011:

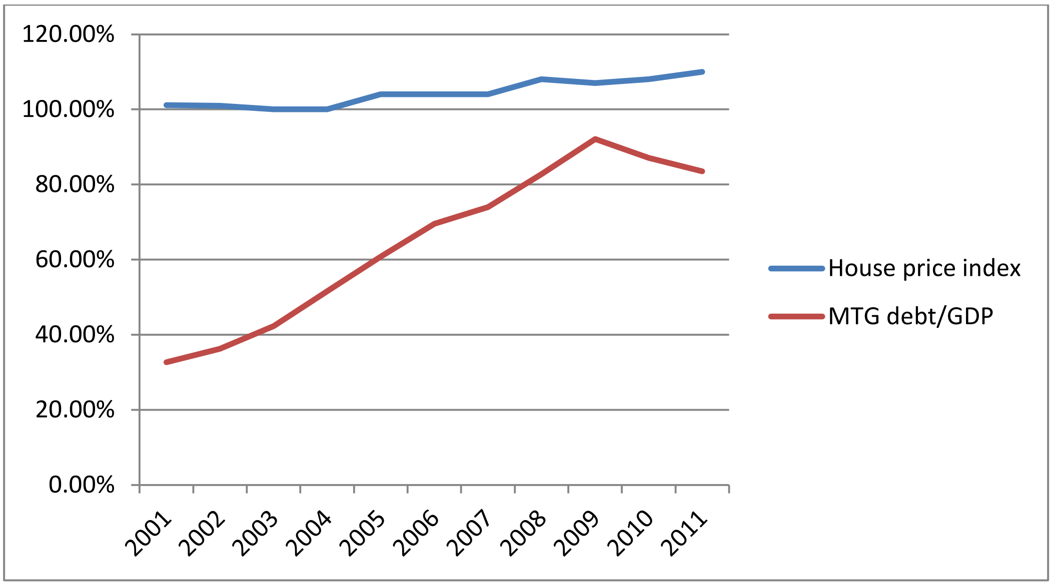


Figure 3-8: Housing price index and mortgage debt–to–GDP ratio, 2001–2011

c. Demographic and Cultural Facts

The Irish people's desire to have their own home is evidenced by the homeownership rate, which remains very high, with over 75% of private dwellings being owner-occupied in 2003 despite an increase in the level of private dwellings purchased for residential investment purposes and as second dwellings. At that time, the level of private renting in Ireland was the second lowest in the EU at only 8% of dwellings. Rental levels increased to 11% of total private dwellings by 2002.

In addition to the homeownership factor, one of the key drivers of the housing market was the bulge in the population in the household formation age group (between 25 and 34 years). This results from a combination of a natural increase (excess of births over deaths) and positive net migration into Ireland. The impact of the change in the population structure is reflected in significant increases in house market activity.

A national survey commissioned by the Irish Association of Pension Funds (IAPF) and conducted by Red C Research has identified general gaps in the Irish public's understanding of basic personal finance issues. The findings of the Irish survey overall signalled a need for further education of key personal finance issues on a national basis. In the survey, three questions were asked of participants, and in total, just 3 in 10 (31%) Irish adults answered all the questions correctly, and 53% answered two of the questions correctly. When compared with other worldwide counterparts, Ireland's results were noticeably below average, on most measures –53% of Germans got all questions correct, and Japanese and American participants scored slightly poorer than the Irish at just 27% and 30%, respectively.

d. Discussion and Analysis

All players, whether public or private, have been responsible for the crisis. The government policy used property and housing finance to generate revenue to finance its budget, with almost 8% of government revenue coming from taxes in the form of VAT on sale of property. This highlights the importance of the role of government and the rigorous discipline in fiscal policy. Monetary policy allowed low interest rates over the second cycle in the housing sector.

There are several causes for the crisis, among which is the lack of financial regulation, which should always set the rules for quality primary market and secondary market as well. The property boom was financed through aggressive lending by the Irish banking system using the interbank market, typically in three months' basis with repayment not expected in two to three years.

There is also a lack of proper underwriting criteria which should be based on borrower ability to repay rather than expected appreciation in housing prices. 100% LTV is available to a specific market segment.

The sources of funds for housing finance were from interbank and external deposits. Most of this borrowing was re-cycled by the banks into property loans. This, in turn, led to a massive increase in the price of Irish property assets.

A strong desire for homeownership, supported by lax banking regulations and the need for housing, has been among the main root causes of the crisis. The findings of the Irish survey overall signalled a need for further education on key personal finance issues on a national basis.

3.1.7.2.2 Spain

Spain is the world's 14th largest economy by nominal GDP. Its population in 2011 stood at 47,150,819 inhabitants. Spain fell into an economic downturn in 2008 because of the collapse of its housing market, and economic conditions worsened when it became clear how entrenched the country's unregulated saving banks were in the real estate market (Harrington, 2011). The bubble imploded in 2008, causing the collapse of Spain's large property-related and construction sectors, causing mass layoffs and the decline of domestic demand for goods and services. As of April 27, 2013, the crisis had led to around 5.6 million unemployed people. In four of the country's autonomous regions, the jobless rate is over 30%, and across the country, 52% of under-25s are out of work, leaving 1.72 million households without a single member employed (Burgen, 2012).

At first, Spain's banks and financial services avoided the early crisis of their counterparts in the United States and the UK. However, as the recession deepened and property prices slid, the growing bad debts of the smaller regional savings banks, the cajas (regional savings banks under the oversight of the regional governments), forced the intervention of Spain's central bank and government through a stabilisation and consolidation programme, taking over or consolidating regional cajas and finally receiving a bank bailout from the European Central Bank in 2012.

The crisis left Spain a country with a million unsold properties; hundreds of housing developments were left unfinished by construction companies and real estate promoters. Like the United States and Ireland, it started with a fondness for real estate speculation and a belief that property values would never cease to rise. The euro was an incentive for foreign investors eager for a piece of the cake.

a. Key Economic and Mortgage Facts

The economy of Spain is the 14th largest economy in the world, the fifth largest in the European Union and the fourth largest in the Eurozone, based on nominal GDP comparisons. The total outstanding mortgage market in Spain amounts to €1,044 billion, 64.3% of which is residential mortgage lending. Spain GDP was $1,151 billion in 2009, $1,242 billion in 2010 and $1,321 billion in 2011 (IMF, 2014).

In terms of GDP, at the end of 2011, total mortgage outstanding loans amounted to 97% of Spanish GDP (Hypostat, 2011), while residential mortgages outstanding amounted to 62% of the GDP. Most mortgage loans are subscribed at variable rates referenced to the 12-month Euro Interbank Offered Rate, which is strongly linked to the European Central Bank overnight rate.

The following figure presents the growth in number of building permits and housing completion in Spain over the period 2001–2011:

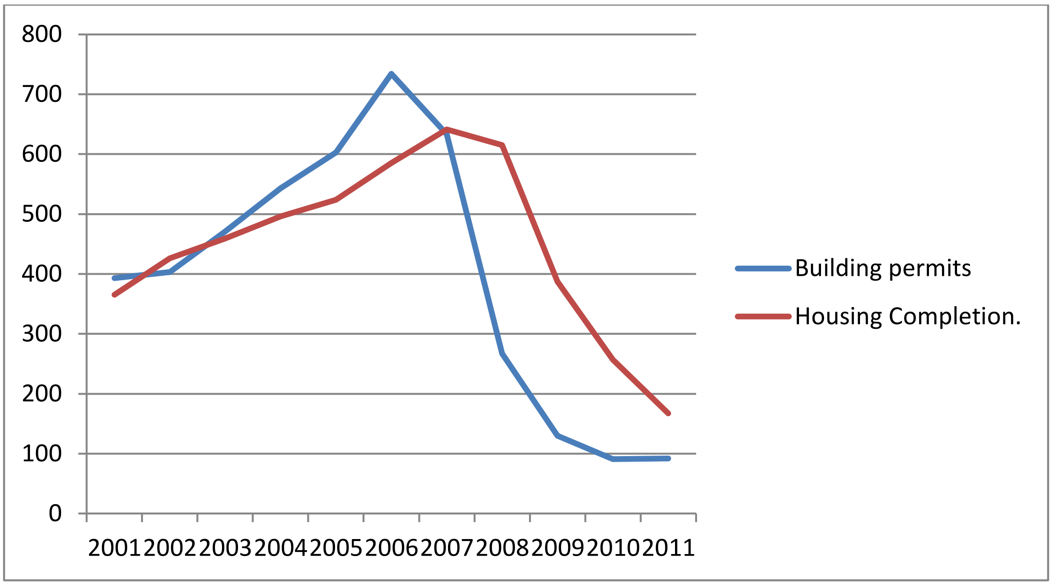


Figure 3-9: Building permits and housing completion in Spain, 2001–2011

The following figure presents the increase/decrease in house price index and total mortgage as percentage of GDP in Spain over the period 2001–2011:

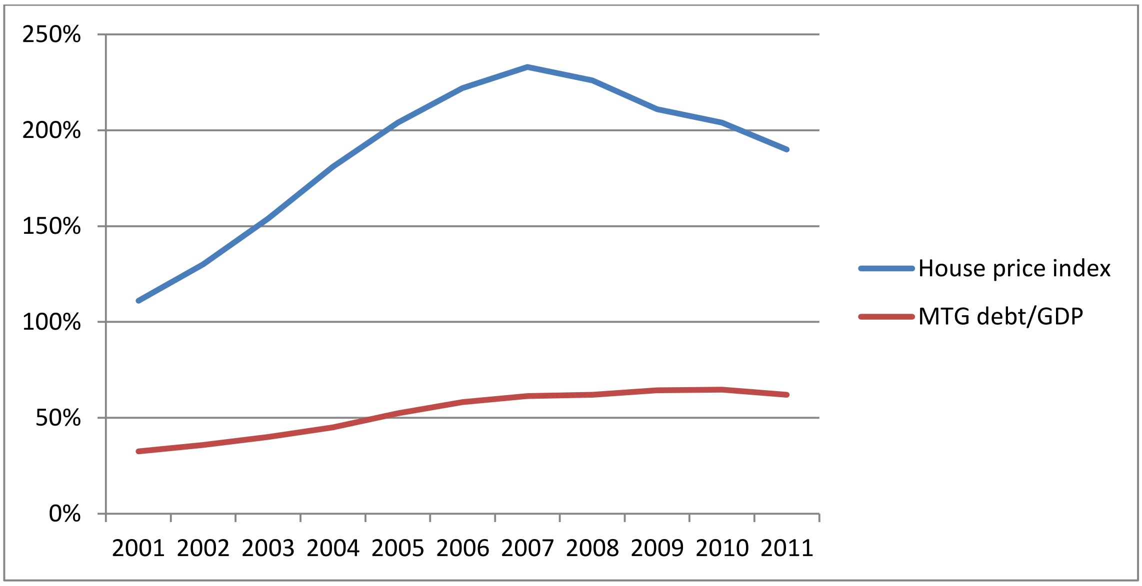


Figure 3-10: House price index and mortgage debt–to–GDP ratio in Spain, 2001–2011

b. Housing Sector

From 1995 to 2008, Spain experienced a long property cycle. During the most dynamic part of the cycle, the first eight years of this century, property prices were multiplied by 2.5, and 5 million new homes were built (almost 25% of the existing homes at 2000). During the boom years, the increase in prices translated into rises in housing market indicators, as price-to-rent ratio and the affordability index, starting from price-to-rent ratio of 16.5 at 1998, climbed to almost 32 in December 2007. The affordability index increased from 31 in 1998 to 52.6 in 2008 (Bardhan et al., 2012).

Globally and in terms of ease of doing business relating to the construction sector, Spain stands at 38, compared with the regional average of 53 for high-income countries, in the ranking of 185 economies on the ease of dealing with construction permits. The average time to get a construction permit is 182 days. Registering property value takes 13 days and costs 7.1% of the property value. Globally, Spain stands at 57 in the ranking compared with the regional average for high income of 57. Enforcing a contract takes 510 days and costs 17.2% of the value of the claim. Spain stands at 64 compared with the regional average of 36 (World Bank, 2013).

c. Housing Finance

In Spain, mortgage lending is always provided by financial institutions. These are mainly commercial banks (whose mortgage outstanding market share in 2011 was 38%), saving banks (58%) and cooperative banks (7%). The authorities in charge of the financial regulation are mainly the Bank of Spain and the Ministry of Economy. The average maturity of new mortgage loans in 2010 and 2011 was 25 years (Hypostat, 2011). However, Spanish regional savings and loan banks, called cajas, and which accounts for half of Spain's banking system, have been unregulated. There are around 24,000 branches of cajas throughout Spain to serve its 46 million residents (one branch for every 1,900 people). The UK in comparison has only 10,000 banks branches serving 62 million (one branch for every 6,200 people). Cajas are not publicly traded, and usually regional politicians control the cajas instead of shareholders.

Before the crisis, cajas often lent to those that the larger banks turned away because they were considered 'undesirable' – clients that were less likely to pay their loans. Unlike the rest of the banking system, cajas were relatively unregulated and were not required to disclose certain information such as collateral on loans, repayment history, and loan-to-value ratios. Because the cajas were not required to disclose much of their investment information to government, their continued lending to the real estate market went relatively unchecked (Harrington, 2011).

The adoption of the euro saw a marked reduction in interest rates to historic lows, down to 4% from 14% before this adoption. German banks financed Spain's savings and commercial banks, which needed the extra funds for high-risk mortgages. The growth in the Spanish property market, which had begun in 1997, accelerated and within a few years had developed into a property bubble, financed largely by the cajas and fed by the historically low interest rates and a massive growth of immigration.

The Spanish version of subprime loans was those loans given to real estate developers. For instance, the largest bankruptcy in Spanish history was of a real estate developer at €5.2 billion. At the end of 2009, the total exposure of the Spanish financial system to the real estate and construction sectors was €453 billion (Bardhan et al., 2012).

The Spanish government has been a major stakeholder in the property boom. A VAT rate of 8% is charged for the first purchase of new dwellings and 4% for new state-subsidised housing. A tax on capital transfer (TPO) of 6% to 7% is charged for second and subsequent purchases of dwellings. In the case of non-state-subsidised housing, the mortgage contract is subject to stamp duty ranging from 0% to 1%.

d. Demographic and Cultural Facts

The construction market flourished because of increased demand for housing after the government passed legislation which significantly increased the amount of land for development. As more Spaniards bought houses, more construction companies required unskilled labour, which prompted an increase in immigration to Spain's labour market. From 2000 to 2008, Spain's population grew from 40 to 45 million, and from 1999 to 2007, the Spanish economy created more than one-third of all employment in the Eurozone. As more immigrants came to Spain, more housing became necessary and the cycle continued. However, the supply in land, which was enhanced in 1998 with the new legislation, was not matched by simplifications in getting building permits.

e. Discussion and Analysis

The Spanish case is a clear example of the dysfunction of government and private sector as well. The government policy used property and housing finance to generate employment in the economy and revenue to finance its budget. This highlights the importance of rigorous discipline in macroeconomic policy in general and fiscal policy in particular. The Spanish government's tax revenue was heavily dependent on real estate.

The banking sector was underregulated, and cajas, which had a market share of more than 58% of the mortgage market, were not regulated by a financial authority but rather by regional governments. Regional politicians controlled the cajas instead of shareholders. Before the crisis, the Spanish version of subprime lending was that of cajas often lending to those that the larger banks turned away because they were considered 'undesirable' – clients that were less likely to pay their loans.

Another factor was the entry into the Eurozone, which allowed interest rates to fall from 14% to 3%–4%, led to a sharp decrease in the cost of borrowing beyond the fundamentals of the Spanish economy.

The construction market flourished because of increased demand for housing which was fuelled by easy credit at low cost. As more Spaniards bought houses, more construction companies required unskilled labour that immigrated and further fuelled demand.

3.1.7.3 Emerging Countries

In this section, we introduce two cases of emerging countries in which the government took the lead in the development of the housing and housing finance sectors. The cases of Malaysia and South Korea are quite interesting models for MENA countries. In both cases, the Government has taken the lead in the establishment and evolution of housing finance systems leading significant increase of the size of the system as evidenced by the ratio of total mortgage loans as percentage of GDP and the market penetration. This role was part of a Government led major transformation of the national economy from underdeveloped to emerging economy.

3.1.7.3.1 Malaysia

Malaysia is a federal constitutional monarchy in Southeast Asia. Th country consists of 13 states and 3 federal territories. In 2011, the total population was 28.86 million.

Malaysia stands out as a role model for MENA region countries in the housing sector and housing finance in the national economy. The role of the government was evident in the introduction of securitisation through the government-sponsored organisation Cagamas, which started as a liquidity facility and turned into a major player in the housing finance system, and having a dual financial system with Islamic and conventional banks operating in parallel offers a good experience for MENA region countries.

In the 1950s, the Malaysian Building Society was the dominant source of housing loans, offering housing loans on a term-loans basis with a fixed schedule of repayment. In 1960, it provided 97% of end finance. Commercial banks offered almost no housing credit up till the mid-1960s. The mismatch in the maturity profile of a housing loan and the deposit liability of commercial banks coupled with lack of expertise could have discouraged commercial banks from venturing in mortgage market activities. The liberation of the market and the role of the government led to a significant growth in the market and the participation of all financial institutions in the housing finance system.

a. Key Economic and Mortgage Facts

Malaysia is a relatively open state–oriented and newly industrialised market economy. The state plays a significant but declining role in guiding economic activity through macroeconomic plans. Malaysia has had one of the best economic records in Asia, with GDP growing an average 6.5% annually from 1957 to 2005. In 2011, the GDP (PPP) was about $450 billion, the 3rd largest economy in the ASEAN and 29th largest in the world. GDP per capita is $15,568. Inflation in 2011 was 3.2%. Total outstanding housing loans amounted to $94,286.75, or 33.8% at the end of 2011.

b. Housing Sector

The housing system plays a crucial role in the Malaysian economy and society. The housing market depends on strong construction companies backed by construction finance offered by the banking system and a vibrant housing finance system. House prices increased with a modest rate, with an average annual growth rate of 4% from 2000 to 2008.

c. Housing Finance

With total outstanding housing loans of $94.28 billion, which is 33.8% of the GDP, the Malaysian housing finance system stands out as role model for emerging countries or the MENA region countries. The Government has led the evolution of this system in a country of mixed population by the transformation of institutions from dependence on public funding and public ownership into market based institutions, and by establishing new institutions, such as the housing finance facility, Cagamas. The Government had achieved significant growth of the system as evidence by ratio of total mortgage loans a percentage of GDP by adopting the right mix of public housing and financial policies aimed at satisfying demand for housing by market mechanism and means.

The housing finance system evolved from being dominated by one institution, the Malaysia Building Society Bhd, whose market share went down from 97% in 1960 to 58% in 1980 to 1% in 2000 in a market-based competitive system. The system evolved as part of the national development plan of the government, which spelled out the economic and social aspects of housing finance. From 1986 to 1996, the stock of outstanding housing loans grew to an annual rate of 13%. This was significantly higher than GDP growth or inflation rates (International Housing Finance Source Book, 2000).

Historically, the building societies were the largest originators of housing finance in Malaysia during the early 1970s. Since then, commercial banks and financial companies as well as the Treasury Housing Loans Division (THLD) have emerged as major players in the housing finance market, resulting in these building societies losing their market leader positions (International Housing Finance Source Book, 2000).

The government has set up an Employees' Provident Fund, in which employees accumulate savings until their retirement. However, members can opt to withdraw part of their savings earlier for specific purposes like house ownership.

The government also established a special fund to provide guarantees to end-financiers for house purchasers without fixed incomes to avail housing loans. Though Malaysia has Cagamas, which is a housing finance agency, it does not seem to receive government subsidies (even not indirectly) as even the market's view is that Cagamas does not have a government guarantee which is consistent with the formal level of government support.

In 2011, commercial banks were the most important originators of housing loans in Malaysia (85.1%), followed by the Treasury Housing Loan Division (THLD; 10.4%) which provides (subsidised) housing loans to government employees only. The building societies which were the biggest originators until the early 1970s accounted only for a small share (around 1.7%). The ratio of mortgage debt to GDP has been growing only slowly from 27.7% in 2000 to 33.8% in 2011. However, this moderate relative growth in housing loans masks an impressive growth in absolute terms (Housing Finance Network, 2013).

CAGAMAS

Activities in mortgage securities have been dominated by the national mortgage corporation Cagamas, set up in 1988 with the objective to promote homeownership and contribute towards the development of the domestic bond market. Cagamas is owned by private commercial and investment banks (80%) and the Malaysian central bank, Bank Negara Malaysia (20%). Cagamas is not involved in origination but only in refinancing. Loans sold to Cagamas are not off balance sheet. The liquidity provided by Cagamas's securitisation facilities has made it possible for financial institutions to extend the term of housing loans from 15 to 25 or even 30 years. From 1988, Cagamas managed to increase its market share of total mortgage loans to 30% (Kusmiarso, 2006). Banks use deposits, issue unsecured debt securities and use the refinancing opportunities offered by Cagamas to fund their mortgage market activities. The housing loans of the THLD are financed by other entities in the private sector or by federal government loans. The building societies are the only financial institutions which do not resort to refinancing with Cagamas but rely almost solely on deposits. Cagamas refinances by issuing unsecured debt securities and mortgage-backed securities. The impact of Cagamas on the mortgage market has been especially high in the mid-1990s but has declined steadily. Outstanding mortgage-backed securities (issued by Cagamas) have a share of 4% on the market.

In terms of products, fixed rate, variable rate or a combination of the two is also available although the standard product is a variable rate loan with an initial fixed-interest period. Also, sharia-compliant mortgage products are readily offered by banks.

Typically, a banking institution would offer two types of mortgage loans, conventional loans and Islamic housing financing. It would also offer loans to refinance existing housing loans with other institutions to convert Islamic financing into conventional and vice versa. Under a conventional housing loan, a banking institution would offer a basic-term loan to a term loan with an overdraft facility. The normal housing loan tenure goes up to 30 years or until the borrower is 65 (Kusmiarso, 2006).

The narrow spread between the bank deposit and lending rates shows the level of competition and efficiency in the industry. Banks usually charge low rates on mortgages to attract retail. Typical LTV at origination was 70% in 2012 even though the usual maximal loan-to-value ratio can reach up to 90%. The total amount of home mortgage loans outstanding at the end of year as a percentage of the GDP was 33.8%. The total number of days needed to transfer title was 48 days (World Bank, 2012).

Malaysia has progressively developed its sharia-compliant Islamic finance industry. Launched with a small saving sector fund in 1963, the industry has grown steadily to become the third largest in the global Islamic finance industry. Islamic assets are worth $1,200 billion with an average growth rate of 20% annually (Krasicka and Nowak, 2012). Malaysia is the world's largest issuer of Islamic bonds (Sukuk).

d. Demographic and Cultural Facts

The majority of the population in Malaysia are Muslims. The urban population represents 72.7% of the total population. The percentage of owner-occupied housing was 67%. The level of development of housing finance shows that religion is not an obstacle but rather a market characteristic which should be addressed with the right supply of products. Also worth mentioning is the important role of the Chinese minority in Malaysia. It is economically important and demographically increasing. The product diversity and the presence of this minority given its economic importance helped develop an efficient dual system. This experience is of interest to MENA, where there is diversity in population especially in the Gulf states, where certain minorities play a significant role in the economy.

e. Discussion and Analysis

The role of the government in the development of the system is clear. It has intervened through three levels – policy level, regulation and establishing institutions – to develop the market and cater to the demand of the different market segments.

There is a dual banking system, conventional and sharia compliant. The government helped in establishing the securitisation market by sponsoring the establishment of a liquidity facility, Cagamas.

A strong housing sector and market contributed to the success of housing finance. Having a continuous supply of housing kept prices in the housing sector in check and reflected positively on the economy.

The growth rate in Islamic finance and the depth of the mortgage market shows that religion is not an obstacle to the development of housing finance in a country with a large Muslim majority. The Employee Provident Fund was established to cater to the needs of the special market segment.

Diversification of products and competition between banks led to an efficient pricing of housing finance and a strong supply. Banks usually count on extending housing finance to establish long-term relationships with customers targeting the promotion of retail banking products/income.

3.1.7.3.2 South Korea

South Korea, or the Republic of Korea, is a republic in East Asia constituting the southern part of the Korean Peninsula with an area of 100,210 square kilometres and a population of 50.62 million in 2015. It is a high-income country by World Bank standards. It has the fourth largest economy in Asia and the 11th largest in the world. The country is also a member of G20.

South Korea is famous for its spectacular rise in just one generation from a devastated and one of the poorest countries in the world to a developed, high-income country. The country suffered from foreign occupation for four decades, between 1910 until the closing days of the World War II. In 1948, the Korean War started as result of the Cold War between the United States and the Soviet Union, which lasted until 1953 when fighting ended. The war split the Korean Peninsula into two entities, one of them is the Republic of Korea, also known as South Korea. South Korea remains in a state of war, with no permanent peace treaty existing. The foreign occupation and the Korean War left South Korea as one of the poorest countries of the World. Korea is an exceptional example of an aid recipient turned into high-income country. According to data from Statistics Korea, the country's nominal GDP grew up from $40.9 million in 1953 to $279 billion in 1990, to $1.304 trillion in 2013 to $1.376 trillion in 2015 (Statistics Korea, 2016). GDP per capita grew from $155 in 1960 to $6,541 in 1990 to $25,972 in 2013. The economy is one of the fastest-growing developed countries in the OECD and G20.

a. Housing Sector

The total housing stock, as of 2015, was estimated at 16.37 million units in 2015, up from 10.8 million units in 1998. Urban units are 6.95 million. The housing stock has witnessed continuous growth from 9.5 million units in 1995 and 7.3 million units in 1990 with the homeownership ratio being approximately 60%.

Based on housing permits, the average annual housing production was about 621,000 during the period 1992–1996. This figure declined to 596,400 in 1997 and further declined to 306,000 in 1998. In 2015, the real estate sector was 8% of the GDP. Housing prices have steadily increased in the early part of the 1990s and a peak at the end of 1997. With economic and financial crises at hand, housing prices decreased dramatically by the end of 1998. The housing market is active with annual housing transactions reaching 829,000 in 2015 (Hofinet, 2016).

b. Housing Finance

Housing finance in South Korea is quite developed with outstanding mortgage loans reaching $427 billion in 2015, from $376 billion in 2013 and $418 billion in 2014. Total outstanding mortgages represented 31.47% of the GDP in 2013, 32.96% of the GDP in 2014 and 31.05% of the GDP in 2015. Total outstanding mortgage loans represented 41.27% of all credit outstanding in 2013, 47.79% in 2014 and 41.27% in 2015. Typical LTV was 56% in 2013 (Hofinet, 2016).

South Korea's residential mortgage securitisation increased dramatically in the first half of 2015 because of a government policy to stimulate borrowers to move to less risky mortgage instruments. In March 2015, the government of Korea allowed borrowers to switch from short-term, floating-rate housing loans to long-term, fixed-rate amortising mortgages (FRM), for a limited period of time. Encouraged by the lower interest rate environment, a large number of borrowers transferred into FRMs. The government made an initial amount of $33.5 billion available for the purchase of these FRM through the Korea Housing Finance Corporation (KHFC), a public finance company. KHFC issued more than $34 billion residential mortgage-backed securities (RMBS) in the first half of 2015, more than three times the amount it issued during the entire previous year. KHFC provides guarantees on its RMBS up to 50 times the shareholder equity, which stood at $1.56 billion as of December 2014.

Historically, the housing finance market has been largely dominated by the public sector. The National Housing Fund (NHF), the Korean Housing Bank and Kookmin Bank arranged all public funding. Life insurance companies, commercial banks and specialty finance companies provided private housing loans. These mortgages were primarily available to low- and lower-middle-income buyers with up to 40% of loan-to-value (LTV) ratios. Until 1997, the government controlled interest rates, keeping them below market and forcing the use of LTV as a rationing device (International Housing Finance Source Book, 2000).

With the lack of readily available funds and complex application processes, many of the middle- to upper-class homebuyers had to resort to making all-cash transactions, and many middle- to lower-middle-class households had to resort to rental housing through the Chonsei system. The interest rates were deregulated in 1997, and commercial banks were allowed to make mortgage loans. In addition, the Korea Housing Bank was privatised, becoming the Korea Housing & Commercial Bank (H&CB). Significant policy changes with the goal to revitalise the real estate and housing finance industries have been made since 1997.

The privatisation of the Korea Housing Bank was initially set up by the government in 1967 to provide a stable source of funds for housing. The Korea Housing Bank held over 75% market share on new housing loans in 1995. The bank was split in 1981 into two separate functions. The role of bank was increased through its proceeds from national housing bonds (Boleat, 1985).

The Korean government set in 1997 a regulatory framework for the mortgage bond market, which was aimed at providing an alternative vehicle for long-term funding. The government passed ABS and MBS laws in 1997 to permit securitisation of mortgages for the first time in Korea. In 2004, the government established the Korea Housing Finance Corporation (KHFC) as a state-run enterprise that facilitates the long-term, stable supply of housing funds and other related instruments, thereby promoting national welfare and developing the national economy. Aiming to serve as a trusted partner for low- and middle-income families, KHFC has wide-ranging housing finance operations including the supply of Bogeumjari Loan and Confirming Loan, the issuance of credit guarantees for housing finance and annuity mortgages and the securitisation of mortgage-backed claims and other instruments (Hofinet, 2016).

The government has diligently worked on the development of market-based housing finance over the decades. Starting in the 1970s, housing bonds were a major source of housing finance. These were introduced in 1973. An applicant who wanted to obtain a permit for gambling businesses, entertainment businesses and building construction, the registration of real estate and new private car purchase and various other licenses had to purchase a stipulated amount of national housing bonds. They were redeemable in five years and carried an interest rate of 5%, well below the market rate at that time. This was an indirect form of subsidies and also a sort of transfer of income, subsidisation of rented housing. In 1983, a new form of bond was introduced. Purchase of the bonds, which were for 20 years and carried a 3% rate, led to entitlement to purchase a condominium at a price fixed by the government (Boleat, 1985).

c. The Chonsei System

For more than four decades, the government has focused on the industrial development of the economy and on export-oriented industries. The government policies which controlled the interest rate and focused on the financing industrial sector led to a financial repression and underfunding of the housing sector. As result, the 'Chonsei' system was developed. The Chonsei system is a rental contract where the tenant makes an upfront deposit, amounting usually to about half of the price of the house for a one- or two-year contract. Upon termination of the rental contract, through a purchase or a move, the lump-sum amount is returned to the tenant. The Chonsei system allowed tenants to have a fixed rental contract and a determined period of tenure. The credit risk was borne by the tenants. The opportunity cost for the tenants was the interest rates, which were set and controlled by the government. For landlords, the system provided them with funding which allowed them to further invest in new projects.

d. Demographics and Culture

The population of South Korea showed robust growth since the republic's establishment in 1948 and then dramatically slowed down with the effects of its economic growth. In the first official census, taken in 1949, the total population of South Korea was 20.188 million. It grew to 21.5 million in 1955 at a growth rate of 1.1% annually. However, between 1955 and 1985, population grew annually at a rate of 2.8%, to 40.466 million in 1985. Since 1990, the population growth rate declined and stabilised at 0.99%. In 1990, 25% of population were less than 14 years old, this percentage declined to 14% in 2014. Growth accelerated between 1955 and 1966 to 29.2 million, or an annual average of 2.8%, but declined significantly during the period 1966 to 1985 to an annual average of 1.7%. The urban population grew from 14% of the population in 1949 to 65.4% in 1985. Homeownership stands at 56% of the population (Korea Statistics, 2016).

e. Discussion and Analysis

The degree of financial intermediation in general, and the housing sector in particular, is very high for a country at a stage of development as South Korea. The Korea Housing Bank has played a very significant role. In the 1980s, it financed up to 60% of all new housing units and was involved in both public and private sectors in the provision of housing for both sale and rent. Splitting its operations between unsubsidised private-sector finance, funded by deposit-taking activities, and the subsidised public sector was an excellent step in the provision of housing finance and availability of funding (Boleat, 1985).

The South Korean experience is an inspiring experience and holds quite significant lessons for many countries in MENA. The Arab Spring has led to conflicts and civil wars in several countries, which were classified by the World Bank as low-income and middle-income countries. In the aftermath of these conflicts, several MENA countries could benefit from the South Korean experience. South Korea suffered from destruction and poverty and managed to bring the housing finance sector to a leading role in the economy with total outstanding mortgage loans reaching more than 31% of the GDP.

The government's control of the interest rate and financial sector led to financial repression. The rationale of this control might be the industrialisation and development of the country while the government led the sector through public institutions. However, after the crisis of 1997, the government realised the need to change its role by setting the framework for a market-based system. It privatised the two institutions but kept leading the market through regulations. The private-sector institutions realised after the crisis the significance of retail finance and provided housing finance. The percentage of housing finance reached 41% of the total credit.

3.2 PPP Framework of Analysis

One of the aims of the comparative analysis of the cases discussed in this chapter is to develop a conceptual framework. The PPP framework presented in this section will serve as an analytical tool. It will be used to make conceptual distinctions and organize ideas about the country cases presented later in the study.

Housing finance is the extension of credit to homebuyers to finance the purchase of housing units. Housing finance could be thought of within the context of a market or as a system.

A ***market*** is defined as an actual or nominal place where forces of demand and supply operate and where buyers and sellers interact (directly or through intermediaries) to trade goods, services, or contracts or instruments, for money or barter (*Business Dictionary*, 2014). Markets include mechanisms or means for

1. determining the price of the traded item,
2. communicating the price information,
3. facilitating deals and transactions, and
4. effecting distribution.

The market for a particular item is made up of existing and potential customers who need it and have the ability and willingness to pay for it. As a market, housing finance consists of those who offer funds and those who need funds for home purchase. The market for housing finance is a submarket of the overall market for funds.

Housing finance is a pervasive activity given the tenure of financing and the fact that it aims at enabling people to meet the basic need for housing. The performance of the HFS is not dependent only on the market for funds; it influences, and is also influenced by, the level of performance of related markets – real estate in general and housing in particular, the capital market in general and the bond, and derivative markets in particular (Evolution of US Housing Finance System, 2006). Given the pervasive nature of housing finance, the policy implications, the social and political environment, the size of the assets and liabilities in the financial sector and the economic impact of this financing, it is necessary to perceive it as a system.

3.2.1 The Three-Pillar System (PPP)

A *system* is defined as an organised, purposeful structure that consists of interrelated and interdependent components, entities, factors, members, parts. These elements continually influence one another (directly or indirectly) to maintain its activities and the existence of the system, to achieve the goal of a system (*World Business Dictionary, 2014*).

In the context of a system, the generic term *housing finance system* (HFS) refers to a financial service delivery system in which various intermediaries compete in performing three main functions: funding, lending and servicing. In any developed country, the system is inherently complex because public policy goals, such as promoting homeownership for target population groups, work with, and often through, the for-profit private-sector participants. A market-based housing finance system is one in which the funds are raised directly or indirectly from the capital markets rather than from deposits only.

The HFS in any developed country has evolved over decades with the participation of the government and public and private institutions with the objective of achieving the public policy goals in housing and meeting the demand for housing.

The pillars of the PPP model are players, products and people. The evolution process is about players, products and people. We can better understand the success and failures of any system through the three-pillar system. A good way to visualise the three pillars is in the following schematic drawing:

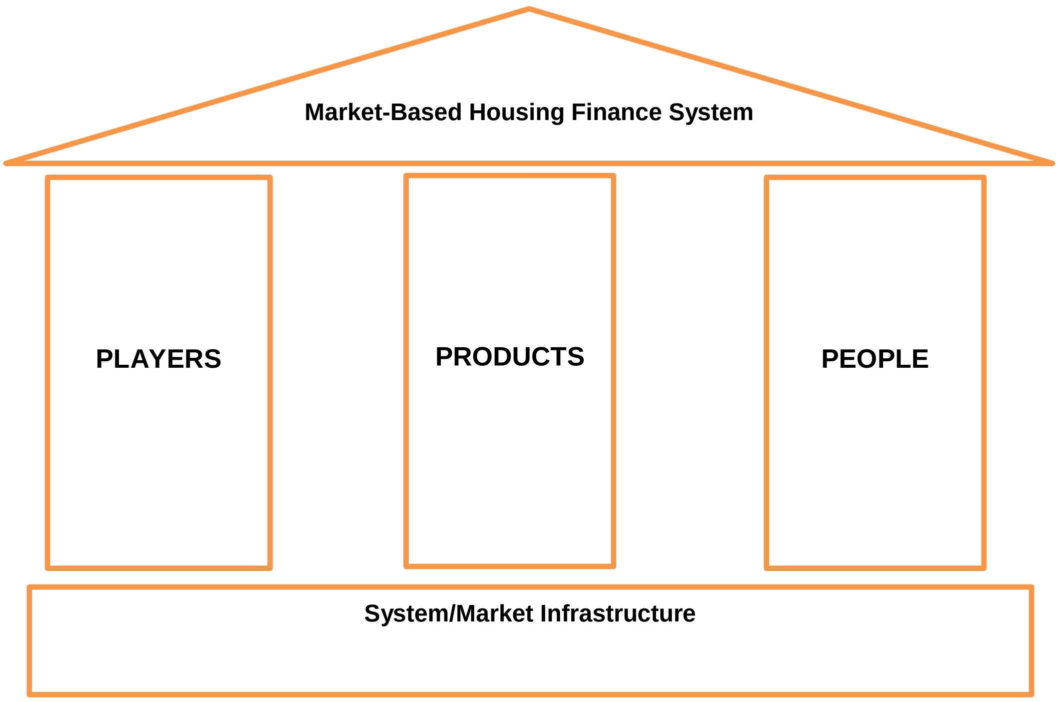


Figure 3-11: The Three-Pillar System (PPP)

Most studies focus on only one pillar at a time such as the policymakers or the financial institutions. However, as the global financial crisis demonstrated, the system can only operate if all the different components are properly engaged and functioning. Weakness in any of the other pillars can directly weaken and endanger the whole system. Accordingly, any study should address the three pillars.

3.2.1.1 Players

The main actors in the development of any housing finance system are public and private institutions and organisations, on top of which is the government. The success of any system depends on how each of the players discharges its responsibilities in the system.

3.2.1.1.1 Government

The government refers to the three branches, the executive, the legislative and the judiciary. In its capacity as the policymaker and in charge of managing the economic cycles within defined objectives, the government stands as the most important player in the establishment and development of any housing finance system. The government could intervene in housing finance by owning and directly extending credit through a government-owned entity, which is limited and constrained to a large extent by the availability of resources. Alternatively, the government could play a positive role by taking the lead in the development of HFS by designing the right policies with minimum cost to taxpayers, issuing the right legislation which should regulate the market, encouraging competition and protecting the consumer. It should as well develop the right infrastructure and economic environment conducive to mobilising public and private resources to satisfy the housing need of population whether through ownership or rental.

3.2.1.1.2 Public Institutions

Public institutions cover administrative bodies such as regulators, central banks and capital market authorities and publicly owned entities such as housing agencies, etc. Publicly owned institutions could be as well in the form of banks and mortgage guarantee funds. Regulators include financial supervisory authorities and consumer protection commissions. The success of such institutions in discharging their responsibilities is crucial for the development of a successful HFS. Success stories can tell a lot about the role of public institutions while failures do as well. When the system is carried away beyond the sound rules of the game, the public institutions always have a role in that failure.

3.2.1.1.3 Private Institutions

Private players are very important in the establishment and development of a market-based HFS. Private players include not only for-profit organisations but NGOs as well. When speaking of a market with only public funding, that market is limited by the resources available to the government. A HFS will compete with other needs for public resources. However, with private resources, the base is much wider, and the potential is much higher. Accordingly, having the private players with the right role and capacity will lead to successful development of a market-based HFS. Private players include an array of participants, being financial institutions, NGOs involved in housing finance, consultants and other service players. Accordingly, the existence and roles of such players are important.

3.2.1.2 Products

The aim of the market is to satisfy the needs of customers. The market for housing finance is not homogeneous. One size does not fit all especially when it comes to housing finance where the targeted customer could be 70% to 80% of the population with different characteristics and levels of sophistication. Products in the PPP model refer to what sort of products are available in the market. The market includes customers with different needs and characteristics and whose needs cannot be met with one product.

To succeed, the market should be segmented based on several factors including income, cultural factors and level of sophistication of customers. Having diverse products which tailor to market needs is also very important.

3.2.1.3 People

Any market aims to satisfy the needs of consumers, which is people, the third pillar in an HFS. The following are important factors to be taken into consideration in the design of an HFS.

3.2.1.3.1 Culture

Culture plays a very important role in the design and function of the system. Culture spans an array of factors including education, homeownership and attitudes towards credit. A culture which supports fulfilment of contractual obligations and respects those obligations makes a difference in the risk profile in any housing finance market. Tailoring the products to cater to market needs while taking into consideration culture makes a difference as well. For example, success in a market which prefers Islamic finance will be achieved much easier by providing sharia-compliant products rather than by trying to change that culture.

3.2.1.3.2 Affordability

Affordability is another factor in the success of any housing finance system. The price of a house is a multiple of the annual average income in any country. And tailoring the products to make finance affordable to people is also important for the development and sustainability of the HFS.

3.2.1.3.3 Awareness

Awareness about the housing finance products, what and how to choose, is a very important factor and which could be labelled as financial education. Mortgage finance is a sophisticated financial instrument whether from a legal or financial perspective. The contractual relationships are long term and in certain cases extend over 25 years or even longer. The calculation of the cost of financing and comparing between the products and what to choose in case of product diversification is important as well. The degree of financial education proved to be important factor in the success of an HFS. Awareness is addressed by education, which, while it should be established in school, is a lifetime process which involves making people aware of the different choices available and contributing to the success of the system.

Financial education is almost nonexistent in the MENA region. It is about the principles of wealth creation and management or the importance of planning one's financial future. In general, financial education is not part of curricula in schools in the region.

3.2.1.4 Infrastructure

No HFS can operate without the required infrastructure, which spans many elements on top of which is information available to market participants both on the supply and demand sides. Information is a basic input for players and people to develop an efficient market. Players also need to have the right and adequate information about the creditworthiness of potential borrowers. People need to have the right and adequate amount of information about the different products available.

The regulatory framework is considered another element in infrastructure, which covers laws and regulations including prudential consumer protection and legislation, which cover mortgage security and financial instruments. Technology, whether in the financial system as whole or at the level of financial institutions, is another infrastructure element in an HFS.

3.2.1.4.1 Economic Stability

Economic stability is a critical factor in the establishment and development of a market-based housing finance system. Housing finance is about extending credit for the long term, in most cases 25 years or more. Macroeconomic stability is important for lenders to price their products and hedge their risks; depositors or investors need to make sure that the payment of the principal and interest will maintain the value of their deposited or investments, with positive return. Transparency in public finance is also very important for pricing long-term funding as the treasury bills indicate the risk-free interest rate.

The design of products depends on having a stable macroeconomic environment, the right and adequate information about consumers' needs, the right regulatory framework and the right level of technology.

3.3 General Discussion

Based on the comparison of the six successful and unsuccessful cases and using the framework of analysis, the following is observed:

1. Any housing finance system is the result of an evolution process. However, the role of government is very crucial in the development of any system. Germany, Denmark, the United States, Malaysia and Canada all are examples of the leading role of the government in the establishment and development of the system.
2. A successful housing finance system hinges on the players, products and people and can deliver properly only if the said pillars are taken into consideration.
3. The role of the government is pivotal. The government is the owner of economic policies, which are important for economic stability, and housing policies, which is about having realistic targets and having the tools and institutional framework, having the right regulations as laws and prudential regulations, leading the development of the system. In Denmark and Germany, governments have led the development of the system through public institutions and right mix of policies. In Spain, Ireland and the United States, governments were to large extent responsible for the failures. In the United States, the Fed's low-interest-rate policy was partially responsible for the government's failure of playing its role as regulator, having unrealistic housing policies whereby homeownership was encouraged regardless of the circumstances of consumers. In Ireland and Spain, the government was a stakeholder in the housing bubble whereby taxes on sale of property comprised a significant percentage of fiscal resources.

4. The role of private financial institutions and having the proper governance structure and working in tandem with public policies are essential for the success of the system. In Germany, public and private institutions work together in consortia to provide finance for homeownership. In Canada, where the prime market dominates, the six largest banks follow sound lending policies in the extension of housing finance. In the United States, the greed in certain private institutions contributed to the overall failure. In Spain, the cajas, which were neither properly regulated nor were properly run, contributed to the failure.
5. The social system plays an important role in the success of the system. In Denmark where the spread in interest rate is less than 50 basis points, the role of the social system is clear whereby the major mortgage banks have been transformed from cooperatives to financial institutions. This is the model to learn from. In Germany, the public and private institutions collaborate to meet the housing finance need of the population.
6. Having diversified products increases market penetration. Fixed rates, variable rates, Islamic and conventional banks in a free competitive market increases market efficiency and penetration. Malaysia is an example of this diversification, which led to increasing market penetration.
7. Culture is another important factor. Culture is not a barrier but rather a factor to be considered while designing the system or developing it. In Germany, the rate of homeownership, which is one of the lowest in Europe, has kept the housing finance system and the housing sector in balance. In Denmark, the credit culture, which encourages honouring obligations, helped in the soundness of the system. In the United States, meanwhile, it is normal to see borrowers walk away when they have negative equity, and this increases the risk of lending. Individuals may file a case with the US Bankruptcy Court under Chapter 7 of the Bankruptcy Code of 2005 whose provisions typically lead to the fastest way for an individual to cancel his or her financial obligations within few months. This cancellation includes but is not limited to second mortgage or home equity line of credit deficiency.
8. Though a housing finance system could be an engine for economic growth and social transformation, it could also lead to catastrophes if it is not properly regulated and monitored. In Spain and Ireland, the system which led to a couple of decades of unchecked economic growth, and in the United States, whereby

homeownership became part of the American dream, the system led to the deepest economic crisis and, in the US's case, led to a global financial and economic crisis.

Chapter 4

HOUSING FINANCE IN THE MENA REGION: THE SUPPLY SIDE AND IMPEDIMENTS TO DEVELOPMENT

This chapter presents nine cases of the supply of housing finance in MENA countries. *The nine cases represent different jurisdictions and geographies*. MENA could be divided into three subregions, which are GCC countries, Levant countries and Egypt, North Africa. Though all the countries in the region share a common culture, the three subregions vary in terms of political economy and wealth. The region has oil-producing countries, which are considered high-income countries by World Bank standards, and low-income and middle-income countries. For each case, the key economic and housing finance figures are presented, as well as a brief about the housing market, a description of the housing finance supply with players and products, key cultural and demographic data and the key features of the supply. In each of the nine cases, an institution or an experience is singled out and explained so that the other countries can benefit from them. In none of the cases, one can consider that there is a housing finance system with a sophisticated circuit like those of other developed countries. The analysis at the end of each case is done using the PPP model, a model developed in Chapter 3 for the housing finance system, within the overall objective of identifying the gap between the existing housing finance supply and what is needed to develop a properly functioning market-based housing finance system for the MENA region.

Housing finance is important to real economy and the financial sector more specifically because it affects both the housing and financial sectors alike. The growth and performance of the housing sector and the role of housing finance in this process are critical for the development of the finance agenda for many reasons:

1. The housing sector could be a very rapidly growing sector of the economy and a significant contributor to GDP; in the developed world, it reaches 8%–12%. The production and consumption of housing is central to any economy. Growing property markets and the finance that drives them will also have a dramatic impact on the structure and performance of national and regional economies
2. Housing assets geared with housing finance can act as springboard to micro and medium enterprise and human capital development.
3. The housing and housing finance sectors have a range of hidden multipliers that are particularly useful for developing economies.
4. Housing finance could boost employment as the housing sector creates jobs in construction and building materials.
5. It affects migration, as homeownership would help in settling population.
6. The housing finance and housing sectors lead to the growth of the middle class. Housing finance offers the opportunity to support its stable growth.

The opposite is also true. Poor housing leads to social and economic problems and instability. All MENA countries share the need of job creation, a growing middle class, a developing financial sector and stimulating economic growth.

4.1 Literature Review

MENA trails other regions in the world in generating adequate market resources available for real estate investment and housing finance. A tradition of heavy state intervention, a dependence on oil wealth, macroeconomic instability and a weak financial infrastructure have hindered financial system development in the region. However, growing housing needs, economic liberalisation and sounder economic contexts have converged to spark new developments in market resources in the past decade (Hassler, 2011). The region, however, is far from being homogenous:

- With the exception of Morocco and Tunisia, MENA countries have lower housing loans/actual GDP levels than countries with comparable level of c GDP per capita. The trend is consistent for the share of housing loans in credit portfolios.
- Except for housing loans directly extended by government agencies, most countries are still in a nascent phase of housing finance development. Globally, the region lags other markets of comparable or lower income levels,
- *Residential real estate finance is still underdeveloped in the region despite strong existing and future need.* Residential housing finance has started to develop only recently in MENA, at least as a market-based activity.

- Mortgage loans account for less than 10% of the loan portfolio in the banking system (a very low share by international standards, which is 40% in high-income countries and 20% in Latin America (World Bank, 2011).

Regional averages for housing finance to GDP and to overall credit ratios are lower than in European Central Asia countries and Latin American countries and only higher than in Africa and South Asia. The percentage of housing loans to GDP in MENA in 2011 stood at around 7% compared with more than 22% in OECD countries (Hassler, 2011). Bahaa Eldin, Mohieddine and Nasr (2004) consider that there is no single model for mortgage finance systems. In developed countries, there is a wide range of mortgage finance models, including those operating through securitisation, which is based on financing through bond markets, those operating through the banking system and those based on specialised retail housing finance lenders. However, there are some common features in most of these models. One of these features is the availability of long-term loans of 20 years or more from a number of competing institutions, provided requirements are met. Another feature is that the market has to be an active one, where loans could be used to purchase new property and second-hand ones. Moreover, the rate charged to the market should be at market price, which is sufficient to cover the cost of raising funds, administration costs, risk and profit. Another common feature is that the procedures for purchasing and selling are smooth and efficient (Bahaa Eldin, Mohieddine and Nasr, 2004).

The literature review reveals that there is a lack of comprehensive study about the attributes of a well-functioning housing finance system. The available studies focus on country issues of housing finance or fragments of the housing finance systems.

MENA countries need guidance and practical tools to carry out an analysis to select those instruments and models most suitable for their country and their particular socioeconomic contexts.

Country Overview (MENA)

In the following tables, the main economic, geographic, demographic data about the country cases covered in this study are presented.

The following table gives the areas of the different countries covered in this study:

Area (KM2)

KSA	Kuwait	UAE	Jordan	Syria	Lebanon	Tunisia	Morocco	Egypt
2,000,000	17,818	83,600	89,342	185,180	10,452	155,566	710,850	1,009,450

Table 4-1: Areas of MENA Countries (KM2)

AMF 2014

The following table presents the GDP of the MENA countries covered in this chapter in US$ over the period 2005 – 2013:

GDP (US$ Million)

Year	2005	2009	2010	2011	2012	2013
KSA	328,206	429,098	526,812	669,507	733,956	748,450
Kuwait	80,798	105,993	115,333	154,056	174,062	175,837
UAE	180,617	253,548	286,049	347,454	372,314	402,340
Jordan	12,589	23,854	26,463	28,881	30,981	33,641
Syria	28,499	53,965	60,038			
Lebanon	21,286	35,140	38,010	40,079	42,764	45,116
Tunisia	32,256	43,433	44,017	45,948	45,242	47,111
Morocco	59,524	90,553	90,714	99,274	96,187	105,333
Egypt	89,528	188,489	218,387	235,464	262,214	271,443

Table 4-2: GDP of MENA Countries Over Period 2005 - 2013

AMF 2014

The following table presents the main demographic characteristics of the countries covered in the Chapter:

Density and Urban Population

	Density (individual /Km2)			Urban Population (%)			Population Age (2012)		
	1990	2000	2013	1990	2000	2013	<15	15-65	>65
KSA	7	9	15	76.6	79.8	82.5	30.1	67.1	2.8
Kuwait	120	124	186	98	98.2	98.3	24.9	72.9	2.2
UAE	21	36	102	79.1	77.8	84.6	14.4	85.2	0.4
Jordan	39	54	73	72.2	78.3	82.637.3	37.3	59.5	3.2
Syria	65	88	118	48.9	50.1	56.5	35.4	60.7	3.9
Lebanon	245	360	392	83.1	86	87.4	21.6	69.8	8.6
Tunisia	52	61	70	57.9	63.4	66.5	23.2	69.7	7.1
Morocco	34	40	46	48.6	54.2	57.4	27.8	67.2	5
Egypt	52	64	84	43.4	43.6	42.8	31.1	64.5	4.4

Table 4-3: Density (per KM2) and Percentage of Urban Population in MENA

AMF 2014

The following table presents the contribution of construction sector to GDP in 2013:

Country	KSA	Kuwait	UAE	Jordan	Lebanon	Tunisia	Morocco	Egypt
Percentage	3.9%	2.5%	9%	7.6%	5.2%	4.25%	11.2%	1.2%

Table 4-4: Contribution of Construction Sector in MENA Countries

The following table presents the main statistics of the banking sector in the courtiers covered in this chapter:

Banking Sector (2013 - US$ Million)

	Banking Assets		Deposits in Commercial Banks		Total Loans & Credit		Banking Claims on Private Sector	
	Amount	% GDP	Amount	% GDP	Amount	%GDP	Amount	%Total Credit
KSA	504,875	67.45	373,861	50	336,407	748,450	299,638	89
Kuwait	182,418	103	129,113	73.1	102,607	175,837	110,358	
UAE	546,176	135	317,947	79	304,000	402,340	205,582	67.62
Jordan	60,370	179	34,527	102.6	26,713	33,641	24,291	90.93
Syria			-----	----			---	
Lebanon	164,821	365	110,685	245	79,171	45,116	41,502	52.42
Tunisia	45,742	97	25,164	54.1	33,571	47,111	31,076	92.56
Morocco	143,378	136	100,859	92.7	125,265	105,333	75,061	59.92
Egypt	237,465	87.48	188,296	74	182,519	271,443	71,380	39.10

Table 4-5: Main Statistics of Banking Sector in MENA in 2013

AMF 2014

The following table presents the main statistics showing the banking penetration in the MENA countries covered in this Chapter:

Banking Penetration (per 100,000 inhabitants)

	Bank Branches	Deposit Accounts	Credit and Debit Cards	ATM	POS
KSA	5.9		46.3	59.4	359
Kuwait	9.4		90.9	36.6	787
UAE	10.7	89	125.6	54.2	965
Jordan	5.8	44.8	101.2	19.9	275.7
Syria					
Lebanon	24	75.4	53.3	37	755.5
Tunisia	24.1	109.8	21	17.2	137
Morocco	16.7	54.4	28.2	16.8	99.3
Egypt	4.3		18	7.7	57.2

Table 4-6: Banking Penetration in MENA (Per 100,000 inhabitants)

AMF 2014

The following table presents the main statistics about the capital markets in the MENA countries covered in this Chapter:

Capital Markets

	No. of Listed Companies		Foreign Companies	Capitalization		Capital /GDP (%)	Capital to Banking Assets
	2012	2013	2013	2013	2012		
KSA	158	163	0	373.42	467.43	62.7	92.6
Kuwait	199	196	11	103.35	109.24	62.1	59.9
UAE *	123	122	24	49.52	70.69	34	
Jordan	243	240	0	27	25.77	76.6	42.7
Syria	22	22	0	1.04	0.96	2.8	
Lebanon	10	10	0	10.42	10.55	23.4	6.4
Tunisia	59	61	1	8.87	8.59	18.2	18.8
Morocco	77	75	1	52.61	54.5	49.9	36.7
Egypt	213	212	1	61.62	61.96	22.8	26.1

Table 4-7: Main Statistics of Capital Markets in MENA 2012 - 2013

*Abu Dhabi and Dubai

AMF 2014

The following table presents the main drivers of demand for housing finance in MENA countries covered in this chapter in 2011:

Drivers of demand for housing finance (2011)

	KSA	Kuwait	UAE	Jordan	Syria	Lebanon	Tunisia	Morocco	Egypt
Population growth%	2.3	3	5	2.3	1.7	0.8	1.1	1	1.7
% of Young of population	38.73	27.16	25.9	40.2	40.03	30.84	29.86	33.55	36.7

Table 4-8: Drivers of Demand for Housing in MENA Countries

AMF 2014

The following table presents comparison of the residential sector among five countries in the region:

	Price/m^2 $	Rental Yield	Price/Rent YRS	Price/GDP	Roundtrip Cost	Rental Income tax	Property Rights Index	Capital Gain Tax
Egypt	831	9.41%	11	28.44	11.74%	7.085	40	0
Jordan	1,326	8.18%	12	29.19	15.24%	0%	55	0%
Lebanon	3,591	3.62%	28	34.29	11.57%	3.04%	25	0%
Morocco	2,101	6.09%	16	66.45	12.13%	12.90%	40	20%
Tunisia					7.10%	8.32%	50	35%
UAE	4,010	6.63%	15	6.02	5.05%	0	50	0

Table 4-9: Comparison of residential sector among five countries in MENA

4.2 Country Cases

4.2.1 Gulf Cooperation Council Countries

4.2.1.1 Kingdom of Saudi Arabia

4.2.1.1.1 Country and Economic Overview

Saudi Arabia is a kingdom, which is the largest Arab state in Western Asia constituting the bulk of the Arabian Peninsula, and the second largest in the Arab world (after Algeria). Its population is estimated to be 29 million, of which there are approximately 16 million citizens, an additional 9 million registered foreign expatriates and 2 million illegal immigrants.

Saudi Arabia has the world's second largest oil reserves, with 17% of the world's proven petroleum reserves. It also has the world's sixth largest natural gas reserves. Oil accounts for more than 45% of the GDP , 80% of budget revenues, and 95% of exports roughly. Vast oil revenues have permitted rapid modernisation and the creation of a welfare state. Saudi Arabia is encouraging the growth of the private sector to diversify its economy and to employ more Saudi nationals. Over 5 million foreign workers play an important role in the Saudi economy, particularly in the oil and service sectors. Saving and investment rates are one of the highest in the region. The country has enjoyed years of economic growth, which was 8.5% in 2012 and 3.8% in 2013, while inflation in 2012 was 3.74%.

4.2.1.1.2 The Housing Sector

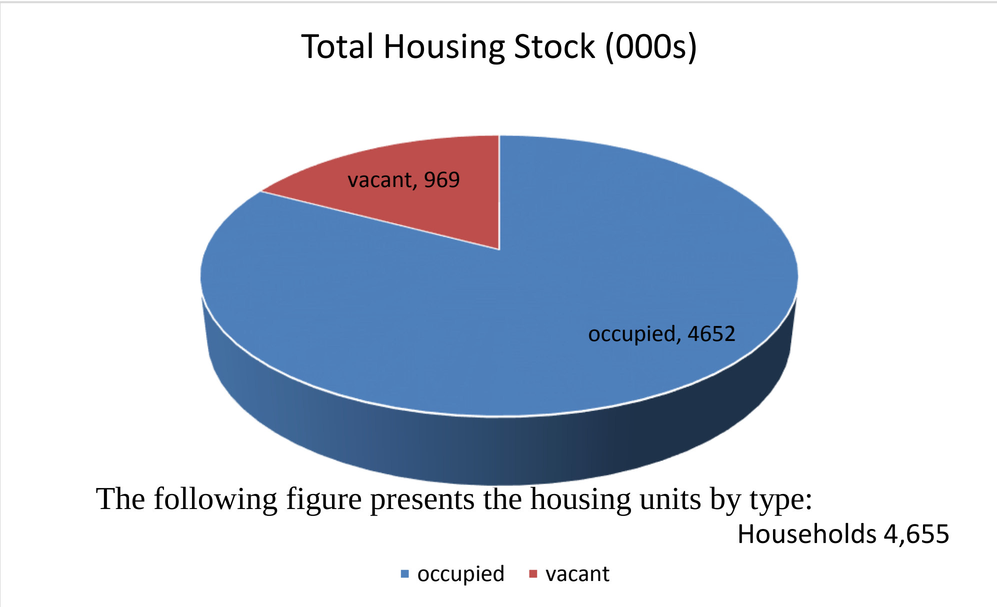
The housing sector in KSA contributed only $28,115 million in 2013, which is 3.9% of the GDP, which is the third lowest in the region after Kuwait, 2.5% and Egypt, 1.2% (AMF, 2014).

The real estate market is large and fast-growing. It is ten times bigger than any other Gulf market but remains underdeveloped, with the balance of estimates suggesting that less than 35% of Saudis own a home. A key characteristic of the market is that demand is primarily generated by local buyers, as freehold ownership is still confined to Saudi nationals, though foreigners can buy leasehold property in designated developments.

Despite the country's size, available land for development is at a premium. *Demand* is being driven by overall population growth of 3.1%, a smaller family size and a national growth rate of 2.2%. The growth rate of Saudi young adult– defined as those aged 20–34 – is estimated at 2.7%. Pent-up demand is considerable given an average family household size estimated at 5.7 (SAMBA, 2010). This in turn reflects the paucity of financing options for most young Saudis, many of whom continue to live with their parents for extended periods. Low- and middle-income households make up about 80% of the unmet demand. Homeownership is currently below 35% mainly because of the lack of mortgage finance. Saudis generally prefer to buy rather than to rent properties. There was a housing shortage of about 1 million dwellings in the kingdom in 2012, according to Jones Lang La Salle. About 275,000 units a year need to be built from 2012 to 2015 to meet demand, according to Banque Saudi Fransi (Global Property, KSA).

Migration is another important driver of demand. The high-end rental market (including compounds) tends to be dominated by two groups: high-income expatriates and religious tourists. Blue-collar expatriate workers drive demand for low-end rental accommodation. Prices have surged, and affordability is a pressing issue in the housing market. The mismatch between demand and supply has pushed prices upwards. The price of residential land in Riyadh increased by 20% per year during the period 2003–2007, with average house prices rising by 16%, according to the real estate investment and management company Jones Lang LaSalle . Residential prices also fluctuate following the oil prices and government spending, but the trend is always upward (SAMBA, 2010).

Total housing stock in KSA was 5,621,000 units in 2011. 1,152,000 housing units were in the capital Riyadh while 1,328,000 in Mekkah. The following figure presents the number of occupied and vacant housing units:



The following figure presents the housing units by type:

Figure 4-1: Total number of occupied and vacant housing units in KSA

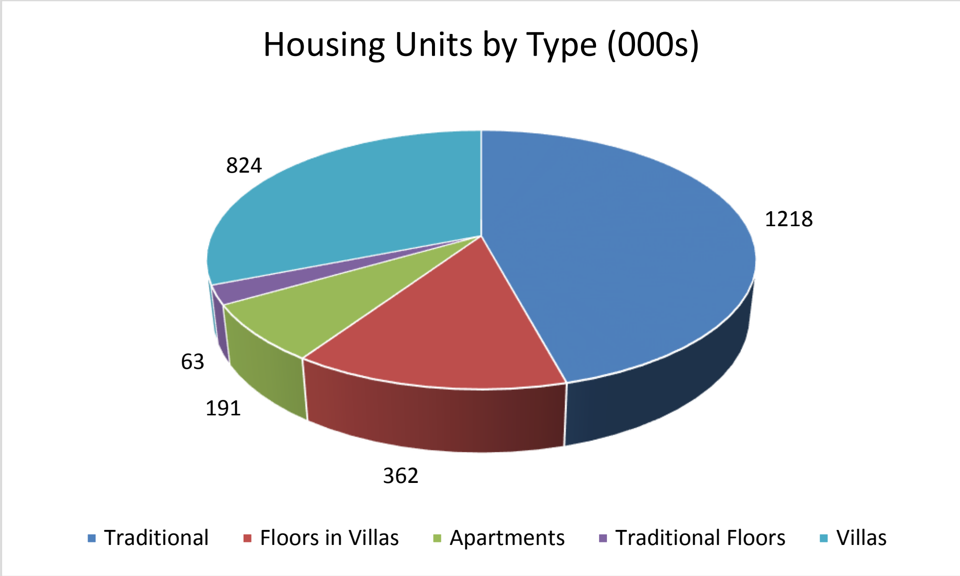


Figure 4-2: Housing units by type KSA

The following figure presents the type of housing units occupied by Saudi Nationals:

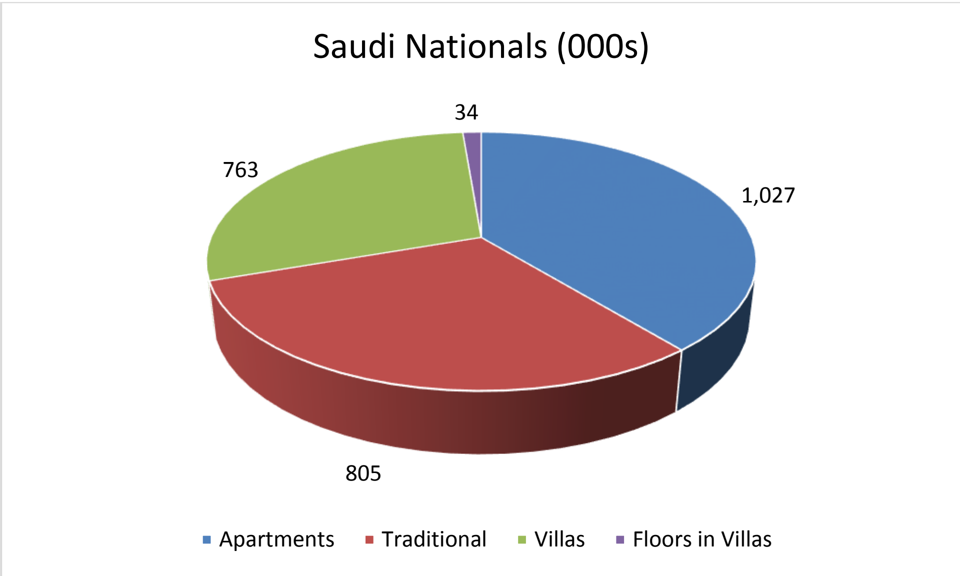


Figure 4-3: Type of housing units occupied by Saudi Nationals

The following figure presents tenure of housing units:

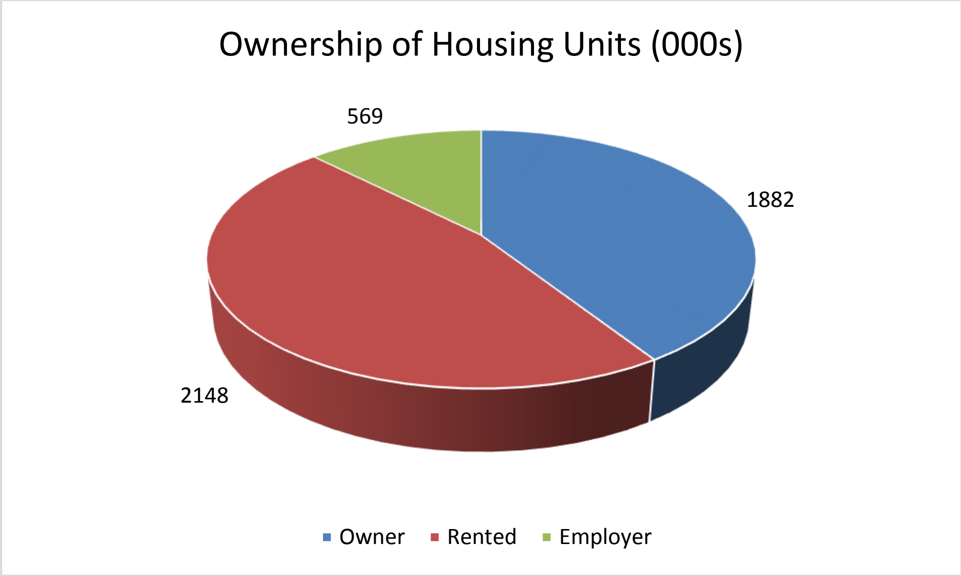


Figure 4-4: Ownership of Housing Units by type of tenure (KSA)

The following figure presents the vacant units by type:

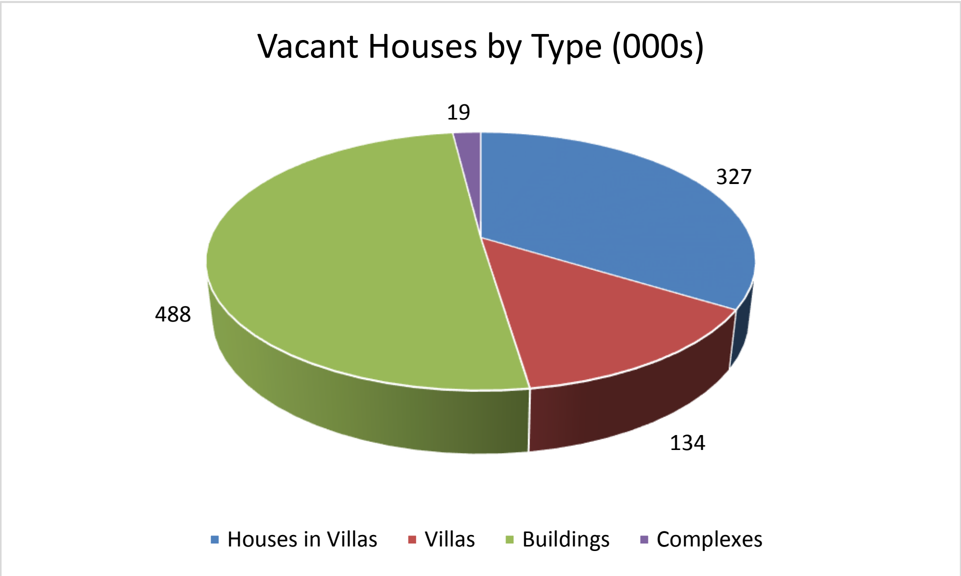


Figure 4-5: Vacant Units by type in KSA

Like other countries in the Gulf, KSA is characterised by a large foreign residents which comprise 75% of the total population. It is expected that the Saudi population will reach 33.44 million by 2020, and family size will fall to 5.3. There are several estimates of housing shortage which put it at more than 1 million housing units. The Saudi American Bank

(SAMBA) estimated that 2.62 million new housing units should be built by 2020, or 163,750 units per annum (Sidawi , 2009).

4.2.1.1.3 The Financial Sector

The *banking sector* has great potential given the size of the economy and its current size. Deposits represent only 50% of the GDP with loans and facilities only 44% of the GDP.

The *capital market* represents a significant part of the financial system, and its level of activities is on the high end when compared with other countries in the region with a turnover rate of 78.1%. However, the major part is the equity market with bonds limited to $16,570 million, or only 2.9%.

4.2.1.1.4 Housing Finance

It is estimated that around 86% of all purchased homes are paid for in cash, and only 14% are funded by loans. Currently, the mortgage market in the kingdom is relatively underdeveloped. Consumer loans for real estate financing stand at only around 1% of the GDP (Global Property Guide, KSA).

The main reason for the current disequilibrium in the Saudi residential property market is the scarcity of mortgage financing. Currently, Saudi property developers are reluctant to build middle- or low-end residential real estate because, although pent-up demand might be substantial, actual demand – that is, individuals able to purchase these types of homes without the benefit of a mortgage – is low.

Financing is available but is generally limited. In addition to the Real Estate Development Fund (REDF), commercial banks do provide mortgages (on Islamic terms), but lending has been largely confined to those who can provide the large down payments required (lending for the housing needs of large corporates also takes place). Thus, bank mortgage lending makes up only around 3% of housing loans in Saudi Arabia, compared with approximately 6% in Kuwait and 7% in the UAE, and well over 50% in many developed countries (SAMBA, 2010).

Real Estate Development Fund

The Real Estate Development Fund (‘REDF’ or the ‘Fund’) was established 1974. The purpose of the Fund was to contribute to the establishment of modern houses and residential complexes in different regions around the kingdom for those who do not own or have never owned a house. REDF provides soft loans to Saudi individuals to build their own homes, but this has proved inadequate given the demand for housing and the lengthy approval process. The Fund and its associated 29 different branches and offices in various regions of the kingdom serve more than 4,279 cities and provinces. The Fund started with a capital of US$ 74 million, which was increased several times to reach around US$ 54 billion at the end of the fiscal year 2011–2012 where it now represents one of the largest real estate financing institutions in the world. The waiting list was about 2.2 million in 2014 with many loans approved but not disbursed, which indicates that the amount approved is not enough to buy the targeted house by the beneficiary.

4.2.1.1.5 People and Demographics

The housing sector is characterised by the fact that 86% of all purchases are in cash. A large portion of the population would like to get housing loans but from public institutions. The waiting list for housing loans from REDF is a clear indicator of the acute crisis. From time to time, the king issues amnesties to waive certain instalments, which could explain the financing preferences.

People in KSA still have concerns regarding the property financing issues. Borrowing in Saudi society is something which is generally unacceptable and difficult to comprehend. The Saudi individual prefers to ask help from the family, parents, and other relatives before borrowing from banks. Also, the client feels that the bank – which grants the loan – is in a superior position, and it restrains him/her, and there is no equality in the relation between the two parties. On the other hand, banks apply a flat-rate interest at the start of the lending period. People do not know the difference between lending rates and ask whether the loan decreases or not, and in case that it does not decrease, they consider it as a ripe-off. Another cultural characteristic that affects the lending process is that many believe that when the government announces the property financing, people imagine that it is free. The Saudi society expects that everything is or should be free. Thus, when banks provide mortgage loans, people have vague perceptions of the mortgage loan terms and conditions, whether it is free, halal (i.e., not prohibited by Islamic sharia) or not. This could explain the reason behind banks initially going into the Ijara scheme as this would keep the property ownership with the bank (Sidawi, 2009).

Saudi’s sharp population growth is causing housing demand to outstrip supply. The kingdom’s population is growing by more than 2% annually. It is dominated by young middle-class Saudis who are first-time homebuyers. About 45% of the country’s population are below 20 years old. In addition, demand from expatriates is also exacerbating the housing shortage, with about 5.5 million expat workers in the country.

4.2.1.1.6 Discussion and Analysis

KSA is one of the richest countries in the region. Despite the wealth, the homeownership rate is low. The contribution of the housing sector is very modest and limited to 4.5% of the GDP. Though the country is one of the Great 20 with a lot of resources, the housing crisis is chronic. The supply of housing finance is not only underdeveloped but is also minimal given the general income level and the size of the banking and financial sector. The bond market is quite limited despite the availability of Islamic alternatives to conventional bonds.

The following demonstrate the crisis in housing finance:

- The waiting list for REDF is more than 2 million applications;
- More than 100,000 applications have been approved by the fund but have not been withdrawn. This could be a clear indication of affordability and cultural issues.
- The share of private banks is just 3% of total outstanding housing loans.

Like other Gulf countries, the government is the main *player* in the economy. The government has been active in both the housing and housing finance sectors, albeit with direct intervention which is dependent on public finance. However, the governmental policies of subsidies and amnesties led to expectation gaps and long waiting lists, a limited role of the private sector and spoiling the culture of people. People believe that financing is an entitlement to every Saudi national. The governmental policies should have focused on mobilising the market resources while targeting only those qualified for subsidies.

There is no market-based housing finance system, while deposit-based financing is limited. Private banks extend credit. However, their market share is limited to 3%. The private sector needs to be more engaged in the housing finance system. The new mortgage law could be a step change in that direction. REDF's role has to change as well to move from direct supply to mobilising private funds similar to other institutions in other countries such as Fannie Mai as it might be impossible to cover the financing needs of all the waiting lists with public funds.

Affordability is an issue as well. There is shortage of supply of land. There is a need for massive building projects, which would absorb any demand driven by financing. The model of government-related entities could be a solution, as the private sector alone cannot tailor to the housing demand.

It is worth mentioning the role of charities in the housing market and housing finance. Charities own land, and this land could be developed to provide affordable housing.

The *product* diversification is very limited in KSA because of state intervention and the supply of long-term subsidised housing loans by REDF. REDF has started to diversify products available in the market through adopting new strategies which aim at cooperating with private banks and real estate developers to increase supply of housing and housing finance.

As to *people*, it is clear that culture is a major issue in the Saudi market for the following reasons:

1. People perceive public financing to fund housing finance as entitlement and should be free of charge.
2. The culture has to change to accept that a dwelling is not only a villa. Entitlement should be about means rather than only about subsidies.
3. Many people are reluctant to borrow and prefer family and friends as sources.

Culture has a negative impact on the system. The approved loans which have not been disbursed are due to either an affordability issue or a mismatch between what people would like to buy and what the financing could help them get.

The consumer should be financially educated. There is need for a body entrusted with educating the client about property appraisal methods, housing, and how somebody could raise the value of his/her property and other issues. The customer should be educated about mortgage loan products and processes. He/she should understand he/she is entering a business transaction. The mortgage loan that the customer gets will not be subsidised by the government; it is a loan based on affordability and commitment to pay back.

4.2.1.2 Kuwait

4.2.1.2.1 Country and Economic Overview

Kuwait is a country in Western Asia. Situated in the northeastern edge of the Arabian Peninsula at the tip of the Arabian Gulf, it shares borders with Iraq to the north and Saudi

Arabia to the south. The country covers an area of 17,820 square kilometres and has a population of 3.823 million as of 2012. Kuwait City serves as the country's political and economic capital.

Kuwait is a high-income country with a GDP per capita of $44,347 in 2013, making it the fifth richest country in the world and the second in the Arab world, per capita. A significant percentage of the population is expatriates. The country has the world's fifth largest oil reserves with petroleum products accounting for nearly 95% of export revenues and 80% of government income. Kuwait has a GDP of $175,837 billion in 2013. The saving and investment rates were 59.1% and 14.1% of the GDP in 2013, respectively.

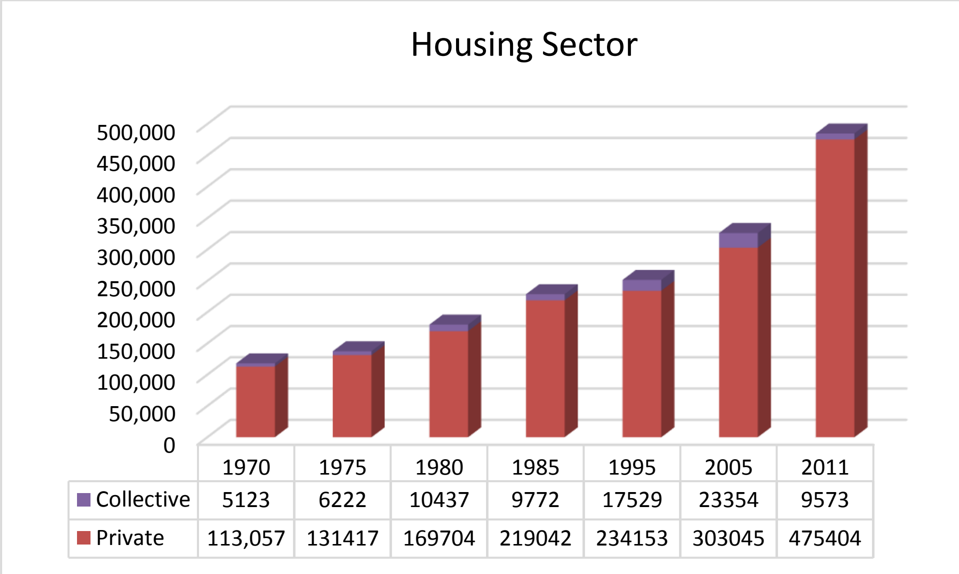
The Kuwaiti economy was relatively stable with an inflation rate at 4.7% in 2011. The Kuwaiti dinar is pegged to the US dollar. According to the 2014 Index of Economic Freedom, Kuwait has the seventh most free economy in the Middle East with a global ranking of 63. However, this freedom is basically limited to Kuwaitis. The cost of establishing a business is 1% of GDP per capita, which is the lowest in the Arab world. Kuwait ranks eighth in terms of ease of doing business, with 82 compared with the global average of 93 and the Arab average of 104. It ranks 22nd in terms of construction permit procedures, which could explain the housing gap. It ranks 16th in terms of number of days to start a business.

4.2.1.2.2 Housing Sector

The contribution of the housing sector to the GDP was limited to $4,647 million or 2.5% of the GDP, which is one of the lowest in the region.

Total housing stock in Kuwait was 485,000 units in 2011, out of which 475,000 are private while 9,660 are collective. The growth rate of supply between 1995 and 2005 was 28.1%, while the increase in number of households, which was 307,282, was 29.1% during the same period.

The total population lives over only 8% of the total land area. There is shortage in the supply of land. Land supply is limited as the state monopolises more than 90% of the total area of the country. The Petroleum Oil Company has exclusive concession rights over 80% of the land. Given the shortage in supply, land is very expensive, which is exacerbated by speculation because of real estate investment by financial institutions. The number of vacant housing units in 1995 was 35,762. The following figure gives statistics about the housing stock between 1970 and 2011:

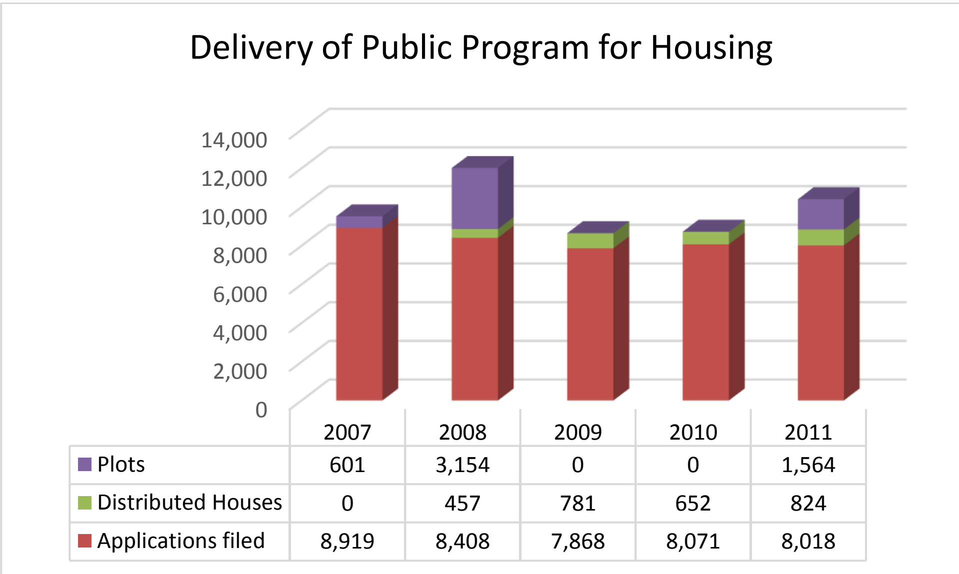


	1970	1975	1980	1985	1995	2005	2011
Collective	5123	6222	10437	9772	17529	23354	9573
Private	113,057	131417	169704	219042	234153	303045	475404

Figure 4-6: Main Statistics of Housing Sector in Kuwait

Like other countries in the Gulf, Kuwait is characterised by a large number of foreign residents with the local population making up less than one-third of the total. Foreign ownership of property is not allowed. Foreign residents are left to the private sector to provide them with their housing need, while the Public Authority for Housing Welfare is the institution which takes care of the housing of nationals.

The following figure presents the delivery of the government programme for housing, which is a clear indication of the limitation of this option of delivery:



	2007	2008	2009	2010	2011
Plots	601	3,154	0	0	1,564
Distributed Houses	0	457	781	652	824
Applications filed	8,919	8,408	7,868	8,071	8,018

Figure 4-7: Delivery of Public Housing Program in Kuwait

The state has provided 91,607 housing units, which represents 40% of the number of households. The cost of the state housing unit is approximately $213,000. The citizen who is allocated a housing unit is granted a loan of $249,000.

Housing is considered an entitlement for Kuwaiti nationals. While supply is constrained by several factors among which is the land supply and restrictions on foreign labour, the sector is suffering from crisis due to the inability to provide housing. The state budget finances the monthly rental of those qualified and have not been allocated with housing units. The Housing Welfare Commission pays $535 monthly to every Kuwaiti who is qualified for housing but has not been allocated with a housing unit. The state paid $2.88 billion over the period between 1991 and 2009 as cost of rental. The cost in 2009 alone was $341 million. The number of beneficiaries between 2008–2009 was 81,478. The number of new beneficiaries increases annually by around 15,000.

4.2.1.2.3 Financial Sector

The *banking sector* is well-developed compared with other countries in the region. The National Bank of Kuwait is the largest bank in the country and one of the largest in the Arab world. The total assets of the banking sector represented 103% of the GDP in 2013. Total credit to the private sector amounted to 62% of the GDP.

The *capital market* is quite active and has about 214 firms listed. It is the second largest stock exchange in the Arab world with a total market capitalisation of $109.24 billion in 2013. The value of publicly traded shares was $21.96 billion and $25.77 billion in 2011 and 2012. The share turnover was 35.8% in 2013, which was the fourth highest in the Arab region.

4.2.1.2.4 Housing Finance

Housing finance is about soft lending to Kuwaiti nationals only, as foreign ownership is not allowed. Kuwaitis usually get special loans from a state bank. The State Saving and Credit Bank is the main player and extends loans and other commercial banks which are subject to limits and ceilings. Kuwaiti nationals are entitled to get 70,000 KD, more than $249,000, as housing loan.

The government has been active both in the construction of new housing and in housing finance. The private sector has a very limited role in housing finance because of legal constraints on foreign ownership and the loans which are considered as social benefit rather than benefit from credit.

Product diversification is very limited in Kuwait because of state intervention and the supply of long-term subsidised housing loans.

Public Authority for Housing Welfare

In 1993, Law 47 was issued, which established the Housing Welfare Commission with financial independence and in which all the relevant ministries are represented. Population growth drives increase in demand. The following should be noted:

1. There are 174,600 applications which have been filed with the HWC to get a house, coupon or apartments. Between 1976 and 2008, the state has provided 91,607 housing units, which represents 40% of the number of households.
2. The waiting list is 83,000. This represents the gap for housing, which is 47.5% of the total demand.
3. The average waiting time is 10–17 years.
4. The cost of a state housing unit is $213,000.
5. A citizen who is allocated a housing unit is granted a loan of $249,000.
6. The Housing Welfare Commission pays $535 monthly to Kuwaitis who are qualified for housing but have not been allocated with housing unit.
7. The state budget finances the monthly rental of qualified Kuwaitis and have not been allocated with housing units. The state paid $2.88 billion over the period 1991–2009 as cost of rental. The cost in 2009 was $341 million. The number of beneficiaries in 2008–2009 was 81,478. The number of new beneficiaries annually is around 15,000.
   (Obeid and Salameh, 2009)

4.2.1.2.5 People and Demographics

Kuwait has well-educated population with very low rate of illiteracy of 5% among males and 8.2% among females in 2013. However, over the last six decades, Kuwaitis have been convinced that the right to housing is about ownership rather than benefitting from housing services. Accordingly, the perception is that the state is wholly responsible for the provision of housing and finding the solution to bridge the housing gap.

The Kuwaiti population is young, with 61.4% being below 24. Kuwaitis represent 39.2% of the total population. The average growth rate in the Kuwaiti population is 3.7%

while the growth in residents is 3.8%. The average family size is 8.6 persons while the number of households stood at 233,153 in 2011. The rate of urbanisation is 98%, which is one of the highest in the Arab world, while the population density is 215/km^2 in 2012.

4.2.1.2.6 Discussion and Analysis

Though Kuwait is ranked amongst the top countries in terms of GDP per capita, there is also a housing crisis as manifested by the waiting list of Kuwaitis who are entitled to housing units. The fact that there is a housing shortage of more than 80,000 housing units indicates a crisis in housing. Financing depends mainly on public financial institutions with a huge cost to budget. The cost is again to be financed by the budget, which is an additional burden constrained by budgetary resources. Developing a market-based housing finance leads to continuously functioning system.

The *players* in housing finance system are basically the government and the State Housing Welfare Authority. The government, and like the majority of other GCC countries, has followed policies of directly providing finance and housing. The policies are conflicting, and the government encourages marriage though grants and loans and allowance for each extra child, which only accentuates the housing gap which the government is trying to bridge. The government policies are not sustainable because of complete dependence on public funding.

There is a lack of cooperation between the public and private sectors. Land policies, a ban on foreign ownership and the impossibility of foreclosure are all major constraints on development of a market-based housing finance system. This is a burden on the budget, constrained by budgetary resources, which depend on oil prices. The state contribution to housing provision is 99% for Kuwaiti nationals compared with a single digit in developed countries.

The *product* offering is quite limited. Because of shortage of land and the ban on foreign ownership of real estate, housing finance is limited to loans extended by the public bank.

Given that the governmental loans are subsidised, they will stay with the lending institution and cannot be channelled to the market since they are not priced on a market basis but rather on an administrative basis.

The *people* factor is problematic as well. As in other countries in the Gulf, the culture is a major constraint on the development of a proper housing finance system. People consider governmental financing as entitlement and look to having villas rather than apartments.

The culture will not be conducive to market-based housing finance. A change in culture is required to develop market-based housing finance. There is a need in culture for people to accept living in apartments rather than in villas.

4.2.1.3 United Arab Emirates

4.2.1.3.1 Country and Economic Overview

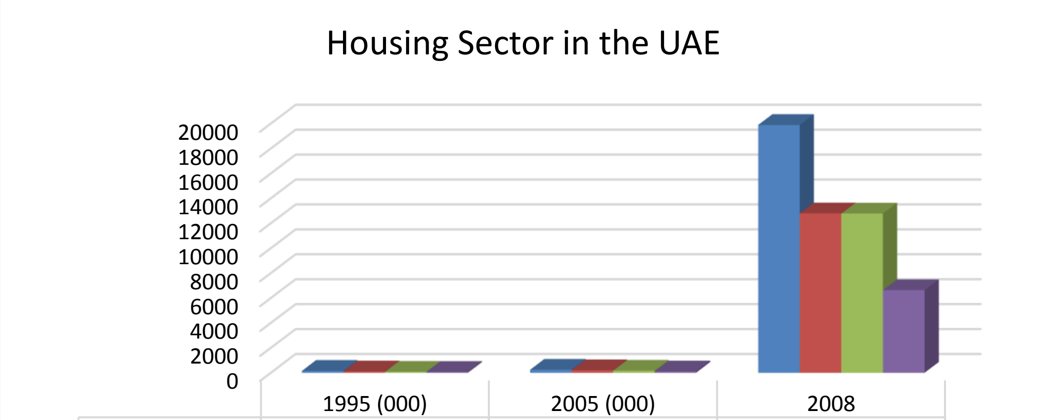
The United Arab Emirates is an Arab country southeast of the Arabian Peninsula on the Arab Gulf, bordering Oman to the east and Saudi Arabia to the south, as well as sharing sea borders with Qatar and Iran. The country is a federation of seven emirates, each one governed by a heredity emir. The constituent emirates are Abu Dhabi, Dubai, Ras al-Khaimah, Sharjah, Umm al-Quwain and Ajman. The second largest city is Dubai. The total area of the country is estimated to be 83,600 square kilometres.

The United Arab Emirates is classified by the World Bank as high-income country. GDP stood at $402.34 billion in 2013 and per capita at $47,152, which is one of the highest in the world. From 2004 to 2008, the UAE economy expanded by an average of 7.9% per year, after an astonishing GDP growth rate of 16.4% in 2003. The global financial crisis affected the economy after enjoying several years of economic growth driven by high oil prices and investment in mega real estate projects. Dubai stands as the leading emirate in terms of economic development.

The country has oil and gas reserves which are ranked as the world's seventh and seventeenth largest, respectively. Despite being rich in natural resources, majority of the emirates have been successful in diversifying their economies, and UAE has one of the most developed economies in Western Asia.

4.2.1.3.2 The Housing Sector

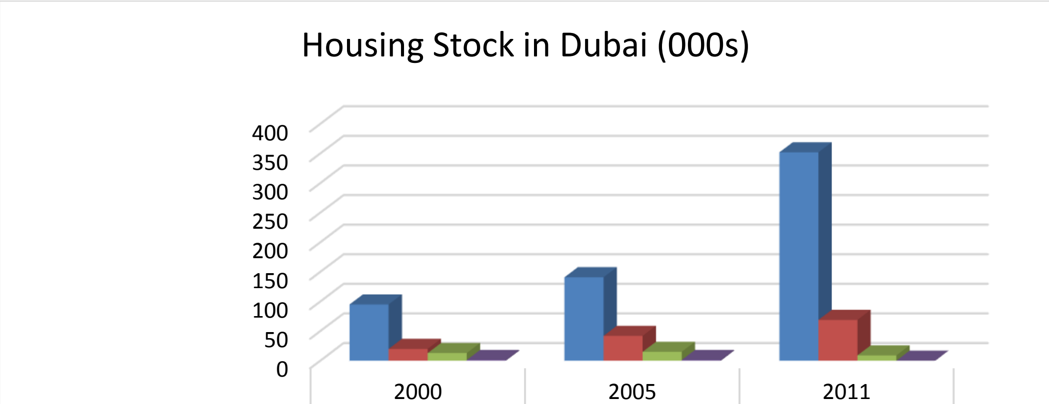
The housing sector/services contribution to the GDP in 2013 was $34,745 million, or 9% of the GDP. It is the highest in the region. Specifically, the housing and real estate sectors have been leading in both Abu Dhabi and Dubai. The overall economic development strategy of the emirate of Dubai and its real estate boom were propelled forward by the rise of oil prices, which increased six times between 2002 and 2008. This peak was followed by the abrupt collapse due to a sharp fall in oil prices to $34 per barrel on December 21, 2008. The following figure presents statistics on housing in the seven emirates. Abu Dhabi, Dubai and Sharjah have 84% of the total number housing units in the UAE:



	1995 (000)	2005 (000)	2008
Abu Dhabi	153	242	19,891
Dubai	111	205	12,792
Sharjah	78	167	12,781
Other Emirates	67	105	6,632

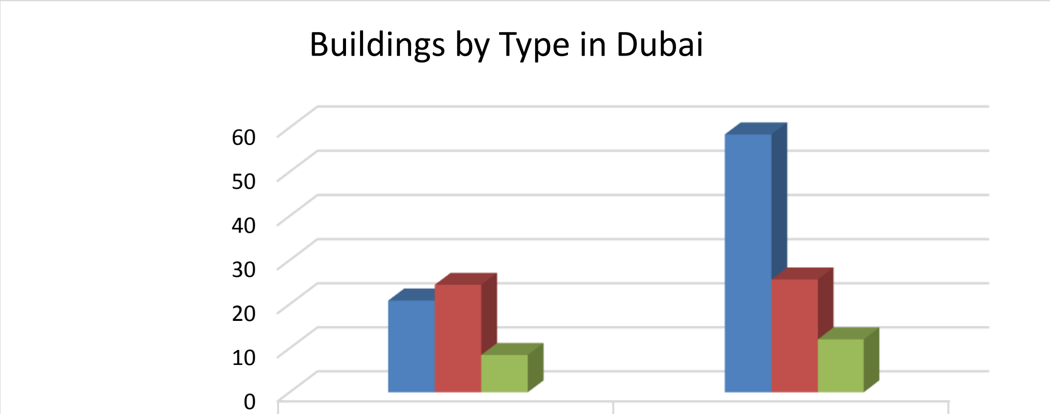
Figure 4-8: Main Statistics of Housing Sector in UAE

In Dubai, the increase in the number of buildings between 2000 and 2005 was 40%, while the increase in number of housing units between 2005 and 2011 was 116.6%. The net increase in number of private villas between 2000 and 2005 was 26.8%, while the net increase in residential villas was 15.6%. The following figures present the change in the number and composition of housing stock in Dubai over the period 2000–2005:



	2000	2005	2011
Flats	95	141	352
Villa	20	42	69
Arab House	13	15	9
Collective Residence	1.3	1.2	0.09

Figure 4-9: Housing Stock in Dubai



	2005	2011
Private Villas	20.84	58.45
Investment Villas	24.41	25.62
Multi Story	8.48	12.02

Figure 4-10: Buildings by Type in Dubai

The following figure presents number of completed buildings by type between 2005 – 2011:

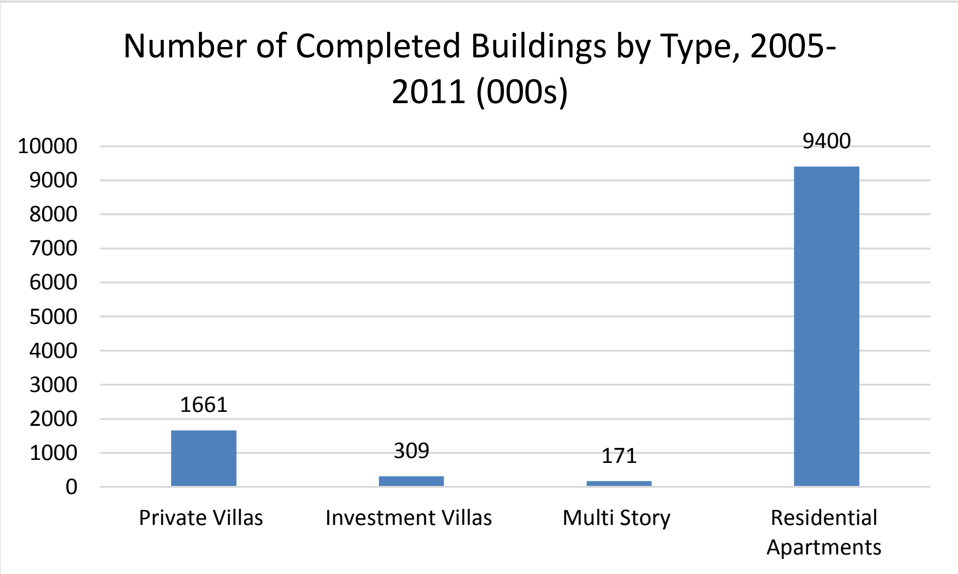


Figure 4-11: Number of Completed Buildings by Type in Dubai in 2011

The following figure presents that total number of building permits by type in 2012:

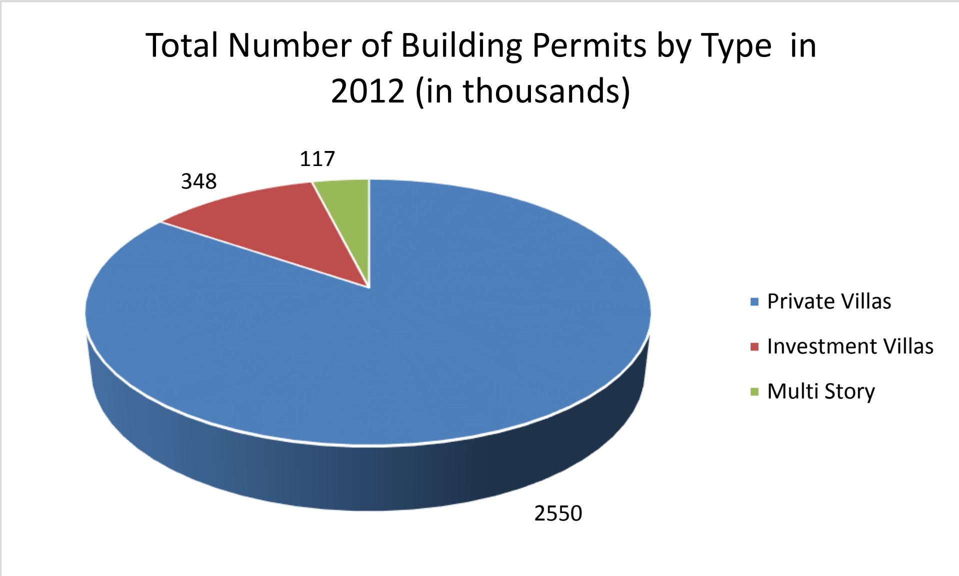


Figure 4-12: Number of building permits by type in Dubai in 2012

The housing market is influenced by broader economic trends. Dubai's economy has experienced solid and sustainable rates of growth over the past three years. The key drivers are logistics, hospitality and retail. Demand for housing is rising because of Dubai's population growth. The city's population is the second largest in the country, after the capital Abu Dhabi, and is largely comprised of expatriates.

Dubai witnessed sharp increases in property prices between 2002 and up to December 2008, which were driven by excessive short-term speculative activity, especially on off-plan properties. For these properties, buyers only had to put down deposits which could be around 10% (rather than the full price), so the market became highly leveraged. Many buyers never had the intention (or the funds) to pay the future instalments as they planned to flip the property before any payments were due. This turned the housing market into an unsustainable, highly leveraged derivatives market.

In *Dubai*, widely viewed as a regional financial and transport and logistics hub, the all-residential property price index (RPPI) surged by a record 18.89% (18.26% in real terms) during the year to November 2012. In contrast, the *Abu Dhabi* all-residential property price index dropped 6.5% during the year to end-November 2012.

4.2.1.3.3 Housing Finance

The emirates, and more specifically Dubai, is considered to have the most developed financial sector in MENA. The UAE's mortgage market has expanded rapidly in recent years. Mortgage loans grew from 4.1% of the GDP in 2001 to 14.7% of the GDP in 2010 before falling to $43.787 billion in 2012 affected by the global financial and economic crisis. In December 2010, total outstanding mortgage loans rose by 15.2% to $44.70 billion from $38.825 billion in December 2009. The following figure presents the main statistics about the mortgage finance in the UAE in $ million:

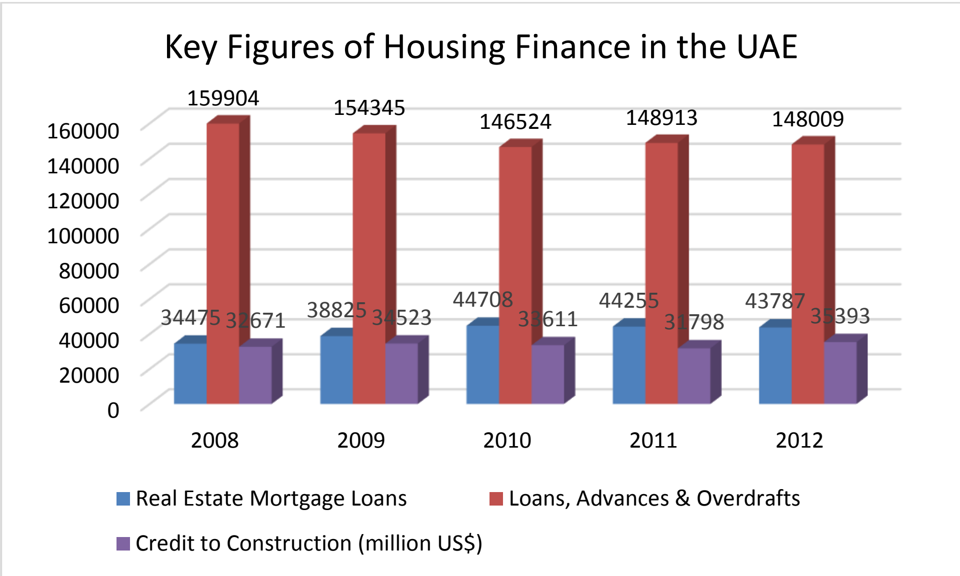


Figure 4-13: Key figures of housing finance in UAE

The banking sector is active as well in financing the construction sector, which is considered a leading sector in Dubai economy. Loans to the construction sector went up from 10.5% of total credit extended to private sector in 2007 to 12.24% in 2012.

The *players* in the supply of housing finance are both public and private. The government, whether at the level of the federation or the emirates, and especially in case of Dubai, stands as the role model in certain aspects for other countries in the region. The government has participated in the supply side of the housing market through the government-related entities (GRE) and encouraged the development of a well-functioning housing sector. The government also played well its role as the regulator of the financial and real estate sectors. Last but not least, the government played its expected role as in other oil-rich countries by designing special social housing programs for its citizens. The Sheikh Zayed Housing Program was launched to offer to nationals

1. land lot with loan
2. vacant land lot
3. governmental housing
4. maintenance and renovation

And through the financing options, loans from the programme through

1. ready housing loan
2. construction loan
3. maintenance and renovation

The number of beneficiaries have been 12,635 between 2000 and 2005 while the number of completed units or under construction was 12,635.

Regulators, as represented by the Central Bank, Capital Market Authority and Real Estate Authority in Dubai are active in regulating the financial imputations and the real estate sector. Dubai is a pioneer in the MENA in regulating the real estate sector and developers as well. The Central Bank is working on issuing special regulation for mortgage finance.

4.2.1.3.4 The Financial Sector

The banking sector consists of 23 national banks, 824 branches, 89 pay offices, 28 electronic banking service units, 28 foreign banks, 86 branches and 54 electronic banking service units. This puts UAE amongst the top 10 countries in MENA in terms of banking penetration with 11.4 bank branches per 100,000 adults in 2014.

Deposits in the banking sector grew from $191,886 million in 2008 to $254,519 million in 2012 with an annual growth of 6.5%. In 2007, demand deposits represented 31%, savings 5.5%, time deposits 63%. In 2012, demand deposits stood at 37%, savings 9% and time deposits at 54%. In 2007, 52% of time deposits were up to 3 months, 16.5 3 to 6 months, 15.8% 6 to 12 months and 15.2% more than 1 year. In 2012, 35% of time deposits were up to 3 months, 15.9% 3 to 6 months, 23% 6 to 12 months and 24% more than one year (Central Bank Report, 2013).

Stock markets in the UAE, Dubai and Abu Dhabi are very active compared with other markets in MENA. The combined market capitalization of Dubai and Abu Dhabi represent

17.6% and 39.2% of the GDP. The capital market is characterised by having the largest volume of bonds and sukuk in the MENA.

In terms of *products*, all banks in the UAE offer mortgage finance. Mortgage interest rates in Dubai have followed key US Federal Reserve's rates because of the peg of Arab Emirates dirham to the US dollar. In 2008, when the Fed successively cut key rates, the UAE's central bank was forced to track US monetary policy, causing inflation to hit a record high of 12.9%.

After the 2008 crisis, many banks became reluctant to lend on mortgage basis. However, banks and other mortgage lenders in the UAE have returned to the market and offered new mortgage products.

More fixed-rate mortgage products have been introduced. In addition, 'fee-free' products, which allow borrowers to switch to a new lender at a lower cost, have been offered starting during the last quarter of 2010.

Loan-to-value (LTV) ratios are also increasing again, with some lenders offering as much as 80% LTVs on some projects. In the first quarter of 2011, mortgage loans were offered with interest rates ranging from 5.8% to 6% (Global Property Guide, UAE).

There are several financial institutions which offer Islamic finance products. Tamweel is one of the largest Islamic mortgage–specialised lenders. The company is back in the market after the global financial crisis, having stopped trading its mortgage shares in November 2008 because of the global credit crunch.

4.2.1.3.5 People and Demographics

The population of the UAE is a mix of nationals and residents with 16.6% emirati (citizenry), 23.0% other Arabs, 42.3% South Asian, 12.1% other Asian and 6.0% other expatriates. Density is 99/km^2. Eighty-five percent of the population is concentrated in three emirates, 34% in Abu Dhabi, 32% in Dubai and 19% in Sharjah. In Dubai, the population increased by 81% from 1985 to 1995, from 370,000 to 674,000, and by 78% between 1995 to 2005, up from 674,000 to 1.204 million, and by 74% between 2005 and 2013, from 1.204 million to 2.106 million in 2013.

Dubai's Government-Related Real Estate Firms

The role of public and private sectors in meeting the demand for housing has been a subject of debate in the region. Dubai presented a solution which combines the ability of the government to intervene in the development of the sector while using private sector structures and management practices, the government-related entities (GRE). A bewildering array of competing GRE is not unique to Dubai. Over the last two decades in many emerging economies, especially in large transition economies such as China and Russia, there has been a clear rise of hybrid corporations that mix features of private corporations with an explicit relationship with the government (El Sadik and El Badawi, 2012). These hybrid corporations often show different governance behaviour from purely private corporations as GRE decisions are likely to be politicised owing to their close relationships with government. The central policy issue with explicit or implicit guarantees to private or semiprivate corporations is that during periods of high liquidity and low interest rates, these guarantees are likely to lead to overinvestment and high-risk management decisions for which Dubai is a textbook case, although real estate in China shows plenty of similar cases.

However, this model has challenging characteristic risks which should be mitigated. Renaud and Bertrand (2010) consider that overguaranteed and underregulated financial and nonfinancial corporations cause a moral hazard and the increase in the overpricing of real estate assets until the boom collapses and then values will sharply reverse themselves. The mismatched maturity funding of large real estate projects is a particularly fertile ground for misleading guarantees (Renaud and Bertrand, 2010).

4.2.1.3.6 Discussion and Analysis

The UAE is considered one of the best GCC countries in terms of supply of housing finance because of the following:

1. The housing market is open where supply is provided by private developers and GREs as well;
2. UAE nationals benefit from national housing programs targeting them;
3. The UAE is one of the two countries with foreign ownership allowed subject to certain licensing processes;
4. The UAE has the highest penetration rates in housing sector in GCC as measured by number of housing units per capita;
5. The financial sector, the banking sector and the capital markets are considered among the best in the region.

However, the market is still deposit-based with the risks associated with the mismatch between maturity of funds used to finance housing finance and tenure of housing loans.

Public and private *players* are participating in the housing finance sector. The government has laid the ground for a vibrant housing supply by private developers and GREs. Dubai and Abu Dhabi lead the region in setting a regulatory framework for real estate development/developers. The Central Bank is regulating the mortgage finance by the banking sector. However, the country still has potential to release in terms of the depth of the market or the penetration to middle-class expatriates. What is available is still housing finance supply and not a system. It still depends on the primary market despite the potential of the secondary market. Dubai is competing with other financial hubs for Islamic finance and could play an integrating role not only locally but regionally as well. The banking sector is participating in the development, but more is expected to release the potential.

Products provided are more diversified than other countries in the region whereby Islamic and conventional products are available. However, given the size of the financial sector and the diversification of the population, and the growing need for financing, more diversified products should be available.

The *people* factor covers both nationals and expats. Nationals benefit from housing finance and housing programs similar to what is available in other GCC regions albeit with more efficient allocation. Expats are as diversified as the 190+ nationalities living in the emirates. Financial education should be in the curricula and provided by advisors whenever needed.

4.2.2 Levant

4.2.2.1 Jordan

4.2.2.1.1 Country and Economic Overview

Jordan is a kingdom in Western Asia, on the east bank of the River Jordan, and extending into the historical region of Palestine. Jordan borders Saudi Arabia to the south and east, Iraq to the northeast, Syria to the north and Palestine and Israel to the west, sharing control of the Dead Sea with the latter.

Jordan is an upper middle-income country with a population of 6.4 million and a per-capita GDP of $5,152. The country has limited natural resources, limited agricultural land, and water is especially scarce. GDP in 2013 was $33,641 (millions); services account for more than 70% of the GDP and more than 75% of jobs. Over the past 10 years, Jordan has pursued structural reforms in education, health and privatisation/liberalisation. In addition, the Government of Jordan (GoJ) has been working towards social protection systems and subsidy reforms, improving the conditions for greater public-private partnerships in infrastructure, and tax reforms, including the improvement of tax administration and management (World Bank, 2014). The level of poverty was 14.4% in 2013 with external debt amounting to $10,189 million.

The government has been making significant reforms over the past few years, most notably, controlling public debt and fiscal deficit, privatisation plans, opening the economy and encouraging foreign direct investment (FDI).

4.2.2.1.2 The Housing Sector

The contribution of the housing sector to the economy in 2013 was $2,372 million, or 7.6% of the GDP. This is on the high end in the region. The housing sector in Jordan is a reflection of a country which has been host to waves of migrations propelled by regional unrest in addition to meeting the need of an economy which depends on exporting human resources who come back with resources required to build their dream house. So a general housing shortage in the mid-1960s was aggravated by the influx of refugees from the West Bank of Palestine after the 1967 war, and Jordan still lacked adequate housing in the early 1980s. During 1981–1986, some 42,300 new residential building permits were issued. According to the 1994 national statistics, there were 831,799 housing units nationwide, including 467,715 apartments. About 80% of all dwelling units were owner-occupied (*Nation Encyclopedia*, 2015).

On the back of the Iraqi crisis and investment from GCC countries, building permits grew at a combined annual growth rate of 3.1 % over the period 2002–2007. Residential permits account for the bulk of building permits issued, accounting for approximately 88% during the year 2006 and 2007 as compared to 90% in 2005. The majority of the permits issued in 2007 were in Amman, which accounted for 39.6 % of total permits issued in 2007, versus 45.0% in 2006, as building shifted onto other areas because of higher prices.

The real estate and construction sectors have been one of the most active sectors of the Jordanian economy lately. The construction sector accounted for 4.4% of the GDP on average over the period 2002–2007. The sector has grown at a CAGR of 13.7% during the same period.

The value of investments in the real estate sector is estimated to be $25.38 billion over the course of the last five years with an estimated value of investment reaching $70.5 billion in 2012. The total value of non-Jordanian investments in the real estate sector advanced at a

CAGR of 22.6% during the period 2004–2007. Prices of Jordanian real estate have risen by approximately 20.0% in 2007 after rising by around 10%–30% in the year 2006. Moreover, land prices are estimated to have risen by around 40.0% in 2007 alone.

4.2.2.1.3 Housing Finance Supply

The 2012 national portfolio outstanding of mortgages and Islamic housing finance loans stood at close to $2.82 billion. Outstanding loans as percentage of the GDP was 5% in 2010 and 9% in 2012.

Credit to the construction sector has also expanded by a CAGR of 20.5%, with the highest growth rates of 34.3% and 24.4% registered for 2006 and 2007, respectively. Real estate investment was 2.8%, 4.2% and 3.6% in the years 2006, 2005 and 2004, respectively (Global Property Guide). The following figure presents the credit extended to the construction sector and the percentage of total credit extended to the private sector:

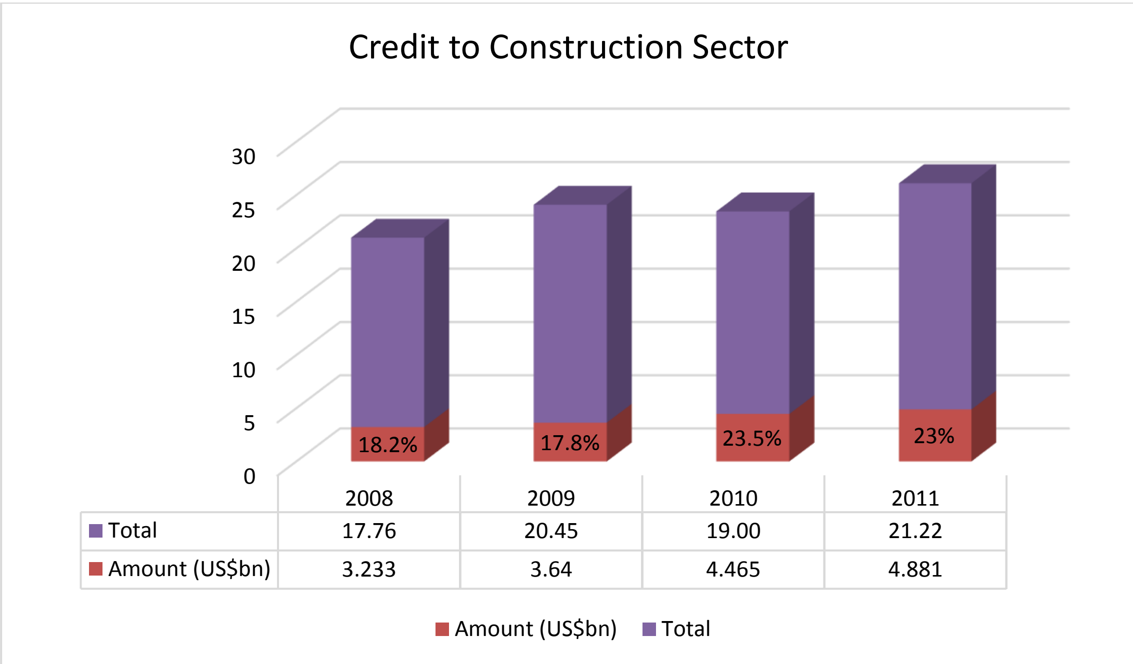


Figure 4-14: Credit to construction sector in Jordan

The main players in the housing finance system are banks and one refinance company. There are no specialised financial institutions.

The government has well focused on achieving economic stability. The government has done well as regulator in laying the infrastructure and land policies for the supply of housing, which kept the market in balance. However, with the exception of the liquidity facility and the support which the housing bank got during the first two decades of its existence, the government has not done what is expected or what could be expected.

The Central Bank occupies the chairmanship of the liquidity facility JMRC. However, when compared with other countries such as Lebanon, the Central Bank is not dedicating special efforts to assist the banking sector in developing an integrated system. There is still a potential to be realised as indicated in the flagship report issued by IMF.

The Capital Market Authority is in charge of regulating the Amman Stock Exchange. Though the capital market is considered active compared with other countries in the region, the amount of housing finance securities traded is very low and is limited to issuances by JMRC.

Given that only the primary market is active in origination, only plain products are offered by the banking sector. The market practice in Jordan is to provide mortgages with adjustable rates. Rate resets typically take place once a year and are based either on the JODIBOR or on the lending institutions' internal cost of funds. There is a very limited volume of fixed-rate mortgages and therefore no significant interest rate risk in the system, which limits the motivation of lenders to seek capital market instruments that could hedge fixed-rate exposures. The prevailing interest rates of mortgage lending are priced off low-cost demand and short-term deposits, making capital market funding economically unattractive even for short-term maturities, independent of yield curve effects.

Although banks can contractually adjust the mortgage rates based on their cost of funds at any time, in practice the banks adjust the mortgage rates annually. Lenders acknowledge the potential for credit risk in cases of significant increases in the mortgage rates and resultant larger periodic borrower payments.

While official 2012 originations are not available, with the share of the Islamic products at about 30%, the number could be estimated at around $846 million. The four Islamic banks in Jordan are granting Islamic housing finance based on the principle of Ijara. Under this principle, the bank purchases the residential property and leases it to the customer who pays monthly lease payments that cover the rent and amortisation of the principal. At the end of the term, when the loan principal is fully repaid, the bank transfers the property to the customer. The terms of such Islamic housing finance 'loans' are similar to the conventional mortgages except that the profit rate (mortgage rate) is higher, about 8.5%. Despite the higher mortgage rate, a significant portion of the population prefers Islamic mortgages for religious or cultural reasons. Additionally, property transfer from the bank to the borrower at the end of the lease is exempt from the 9% property transfer fee (it is levied once at the beginning when the bank purchases the property).

Jordan Mortgage Refinancing Company

Refinancing of mortgage loans is possible through JMRC, which was the first refinancing institution in the MENA and was incorporated in 1996 under a government initiative with financial assistance and support from the Central Bank of Jordan (CBJ) and the World Bank. It commenced business in 1998. The company was set up to alleviate the liquidity problems of the primary residential mortgage lenders by allowing them to use their mortgage loan portfolios as collateral to obtain additional funds. In addition, it allows them to reduce interest rate risk by making available longer-term fixed-rate funds, narrowing the difference between the maturities of their assets and liabilities. An additional objective of the company was to deepen the capital market by creating a new source of fixed-income securities to widen the range of investment instruments in the market. JMRC's shareholders are the Central Bank of Jordan (18%), the Social Security Corporation (10%), the Housing and Urban Development Corporation (10%), the Jordan Loan Guarantee Company (6%), and 11 commercial banks (56%). JMRC only lends to leasing companies that are part of a banking group and requires a comfort letter from the parent bank, which in effect confirms that the leasing company in question is in fact part of the same corporate group.

In parallel, JMRC obtains funds by issuing bonds. The bonds are not backed by specific refinance loan pools but are general debt obligations of the company. To date, all of its bonds have been single-bullet structures, which does not expose JMRC to cash flow risk given the fact that it refinances operations and are always backed by bonds of similar maturities. Most of bonds issued by JMRC were placed (typically with maturities of one year) privately with a small group of investors, namely, a few banks and the Social Security Corporation. JMRC issued only two bonds through public offering since its inception (both took place in 2005).

To support JMRC and promote the secondary mortgage market in Jordan, the government provided a number of incentives to institutions selling loans to or investing in bonds issued by JMRC:

- The weighted average risk factor related to the housing loans refinanced by JMRC is 20%, thus improving banks' capital adequacy ratio.
- Banks are not required to have a general allowance for housing loans refinanced with JMRC.

- Housing loans refinanced by JMRC are excluded from provision under the Banking Law, which indicates that the loans granted for construction and purchase of real estate shall not exceed 20% from the total bank's JOD deposits.
- JMRC bonds characterised by low-risk factor equivalent to 20%, which can help improve banks' capital adequacy ratios.
- JMRC bonds are exempted from ownership transfer fees and charges.
- JMRC bonds are considered liquid assets on the bank balance sheet for the purpose of calculating the bank liquidity ratio according to the CBJ, thus lowering the cost of funds to the banks.

Mortgage deed transfers between banks and JMRC are exempt from stamp duties on a case-by-case basis. This lowers the transaction cost of refinancing the mortgage loans. Treasury bonds are at least 8% for medium-term maturities, implying pricing of JMRC refinance loans of above 8.5%.

4.2.2.1.4 Financial Sector

The banking sector in Jordan consists of 13 national banks, 9 foreign banks, 3 Islamic banks and 1 foreign Islamic bank. Claims on the private sector represented 58% of the GDP in 2012. Demand deposits represent 30% of deposits. Deposits of the private sector amounted to $30.34 billion, which is 97% of the GDP, while the total assets–to–GDP ratio was 179% in 2013, and the equity market capitalisation–to–GDP ratio was 82%.

The banking sector is the main player in housing finance in Jordan with about 50% of the portfolio outstanding with three large banks – the Housing Bank for Trade and Finance, the Jordan Islamic Bank and the Arab Bank. The Jordanian banking system is characterised by a high overall (yet short-term) liquidity. The loan-to-deposit ratio has been stable at around 55% in the recent years. The ratio of assets deemed liquid to short-term liabilities was 163% at the end of 2011. Accordingly, banks depend on funding from deposits. Interest on housing loans is variable and could be changed from time to time depending on the lenders. In this context, banks have little incentive to look for external, more expensive resources to fund their lending portfolio and, in particular, to use JMRC's services. However, the utilisation of short-term liabilities for the production of long-term mortgage loans exposes banks to maturity mismatches, leading to liquidity risk – taking into account a declining trend due in part to significant liquidity and interest rate pressures on the banks. Currently, the single legal or regulatory measure to constrain such mismatch is in the Banking Law, which limits housing and commercial real estate related lending to 20% of the volume of JOD deposits, excluding the amount of loans refinanced with the Jordanian Mortgage Refinancing Company (JMRC). Banks apparently seek JMRC refinancing as a measure to avoid that limit, as '1 year + 1 day' terms of recent refinancing and bond issuance by JMRC indicate that lenders are in fact not utilising their transactions with JMRC to extend the duration of their liabilities but rather to meet the Central Bank regulation.

The insurance sector in Jordan is relatively small, with total assets of approximately \$1.01 billion and \$614 million in premiums. It has an investment portfolio of \$933 million. Of the 22 active companies working in the sector, 16 provide nonlife insurance, six offer both life and nonlife insurance and one company offers only life insurance. Three companies are sharia-compliant insurance (Takaful) providers. In addition, there are also small mutual and savings funds in Jordan but with total assets less than 1% of the GDP.

Income-based guarantee mechanisms, such as the ones offered by FORGARIM in Morocco, do not exist yet in Jordan. Such schemes are more appropriate to inducing lending to lower-income categories and informal-sector households. Usually such guarantees enable self-employed middle-income people to have access to housing finance.

The local fixed-income market in Jordan remains underdeveloped and is largely dominated by government fixed-income instruments. The value of the fixed-income market as percentage of the GDP is approximately 44%. Treasury bills and bonds account for approximately 84% of the total local fixed-income market. This dominance of government fixed-income instruments is reinforced by increasing levels of public debt, especially since 2010 and the relatively underdeveloped private fixed-income market. Approximately 67% of the total government fixed-income issues are listed in the Amman Stock Exchange, with a total market value of \$15.53 billion. Government securities are also traded over-the-counter. All sovereign fixed-income securities are denominated in JOD except for one \$750 million, five-year Jordan Eurobond.

As described above, the bond market is small and not active in Jordan in the absence of a strong base of institutional investors – the Social Security Corporation being the sole significant player – and a system of mutual funds. Individual investors, who can enjoy a high net worth, mostly buy stocks and seems to ignore bonds. Moreover, the government funding needs translate into high volumes of treasury bills and bonds, with a resulting crowding out effect of the private sector in a narrowly delimited market. These conditions are not conducive to the development of an institution whose mandate is to fund itself through bond issues, in particular in the medium or long maturity range.

4.2.2.1.5 People and Demographics

Population grew from 900,000 in 1961 to 6.338 million in 2012. The population in Jordan was 82.6% urban in 2013 and is one of the youngest among upper middle-income countries with 37.3% under the age of 15. There are 1.173 million households with an average size of 5.4.

Jordan ranks 100th among countries in the Human Development Index prepared by UNDP. In terms of human development, Jordan is above average in relation to middle-income countries. The literacy level is 92.6%. The net population growth rate after taking into consideration net immigration is -0.97%.

In terms of getting credit and credit information, Jordan is still underdeveloped. The following table shows its ranking in terms of getting credit and credit information registry compared with other OECD countries and worldwide:

	Getting Credit Rank	Strength of Legal Rights (1)	Depth of Credit Information (2)	Public Registry of Adults (3)	Private Bureau Coverage (% of adults) (4)
OECD		7	5	10.2	67.4
Jordan	167	2	2	1.9	0

Table 4-10: Ranking of Jordan in Credit Information compared with OECD

4.2.2.1.6 Discussion and Analysis

Jordan, and similar to all other countries in the region, has a supply of housing finance with a penetration rate lower than OECD countries or countries with a similar level of income. The following is observed:

1. The supply basically depends on bank deposits which causes mismatches between sources of funds and uses of funds.
2. The liquidity facility did not perform as expected and has not managed to develop the capital market for mortgage finance.
3. The spread between cost of funds and cost of financing reached 400 basis points, which is still high.

4. The market supply still depends on depository institutions.

Players in the supply of housing finance are public and private as well. The government has supported the supply of housing finance by granting special tax exemptions to the Housing Bank, which were later abolished. The housing sector is considered open with supply provided to meet the growing demand driven by demographic factors and refugees from neighbouring countries. This is due to the policies set by the government, which has provided the required infrastructure for the housing sector. However, the government has not worked on developing a market-based housing finance system. Such development requires proper regulations and institutional framework, which is still not available. The Central Bank is silent about the maturity mismatch as well. The country has a banking sector and capital market on which the government can capitalise to realise higher penetration rates for housing finance.

Products available in the market include Islamic and conventional. However, the products are not diversified to cater to the different market segments.

The *people* factor is an area where policy could address the need for financial education and developing a culture conducive to success of the sector. *Unemployment rate is around 13%, but it is very high among the youth.* The country also has one of the highest rates of literacy and homeownership in the region, which could be instrumental in developing a sound housing finance system.

4.2.2.2 Lebanon

4.2.2.2.1 Country and Economic Overview

Lebanon is a republic located in the East Mediterranean. Lebanon covers an area of 10,452 square kilometres and is bordered by Syria to the north and east, Israel to the south. Total population was 4.070 million in 2012. Lebanon is classified as high middle-income country. It has a free-market economy and a long laissez-faire commercial tradition. The 1975–90 civil war seriously damaged Lebanon’s economic infrastructure. Following the civil war, Lebanon rebuilt much of its war-torn physical and financial infrastructure by borrowing heavily – mostly from domestic banks – saddling the government with a huge debt burden.

Following four years of robust annual growth averaging around 7.5%, macroeconomic performance started to deteriorate in 2011, in part due to the impact of regional turmoil, domestic political uncertainty and repeated security incidents. The Lebanese economy is characterised by continuous unemployment and migration, especially that of educated youth and skilled labour. The overall fiscal deficit reached 8.7% of the GDP in 2012. The level of poverty was 8% in 2013, and the external debt amounted to $30.528 billion in 2013. The public debt–to–GDP ratio reached 134.4% at the end of 2012.

Though Lebanon claims to have a free market economy, it ranked 59th in economic freedom globally and 7th in the region. The national currency has been stable over the last 20 years vis-à-vis the US dollar. However, the stability of the Lebanese economy faces many challenges because of the high external public debt and the political unrest in the region. The cost of establishing a business is 67% of GDP per capita, which is the fifth highest in the Arab world. Lebanon ranks 9th in the Arab world in terms of ease of doing business, with 115 compared with the global average of 93 and the Arab average of 104. It ranks second in terms of number of procedures to establish a business with five. It ranks 16th in terms of number of days to start a business (World Bank, 2012).

4.2.2.2.2 Housing Sector

The housing sector in Lebanon has been the leading sector over the last three decades because of reconstruction and demographic factors. The sector contributed $2,273 million to the GDP in 2013, which is 5.2% of the GDP. The number of primary residences was estimated in 2007 to be 888,814. Of the total residences, 42.2% are in Mount Lebanon while 11.6% are in Beirut. Primary residences are distributed into 67.0% apartments in independent buildings, 31.2% independent houses, and 1.0% as 'villas consisting of more than one floor'. Homeownership is estimated to be 71.5% of the primary residences. Secondary homeownership is estimated at 8.5%. The following figure presents the percentage of primary residence by age of the building. The majority of new housing projects are in the suburbs of Beirut, the capital:

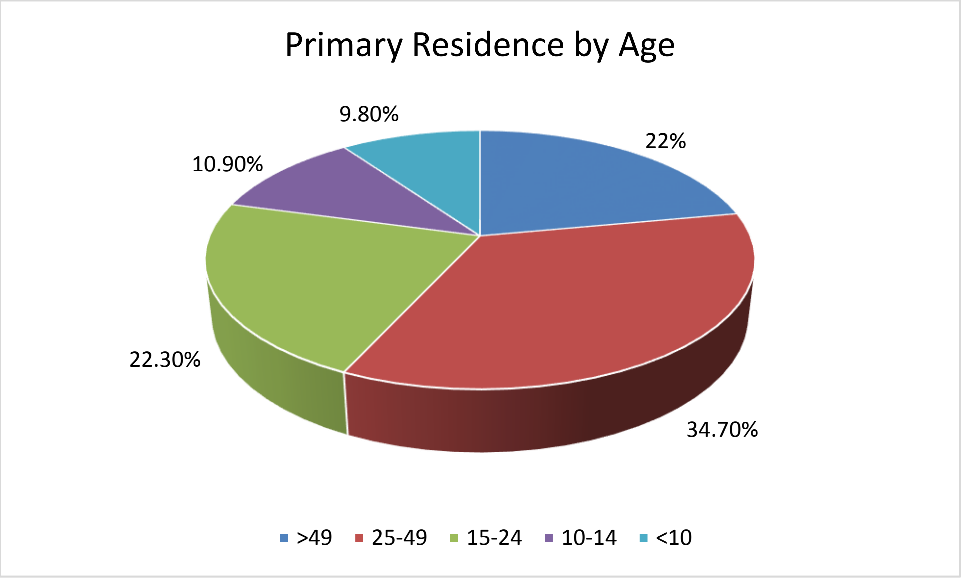


Figure 4-15: Composition of Primary Residence by age of building in Lebanon

4.2.2.2.3 Financial Sector

Lebanon has very active *banking* sector. Total deposits of the banking sector reached $103.57 billion in 2012 up from $96.44 billion in 2011 while deposits-to-GDP ratio was 245.3%, which is the highest in the region. The credit and loans extended by the banking sector amounted to $68 billion by the end of 2012 up from $63 billion in 2011, and the ratio of loans and credit to GDP was 175% in 2013. The average cost of finance was 7.14%. The sector also extends subsidised loans to sectors targeted as per the policy/instructions of the Central Bank. The total value of subsidised loans amounted to $14 billion, or about 26% of total credit. The average bank deposit rate was 5.77%, while the average lending rate was 7.25% in 2012.

The *capital market* in Lebanon is very limited with only 10 listed companies. The market capitalisation was $10.55 billion in 2013, which was 23.1% of the GDP, and 6.4% of total bank assets, which is second lowest in the Arab world.

4.2.2.2.4 Housing Finance

Housing finance has grown well over the last few years. However, this growth was driven by the subsidised loan scheme set by the Central Bank. As per the scheme, banks can lend up to 60% of the obligatory reserves at subsidised rates. The total amount of home mortgage outstanding at the end of 2013 was $8.53 billion, or 20% of the GDP. The number of beneficiaries of housing loans reached 94,300 by the end of 2013 with an average loan of

$91,000. Twenty percent of the total loans were extended outside the subsidised loans amounting to $1.741 billion by the end of 2013. Subsidised housing loans amounted to $6.7 billion in 2013, or 49% of total subsidised loans.

The main players in the market are the Central Bank and commercial banks. The banks originate the loans and keep them on their balance sheet. Despite enacting a legislation to securitise loans more than 15 years ago, the securitisation did not work. The banks, given the limited lending opportunities due to economic conditions, prefer to keep the loans on their balance sheets.

Banks offer plain vanilla products. Islamic products do exist as well through Islamic schemes to finance the purchase of the property and to repay its price. Murabaha is when the bank purchases the desired house from the seller and then resells it to her at a predetermined and competitive price, which includes the bank's profit. In return, the buyer reimburses the total amount over agreed-upon monthly instalments. Housing finance is available using another formula as well, which is Ijara Muntahia Bitamalok, or lease ending in ownership. In this mode of finance, the bank purchases the desired house from the seller and then leases it to her for a certain monthly fee and for an agreed-upon period. By the end of that period, ownership of the house will be transferred to the beneficiary for a prenegotiated price.

The Subsidised Housing Loan

Iskan loans, which represent the subsidised scheme launched by banks, are based on an initiative by the Central Bank launched in 2001. Banks offer loans in collaboration with the Public Corporation for Housing, which is owned by the government. Only Lebanese citizens or residents with a monthly income varying between $400 and $4,500 are eligible. The maximum area of the house is 200 square metres. The maximum amount of the loan is $53,000, which is paid back in up to 30 years. Protocols between the Lebanese Banking Association and the Housing Establishment have been signed to execute this scheme. Loans are denominated in Lebanese pounds. Credit risk is totally borne by the originating banks. The loans covered many social classes, which would not have been able to access banking finance without this type of loan. The value of subsidised housing loans amount to 80% of the total housing loan portfolio.

In 2013, $5.62 billion, approximately two-thirds, benefit from loans extended using obligatory reserves. $1.168 billion, or 14%, benefit from facilities extended by the Central Bank after consuming 60% of obligatory reserves.

As to the cost of financing to beneficiaries, there are three categories. The first category is the Housing Bank, which is 20% of the return on treasury bills plus 3.5% using obligatory reserves, 4.7% which becomes 5.07% if using the credit facilities of the Central Bank. The second category is based on the protocol signed between the Lebanese Banking Association with certain organisations and institutions, such as General Security or the army. The cost of this borrowing is very low, 1.628% using the obligatory reserves plus 0.5% if using the credit facilities of the Central Bank, making the total cost 2.128%. The third category is outside the protocols which is priced at 40% of the return on one-year maturity treasury bonds plus a margin of 3%, which makes the total cost 5.46%. The subsidised loans make the average cost of borrowing 4.8%, which is less than the average cost of funds and the inflation rate. The loan could be up to 20 years with LTV of up to 80%.

4.2.2.2.5 People and Demographics

The urban population in Lebanon represented 87.25% of the total population in 2011. There is a strong culture of homeownership in Lebanon. Of primary residences, 71.5% are owned by the household or one member of the household occupying them while 28.5% are not owned by the households that inhabit them (i.e., renting, no charge or other). In the populace, 24.2% was less than 15 years old in 2011, down from 30.5% in 2000, the difference shifting to the age group 15–65 years old (UNFPA Lebanon).

4.2.2.2.6 Discussion and Analysis

Public and private *players* have worked together to achieve the relative high rate of mortgage penetration rate of 20% compared with the other MENA countries. However, the major role is that of the Central Bank. Banks played a role in the development as evidenced by the protocols signed between the Lebanese banking association and several organisations to launch the subsidised loans.

The Lebanese banking system is very active in the origination of housing loans using obligatory reserves. The capital market is very weak compared with other countries in the region. Launching securitisation to provide stable long-term funding sources for housing finance requires the development of the capital market.

The *products* offered are plain, and a significant percentage of the loan portfolio is subsidised loans which cannot be securitised. Accordingly, any future growth is quite constrained by the growth of deposits or the development of securitisation. The products are not diversified and basically depends on subsidised loans. The limit allowed to use out of obligatory reserves has been reached by many banks.

The *people* have a high rate of literacy, and exposure to banking services shows the potential for housing finance. The high ownership rate shows the potential for housing finance.

4.2.2.3 Syria

4.2.2.3.1 Country and Economic Overview

Syria is a republic in Western Asia, bordering Lebanon and the Mediterranean Sea to the west, Turkey to the north, Iraq to the east, Jordan to the south and Israel to the southwest. Syria is a country of fertile plains, high mountains and deserts. Since March 2011, Syria has been embroiled in civil war. Syria is a lower middle-income country with a population of 21.768 million in 2013 and a GDP per capita of $2,390 in 2012. Syria has been facing a difficult crisis since 2011, one that has led the country's economy and capital stock to suffer substantial losses. Its gross domestic product (GDP) contracted by 15% in 2012 and is estimated to have dropped to about $51 billion in 2012 and to $35 billion in 2013 because of the crisis and international sanctions. Though the country has diversified resources, the country remained dependent on the oil and agriculture sectors. Prior to the current crisis, the oil sector provided about 40% of export earnings. The agriculture sector contributed to about 20% of the GDP and 20% of employment. Oil reserves were expected to decrease in the coming years, and Syria has already become a net oil importer before the crisis. The level of poverty before the crisis was 12.3%. Since the civil war began, the economy shrank by 35%.

Prior to the unrest, the government began adopting liberalising economic policies, including cutting lending interest rates, licensing private banks, consolidating multiple exchange rates, raising prices on some subsidised items, and establishing the Damascus Stock Exchange. Despite the said reforms, the economy remained highly regulated by the government. Long-run economic constraints include foreign trade barriers, declining oil production, high unemployment, rising budget deficits and increasing pressure on water supplies caused by heavy use in agriculture, rapid population growth, industrial expansion and water pollution.

4.2.2.3.2 The Housing Sector

The housing sector in Syria has been a leading one in which the private sector participated along with the public and cooperative sectors. The sector has been affected by the demographic changes during the period of central command economy since 1963. The total investment in the sector amounted to \$2.02 billion in 2008 in which 7% was contributed by the public sector and 98% by private sector.

The average growth rate between 2000 and 2008 in investment was 27.3%. The cooperative sector was very active in the 1970s and 1980s and the savings amounted to \$700 million in 2008. Total number of housing units was estimated to be 3.6 million before the crisis. Similar to other countries in the region, the informal housing prevailed to cater to migration to cities, and it was estimated that 35% to 40% of the housing stock was informal. Most of the informal housing production is self-built incrementally, often on illegally subdivided land, which is bought and acquired through notary deeds.

The 10th five-year plan, 2005–2010, foresaw the construction of 483,000 housing units. Around 10% of that target was executed by the public sector, 9% by the cooperative sector, while 257,000 units were built by the private sector. Around 13% of housing units were vacant between 2005 and 2008. The average area per capita grew from 17.34 m^2 to 19.97 m^2. The homeownership rate is 86%. A key player in the sector is the Housing Establishment, which is a public-sector entity.

Affordability is a major issue with the minimum wage of \$200. The government has launched a key housing initiative in 2002 through the Housing Establishment, which is the Youth Project. The project enjoyed subsidies in the form of soft loans from Public Debt Fund.

The government has enacted a special investment legislation, Law 15 of 2008, to encourage real estate investment and regulate the licensing of real estate developers and projects as well. Developers who dedicate up to 70% of their built-up area for affordable housing are granted special tax incentives for their projects. However, and because of the civil war, the implementation of the law has stalled.

The scene has completely changed after the crisis. The UN Economic and Social Commission for Western Asia (ESCWA) estimates that around 1.05 million housing units have been destroyed in the crisis, of which 315,000 were completely destroyed and 300,000 partially destroyed. More than 7 to 10 million people have been displaced.

4.2.2.3.3 Housing Finance

The size of mortgage market was approximately equivalent to \$2.6 billion in 2011, which was about 3.7% of the GDP. Vanilla products with loans from public and private sector banks were offered with a tenure of 5 to 15 years. Mortgage funding sources is solely based on core deposits. The main player is the Real Estate Bank. The bank was established in 1966 as a public bank specialising in housing finance. The bank has 23 branches; the loan offering was capped to 1.5 million SYP (approximately $30,000). Loans from 5 to 15 years were up to 40% of monthly income. The bank depends mainly on demand and short-term deposits (180 billion SYP, or $4 billion in 2011). Private banks including Islamic banks offer housing finance as well. The latter offers mainly Murabaha products. Before the crisis, the financing of construction projects enjoyed significant growth and went up from $1.28 billion in 2005 to $3.74 billion in 2011.

Law 39 of 2009

As part of the economic reform process, the government envisaged the establishment of a market-based housing finance system including institutional and legal frameworks. The government enacted several legislations aimed at liberating the housing sector and establishing the foundation for a complete housing finance system. Law 39 of 2009 was based on a road map for a market-based housing finance system with primary and secondary markets. Players in the envisaged system included banks, mortgage finance and refinance companies and the National Housing Finance Corporation, which was envisaged in the law but not established because of the crisis.

The Syrian government, based on international experiences of other countries, has laid down a road map for establishment of a housing finance system in Syria. That legal framework for that road map was included in Law 39 of 2009, which stipulated the establishment of a regulator, a housing finance guarantee fund, mortgage finance companies and a liquidity facility.

Law 39 of 2009 established the Real Estate Finance Commission, which is a regulator with the mission to regulate housing and real estate financing and make affordable financing available. Law 39 regulated licensing of mortgage finance and refinance companies and the home purchase financing agreement and accelerated procedures for repossession in case of default. The law specifies that all financing institutions providing housing finance are subject to the supervision of MFC.

Law 12 of 2012 regulated appraisers and subjected them to certification and licensing. Law 15, dated April 2, 2012, regulated the licensing of mortgage finance and refinance companies and home purchase financing agreements.

4.2.2.3.4 Financial Sector

Following more than 40 years of the monopoly of the public sector by six state-owned banks, the first private sector bank began activities in early 2004. By the advent of the crisis in 2011, there were 14 operational private banks, including three Islamic banks. The sector as a whole was experiencing solid growth and was on its way to becoming a key contributor to Syria's GDP. For the 2006–2010 period, assets at all Syrian banks grew at a compounded annual growth rate of 10.9% to reach 2.14 trillion Syrian pounds ($45.5 billion at the time), while customer deposits and loans grew at 16.3% and 25.9% to reach SYP1.07 trillion ($22.7 billion) and SYP638 billion ($13.7 billion), respectively. Private banks were naturally growing at a much faster pace than their more established public counterparts, and their share of total sector assets increased from 13.0% at the end of 2006 to 30.4% at the end of 2010. The Commercial Bank of Syria, a state-owned entity and the largest bank in the country, had close to 37% of the total assets in the banking sector and 52% of all assets at the six public banks.

Public-sector banks do not disclose their financial results or their accounting policies, which means all published figures have to be taken at face value. Total assets at public sector banks at the end of 2010 (latest available as of this writing) were at $31.6 billion, with customer deposits of $11.7 billion and an $8.0 billion loan book. It was estimated that less than 10% of those deposits were in foreign currency.

Three years of conflict and a weakening economy have put a halt to the sector's growth story and have had a large impact on banking operations throughout the country. Borrower defaults gradually rose as the conflict escalated and caused massive write-offs by the banks, severely affecting their bottom lines (Syrian Financial Sector, 2014).

After years of preparation and as part of the economic reform, the Damascus Stock Exchange was inaugurated in March 2008. Banks and insurance companies are the main listed companies. The development of the market has been thwarted by the crisis and is limited to only 2.8% of the GDP.

4.2.2.3.5 People and Demographics

Demographics of the Syria population is characterised by an urbanisation rate of 56% for the total population (2010), while 44% of the population live in two cities, Damascus and Aleppo. The annual rate of urbanisation growth is 2.5% (2010–2015 est.). As to age structure, 35.2% of the population is less than 14 years old, of which 4,066,109 are male and

3,865,817 are female. Sixty-one percent is between 15–64 years old, of which 6,985,067 are male and 6,753,619 are female. Forty-four percent of the said age group is unmarried. Only 3.8% of the population is 65 years or over, with 390,802 males and 456,336 females as per estimate of 2011. The UNDP announced in 2005 that 30% of the Syrian population live in poverty and 11.4% live below the subsistence level. This demographic profile indicates the housing crisis and the future trends which clearly will mean aggravation of this crisis.

As to *culture***,** and because of central command economy policies which led to under development of the financial sector, the Syrian population has one of the lowest banking penetration rates in the region. As in many developing countries, Syria's financial sector was not channelling enough of the country's transactions, savings, and investments, thus keeping its role relatively small and overall penetration of the bankable population quite low. Financial awareness among the general population remains very low, and not enough has been done by the various stakeholders to educate the population about the benefits of institutions like banks and insurers or the use of their products and services, which has been very limited, not coincidentally. This has started to change over the course of 2005–2011 when the economic reform allowed private banks to be licensed.

4.2.2.3.6 Discussion and Analysis

Syria has followed a central command economy for four decades whereby the government has allocated resources in the housing sector and provided financing through a specialised bank, the Real Estate Bank. The main *players* in the housing finance was the government through its housing arm and the Housing Establishment and the financing arm, the Real Estate bank. The public sector monopolised the execution of major housing projects and left very limited margin for the private sector. This led to the very low penetration rate of housing finance, around 0.5% of the GDP. The slow urban planning and zoning process led to the estimated 30%–40% of random housing. However, the public policy started to change with the orientation towards market economy, and more margin was given to private sector. The crisis in the housing sector is a reflection of a long adoption of centralised planning and allocation of resources in housing and housing finance as well.

Only limited plain *products* have been available. Fixed-rate mortgage and contractual saving were the main products. The tenure of the loans was up to 15 years, and the value meant that only a very narrow market segment would benefit. The Housing Establishment managed saving schemes aimed at preparing the savers to subscribe in housing projects executed by the establishment.

The road map to housing finance system was set in Law 39 of 2009. However, the implementation of the law stalled because of the crisis. In the aftermath of the crisis, the government has to resume its role in the development of a housing finance system which should contribute to the reconstruction of Syria.

People is an area of major work for any future development of a housing finance system. Though the literacy rate is one of the highest in the MENA, the low level of banking penetration and the 54% urbanisation rate make any development hinges on launching programs for financial education and engaging the middle market segment.

4.2.3 North Africa and Egypt

4.2.3.1 Tunisia

4.2.3.1.1 Country and Economic Overview

Tunisia, officially the Republic of Tunisia, is located in North Africa and lies along the Mediterranean coast. It is bordered by Algeria to the west and Libya to the southeast. Its size is almost 165,000 square kilometres with an estimated population of just over 10,700,000. Around 40% of the country's area is composed of the Sahara Desert, with much of the remainder consisting of fertile soil and a semiarid to temperate climate. The country has an extensive 1,300-kilometre coastline along the Mediterranean. The World Bank classifies Tunisia as an upper middle-income country. The government has adopted policies aimed at liberalising, privatising the economy, and making it export oriented. These policies achieved 5% GDP growth since the early 1990s up to 2010 when the Arab Spring led to a change in government towards a democratic system, is not over yet. Tunisia has a diverse economy, ranging from agriculture, mining, manufacturing, and petroleum products, to tourism.

Tunisia was ranked in 2009 as the most competitive economy in Africa and the 40th in the world by the World Economic Forum. Tunisia is one of the European Union's most established trading partners in the MEDA region and ranked as the EU's 30th largest trading partner.

In 2013, GDP per capita was $4,325. The country has limited natural resources and limited agricultural land, with 40% of its surface desert. GDP fell in 2013 to $47.11 billion down from $46.43 billion in 2011. GDP growth has been around 4% between 2008 and 2010. Although Tunisia managed an average 5% growth over the last decade, it continues to suffer from a high unemployment especially among the youth. The poverty was 15.5% in 2013 while external debt stood at $24,865 billion.

4.2.3.1.2 The Housing Sector

The housing sector contributed $1,932 billion in 2013, which is 4.25% of the GDP. Since its independence in 1956, Tunisia has made significant achievements in progressive and successful housing policies and in the development of specialised public institutions to improve the availability and quality of affordable housing. State enterprises have built over 300,000 housing units since 1960, and the Urban Rehabilitation and Renovation Agency (ARRU) has been instrumental in upgrading informal settlements since its creation in 1981 (Housing Finance in Africa Yearbook, 2014).

Infrastructure for housing has also advanced; household coverage rates for treated piped water and electricity have reached almost 100%, and coverage for wastewater in urban areas have exceeded 85%. In parallel, government social programmes have led to a fall in poverty rates, tumbling from 22% of the population in 1975 to 15.3% in 2013 (Tunisia Housing Profile, 2011).

Of the total housing stock, the existing supply of 2.5 million units exceeds the number of households, which is 2.2 million. There is a high and growing rate of sold houses, usually of high quality, which are purchased as secondary homes, luxury rental properties or as speculative investment properties, and are left vacant.

Interest in Tunisian real estate is still high. Prices on the formal market have been increasing at a rate of 8% per annum since 1990 and have skyrocketed following the revolution.

Formal supply of housing in Tunisia is almost exclusively targeted at middle- to high-income groups. Of the annual demand, estimated at 70,000 units per year, an estimated 40% are built informally. Of the 40,628 units formally registered in 2011, approximately 80% were constructed by individual households, 18% by registered developers and 2% by public developers. Most of the informal housing production is self-built incrementally, often on illegally subdivided land, which is bought and acquired through notary deed. Between 20,000 and 30,000 units per year are estimated to be produced this way.

Housing affordability is still an issue. Both in terms of cost-to-price ratios and in terms of standard housing loan programmes, urban households in the lower-income deciles currently find it extremely difficult to afford purchasing even modest housing units. The only housing type affordable to urban households under the median income is that which is self-built in periurban areas and may be deemed illegal. And since many households cannot qualify for housing loans for various reasons, there are many other families that cannot begin to purchase/build a new unit.

Most developable land around Tunisian cities and towns can be called periurban. With land for urban development becoming more scarce and, especially, more and more expensive, it is inevitable that competition for land on this periurban frontier becomes more and more acute (Tunisia Housing Profile, 2011).

Private developers still have little interest in affordable housing. Small margins and rising costs of both land and building materials make it difficult to provide units at prices comparable to the housing finance available for the target end users (Africa Housing Finance Yearbook, 2014).

It is clear that Tunisia still suffers from informal housing like many other countries in MENA. However, it is worth noting that the country is leading in organising the real estate developer profession.

4.2.3.1.3 Housing Finance Supply

The mortgage-based housing finance supply that Tunisia has built up over four decades has made notable success in terms of its coverage and maturity, diversity of its products and ability to innovate. However, there are still certain outstanding issues, especially concerning financial sustainability, interest rates and subsidies, targeting the poor, indebtedness, and the exclusion of many from mortgage financing (Tunisia Housing Profile, 2011).

The Tunisian housing finance system compares favourably with countries in Africa and the Middle East. The total value of outstanding property loans to both homebuyers and developers has been increasing rapidly, from $1.26 billion in December 2003 to $7.58 billion as of March 2013. The ratio of mortgage lending is currently 12% of the GDP, the third highest in Africa, behind South Africa and Morocco.

Housing loans are regulated by the Central Bank. Rules were modified in 2007 to limit loan-to-value ratios to below 80% (though up to 90% in social lending programmes such as ‘FOPROLOS’) and a maximum term of 25 years. Part of this law also requires long-term liquidity matching requirements for loans over 10 years and a requirement that interest rates must be fixed for housing loans with terms of more than 15 years. This requirement means many banks are funded by sovereign bonds and are resistant to offer loans beyond 15 years (Housing Finance Africa Yearbook, 2014).

There are currently a large number of financial institutions offering loan products for housing, including over 20 private commercial banks, in addition to the three state-owned banks. This diversity, while it caters to different market segments, still do not cover a significant part of the population.

Along the private lending institutions, the publicly owned Housing Bank (Banque de l'Habitat) still plays the most prominent role in housing finance. Established in 1989 after a restructuring of the Savings and Loans Bank (CNEL), the Housing Bank offers loans for house purchase, home improvement and residential land acquisition, accounting for 20.4% of real estate lending. There is also a state programme of subsidised construction finance for residential property developers. The Housing Bank can finance up to 80% of the total cost of a project if the housing units are 'social' units, at 6.5% a year interest and up to 70% if they are 'economic' or 'high-standing' units, at 8% a year. This financing scheme was introduced as part of the national housing strategy (1988) that saw the private sector as an important housing producer. However, these incentives are not adequate (Housing Finance in Africa Yearbook, 2014).

Looking at the array of housing loan *products* available through the private sector or the government programs in Tunisia, it seems that, with few exceptions, the targets are for the most part the urban middle and upper-middle classes.

Contractual saving or savings-for-housing schemes have been important housing finance mechanisms as well since the 1970s and are very strong today. There are state institutions dedicated to assembling and providing land for housing projects. Other state schemes provide small loans for house improvement and maintenance. Small-lot subdivisions and core housing have been piloted.

Loan rates for mortgages range from 3.5% to 5.75% for three different income eligibility brackets, targeted at households earning a regular salary of between minimum wage up to 4.5 times the minimum wage (set at $187 per month). This compares to an average 6.9% interest rate for mortgages available at commercial rates at the end of 2012 (Tunisia Housing Profile, 2011).

Currently, *sharia-compliant business* accounts for just 2.5% of the Tunisian financial sector compared with about 25% in GCC. There are four or five well-known banks in Tunisia that are trying to facilitate the way for their Islamic finance businesses.

The potential for Islamic finance is significant. Ninety-eight percent of the population is Muslim. In a poll of about 700 ordinary Tunisians conducted for the study, 54% said they would consider switching to banking with Islamic lenders even if that meant lower rates of return, while 40% would be open to switching even if their money was not guaranteed. But 64% of respondents said they were unclear about how Islamic finance worked.

Thomson Reuters estimated that the fledgling Islamic finance industry could take a 25% to 40% share of the country's financial sector in five years' time if necessary rules, consumer education and private investment plans materialise. Thomson Reuters estimates that Islamic financial assets in Tunisia could reach \$17.8–\$28.5 billion by 2018, up from \$1.4 billion at present (Thomson Reuters, 2013).

FOPROLOS

A very interesting experience from which middle-income countries in the region can learn from is FOPROLOS. While private lending is focused on high- to middle-income households, there have been savings-for-housing programs for the formally employed since the 1970s. The Housing Bank is the exclusives manager for state-subsidised housing loans for low-income households. FOPROLOS was designed in 1977 to provide housing finance for low-income groups and is still the main tool assisting access to affordable housing. There are three main categories:

1. FOPROLOS 1: Households earning between one and two times the minimum wage can purchase a 50 m^2 unit of \$19,400, with a loan at 90% LTV for 25 years, at 2.5% a year interest.
2. FOPROLOS 2: Households earning between two and three times the minimum wage can purchase a 75 m^2 unit of \$24,800, with a loan at 90% LTV for 25 years, at 4% a year interest.
3. FOPROLOS 3: Households earning between three and 4.5 times the minimum wage can purchase an 80 m^2 to 100 m^2 unit of \$33,300, with a loan at 85% LTV for 20 years, at 5.75% a year interest.

However, in recent years, FOPROLOS has become inaccessible to the target groups, with housing costs ranging from \$220 to \$460 per square metre, including land. Qualifying incomes also do not enable households with irregular and very low incomes to participate. Furthermore, loan ceilings have not increased with house prices, so it is difficult for developers to offer a housing supply to match this financial product (Housing Finance Africa Yearbook, 2013).

4.2.3.1.4 Financial Sector

The financial system consists of 42 lending institutions, of which 21 are banks, 8 nonresident banks, 9 leasing institutions, 3 factoring institutions and 2 merchant banks. Total assets of the said institutions stand at $47.49 billion, of which 90% was the banking sector share. The percentage of total assets of the GDP was 109% in 2012. Total loans were $31.33 billion while total deposits were $27 billion. There are 1,450 bank branches while the branch per capital was 24.1 per 100,000.

Housing loans account for 43.2% of the outstanding balance of loans to individual parties (against 48.7% a year earlier). Medium-term consumer loans intended to housing fitting out handled 40.8% of the outstanding balance of loans to individual parties (compared to 33.7% in 2011).

Tunisia has one of the active stock markets in the region with market capitalisation at approximately 18.2% of the GDP in 2013. The market observed a downward trend in 2012 and had a negative impact on stock market capitalisation which regressed by 4.7% compared to its level at end-2011 to $8,294 million (19.3% of the GDP) at end-December 2012. As for foreign investors' share in stock market capitalisation, it consolidated slightly, moving to 20.5% at the end of 2012 (against 20.2% at end-2011) while the net balance of their transactions on the stock market quotation was negative by $14.45 million (Central Bank Report).

The stock exchange (BVMT) developed in 2001 the legal framework for securitisation to facilitate access to long-term funding for mortgage finance. However, activity has been limited to only two transactions (in 2006 and 2007, respectively, amounting to $80 million) by a single institution, the International Arab Bank of Tunisia (BIAT).

4.2.3.1.5 People and Demographics

In terms of *demographics*, Tunisia is well positioned in the MENA region in education and openness of its society. The density per square kilometre has increased between 2003 and 2013 from 60.66 to 69.

Population growth has been decreasing from 1.17% to 0.96% between 2000 and 2012. Net immigration has been decreasing from -0.7% in 2000 to -1.78% because of immigration given the level of unemployment and education at home. Literacy rate was 78% for the population and 97% for youth between 15 and 24 years old. Population aged between 15–65 years old represent 69.8% of the population. Ninety-eight percent of the population are Muslim. Life expectancy at birth was 75 in 2011.

Tunisia has a very high homeownership rate, which was 77.4% in 2009. Rental tenure is low and even decreasing, with only 15% of total households living as tenants as of 2009. The government has adopted an 80% ownership rate as an essential element of its national housing strategy. In most countries, rental housing markets are much more extensive, and most housing experts see rental tenure as playing an important part in ensuring a good mix of housing alternatives (Tunisia Housing Profile, 2011).

4.2.3.1.6 Discussion and Analysis

It is clear that the Tunisian government has been active, since independence, in the housing and housing finance markets. Its role was not limited to financing but to regulation as well. While the private sector has played a major role in the supply of housing and housing finance for the middle- to high-income categories of population, the government, through public institutions and public programs, tried to take care of the lower-income group.

The Tunisian regulators have been active in regulating the housing and housing finance sectors. Tunisia was one of the first countries to regulate the real estate development profession.

Tunisia has achieved one of the two highest penetration rates of housing finance in the region. However, the country still lags behind the OECD rate, and what is available is not a complete market-based system. Despite all efforts by the government, the following can be observed:

1. Affordability is still a major issue. A huge number of Tunisian families simply cannot now afford to meet the instalment payments required by the housing loan schemes, and the future looks even bleaker.

2. The government-operated housing finance supply still cannot respond primarily to the needs of lower-income families.
3. Another issue relates to the government policy of supporting the private developer sector. There are numerous funding, tax and land incentives given to private developers, but this has not resulted in much of any affordable housing.

Both public and private *players* are participating in the housing finance supply. The government is ahead of many governments in the region since it sets the regulations to organise the real estate development sector and launched the FOPROLOS programme. The private sector participates as well. However, the issues highlighted require developing a housing finance system in which public and private players participate to achieve the policy objectives and targets. Better involvement of the private developer sector combined with private banks relieve government systems from financing housing for the middle class while also granting the same kinds of incentives given to real estate developers to the private individual, who is, after all, by far the main producer of housing in Tunisia. Rental should be present alongside homeownership, which could contribute to maximising choice and mobility and thus allow housing markets to perform more efficiently.

Regarding the *products,* by looking at the array of housing loan products available through the private sector or the government programs in Tunisia, it seems that, with few exceptions, the targets are for the most part the urban middle and upper-middle classes with limited product diversification.

In terms of *people***,** Tunisia is well positioned in the MENA region in the education and openness of its society. Accordingly, with proper product diversification and proper engagement of the private sector in offering affordable financing products, the penetration rate will be significantly increased.

4.2.3.2 Morocco

4.2.3.2.1 Country and Economic Overview

Morocco is a kingdom in North Africa. The total area of Morocco is 446,550 square kilometres while the population was 32.954 million in 2013. Morocco is classified by the World Bank as a lower middle-income country. GDP per capita was $3,169 in 2013 compared with an average of $7,682 in the Arab world. The Moroccan economy is considered a relatively liberal economy. Since 1993, the country has followed a policy of privatisation. The services sector accounts for just over half of the GDP, and industry, made up of mining (phosphate), construction and manufacturing, is an additional quarter. Morocco's economy depends heavily on the weather. Morocco is the world's third largest producer of phosphorus. Morocco suffers both from unemployment and a large external debt amounting to $28.801 billion in 2013 whose service is estimated at around $2.357 billion. The level of poverty in 2013 was 9% of the population.

Morocco ranks 59th globally in economic freedom and 7th in the Arab world. The cost of establishing a business is 16% of GDP per capita, which is 13th in the Arab world. Morocco ranks 15th in terms of easiness of doing business, with 82 compared with global average of 93 and the Arab average of 104. It ranks eighth in terms of number of days to start a business (World Bank, 2013).

4.2.3.2.2 Housing Sector

The housing sector contributed $11.668 billion to the economy in 2013, which is 11.8% of the GDP. The high rate is a reflection of the government policies of finding solutions to informal settlements. While the growth of informal settlements was reduced in the 1970s, it began to accelerate in the 1980s. A major programme to address substandard housing was launched in the 1980s, and a special agency was established for that purpose, the National Agency for the Prevention of Sub-standard Housing. In 2004, this was followed by the current formal Ville Sans Bidonville (Cities Without Slums). The VSB programme is supervised by a central committee chaired by the prime minister. The main actors in the delivery of housing for lower-income groups and of slum upgrading are as follows:

1. Government. The ministry responsible for the VSB programme is the Ministry of Housing and Urbanization (MHU), which also manages an off-budget subsidy fund. The fund is used to subsidise the cost of social housing units (typically in four- to five-story apartment blocks) which are provided for former residents of slums subject to resettlement. The FSH obtains its revenue from a 10% tax on cement.
2. The government has also established a central guarantee – the FOGARIM – which is used to guarantee 70% of each bank mortgage loan to low-income individuals with irregular incomes who would normally not be eligible for these loans.
3. Donors. International donors have provided substantial funds to the VSB.
4. Local government. All local governments are required to prepare comprehensive plans for the elimination of slums in their jurisdiction. They are also expected to provide sites free of charge to the developers of new social housing apartments.

Sometimes central government land or land acquired from private owners is also used.

5. Banks. With the provision of the 70% FOGARIM guarantee, commercial banks are expected to play an increasing role in the provision of loans for low-income housing purchase or construction.
6. Developers. Private-sector developers are encouraged to participate in the social housing market by the provision of tax incentives and serviced land by local governments. The parastatal, Holding Al Omrane, acts as the developer for many of the slum upgrading projects and undertakes the construction of new housing and even new towns.

4.2.3.2.3 Housing Finance Supply

The total amount of housing mortgage loans outstanding in 2013 was 15% of the GDP. The average bank deposit rate was 3.83% while the lending rate was 6.2%. Typical LTV was 73%. The main players are the banking system and FOGARIM, which is a mortgage guarantee fund.

Mortgage Guarantee Fund (FOGARIM)

The housing finance supply in Morocco is characterised by FOGARIM. The purpose of FOGARIM, which was established in 2005, is to guarantee for the banking institutions the financing to purchase homes or to buy land and the construction as well. FOGARIM guarantees housing finance loans to limited- or irregular-income families. The targeted segment is people with irregular or low incomes, who do not already own a house and have not previously been the beneficiary of another state guarantee. The guarantee could reach up to 70% to 80% of the cost of acquisition or construction depending on the city. Applications are processed within 24 hours. In 2008, the number of loans benefiting from the guarantee exceeded 200,000. Government subsidies support the middle-income market and promote the delivery of housing costing $31,000. With the FOGARIM mortgage guarantee fund, this is affordable to a sizeable proportion of the population.

As a result of the reduced risk from the FOGARIM guarantee, banks can reduce the rate of interest of the loans. Loans are provided at a low fixed rate of interest (between 5% and 9%) for a maximum term of 25 years. Banks have a duty to select the client. Banks can, and do, eliminate people on the basis of bad credit history (though it must be noted that most clients do not have a history of dealing with banks as such) or factors such as extreme instability, bad character, etc. There are strict rules to protect the borrower against eviction by the bank for nonpayment, including one that prohibits court action against the borrower until after he/she has missed nine monthly loan repayments.

The guarantee has started to transform the market. Banks compete with each other in terms of service – approval speeds, for example – and interest rates. They are responsible for assessing the risk but can call the government's guarantee only after nine months of default.

4.2.3.2.4 The Financial Sector

With bank assets equivalent to 136% of the GDP in 2013, banks play a central role in the Moroccan financial sector. The banking sector comprises 16 banks (11 private and 5 public). Additionally, six offshore banks are active, holding less than 2% of system assets. The system remains dominated by the six largest banks, which hold 85% of system assets. Bank credit to the private sector grew by 18% per year since 2005 and was equivalent to 71% of the GDP at end-2013 (compared to 61% in Tunisia and 75% in Lebanon). Furthermore, the financial system comprises 13 microfinance associations and several consumer credit financing, leasing, mortgage, factoring, money transfer and guarantee companies. Six banks are majority domestically privately owned, five are majority foreign owned, and five are majority publicly owned. Majority foreign-owned banks hold 14% of financial sector assets and 21% of banking system assets at end-2006.

Access to banking services has improved between 2002 and 2007, with the percentage of population holding bank accounts increasing from 15% to 40%. This progress was due to increased competition in the banking sector. Number of branches has increased by 12% in 2007 alone, and the number of ATMs has tripled over the period 2002–2007. Despite this progress, access to bank credit is limited to a small segment of the economy, notably larger enterprises and an estimated 10% of the population with a fixed income or property to give as collateral. The rest of the population has access to financing mainly through microcredit associations. The penetration rate of banking and microfinance services remain low in rural areas. Over 75% of all the bank credits go to Casablanca and Rabat. Casablanca alone absorbs 62% of all private sector credit, with an increasing trend since 2002, while the five major cities in Morocco account for more than half of all bank branches.

The government continues to directly or indirectly control about 23% of the banking sector, down from 40% in 2002. Banks' balance sheets consist mostly of loans (over 50% medium to long term), funded mainly by short-term deposits (82% of liabilities), mostly unremunerated. Moroccans residing abroad hold 21% of deposits.

The Postal Service plays key role in depositary payments and other retail banking services for small savers with more than 1,800 branches serving more than 13% of the population while representing 2% of total financial sector assets.

The *capital market* is increasingly contributing to financial deepening in Morocco, with stock market capitalisation growing to almost 49% of the GDP in 2013.

The debt market is dominated by public sector bond issues, while private sector corporate issues remain marginal. Mutual funds hold assets whose value is estimated to be16% of the financial system. The government bond market has deepened, and the Treasury has issued securities with maturities of up to 30 years. Morocco was the first country in North Africa to pass securitisation legislation in 2002. Total bond issuance reached $273 million. Morocco has begun planning to introduce covered bonds in 2010.

The Moroccan *insurance market* is the second largest in Africa, after South Africa. Nevertheless, premia amount to only 3% of the GDP, and insurance consumption amounts to about $65 per capita per year, indicating considerable potential for expansion of the market.

The state-owned Central Reinsurance Company (SCR) is the only Moroccan reinsurer. The insurance market is both concentrated and stable and has grown steadily over the past years (by 12% in 2006 and 20% in 2007). Of the 17 direct insurance companies, 10 are significant, and the largest three account for 53% of the market.

Microfinance in Morocco has expanded dramatically in the past 10 years and is increasingly being seen as an essential component in providing housing finance for the poor. Microfinance institutions are, by law, established as nonprofit organisations. When the government enacted the legislation of microfinance, it was restricted solely to business loans. In 2004, however, the legislation was changed to permit lending for housing – possibly in recognition of the fact that some of the enterprise loans were finding their way into housing. Still, housing remains a comparatively small part of the MFI’s portfolio.

4.2.3.2.5 People and Demographics

Urban population represented 57.04% of the total population in 2011. Moroccans have strong homeownership culture evidenced by an owner-occupied rate of 62% in 2001. Consumer education is being covered increasingly in the VSB, where all residents are expected to receive education on financial management and their responsibilities for repayment.

4.2.3.2.6 Discussion and Analysis

Morocco ranks among the top five countries in mortgage penetration in MENA as represented by the rate of total mortgage loans out of the GDP. However, the potential is still to be realised by having a complete system with all the building blocks. The current GDP per capita, the large number of Moroccans expatriates and the size of the financial sector give the basis for a market-based housing finance system.

Players in the public and private sectors are participating in the housing finance supply. The government has launched several strategic initiatives to provide housing, among which is VSB and FOGARIM. The VSB is a leading programme where parastatal developers along local governments are participating under the leadership of the PM. The Moroccan government has introduced FOGARIM as mortgage guarantee funds for people without regular income. The fund is an example to be learnt from by the other countries. The government is active in social housing, which helps in properly segmenting the market. However, a complete market-based system will reflect positively on the penetration rate and realise the policy objectives in both the housing and financial sectors. The banking system is active in loan origination.

The Moroccan housing finance system has more diversified housing finance *products* than other countries. However, more product diversification will better cater to the needs of the different market segments. Currently, major bank credit is concentrated in the two major cities. Definitely, more product diversification is needed to penetrate other cities/market segments. Microfinance is developed to meet specific demand in the lower market segment.

People is an area where focus is needed to develop awareness and educate to develop a well-functioning housing finance system. With an urbanisation rate of 57% and illiteracy rate of 23% among males and 42% among females, a parallel focus on people is a priority.

4.2.3.3 Egypt

4.2.3.3.1 Country and Economic Overview

Egypt is a transcontinental country spanning the northeast corner of Africa and southwest corner of Asia, via a land bridge formed by the Sinai Peninsula. Most of Egypt's territory of 1,010,000 square kilometres lies within the Nile Valley. Egypt is a Mediterranean country and is bordered by the Gaza Strip and Israel to the northeast, the Gulf of Aqaba to the east, the Red Sea to the east and south, Sudan to the south and Libya to the west. With over 88 million inhabitants, Egypt is the most populous country in North Africa and the Arab world, the third largest in Africa, and the 15th most populous in the world. The Egyptian economy is a versatile, with the sectors of agriculture, industry, tourism and services engaged in comparable proportions in its basic configuration. GDP was $271.143 billion in 2013. Egypt is classified as a low-income country with GDP per capita of $3,119 in 2012. Inflation was 7.26% in 2012 and 11.78% in 2011. Median annual household income was $3,655 in 2010 while the urban minimum monthly wage was $127 in 2010. The average number of the workforce in Egypt is about 26 million, according to 2010 estimates. They are distributed among the service sector (51%), agriculture sector (32%) and the industrial sector (17%). The Egyptian economy depends basically on agriculture, Suez Canal revenues, tourism, , cultural and media production, petroleum exports and remittances of more than 3 million Egyptians abroad. Unemployment was 10.4% in 2011 and 9% in 2010. The poverty rate was 22% in 2013 while external debt amounted to $45.752 billion.

4.2.3.3.2 The Housing Sector

The housing sector contributed $3,237 million in 2013, which is 1.2% of the GDP. This is the lowest in the region.

The number of dwelling units was 28.69 million in 2011 and 28.5 million in 2010, out of which 13.07% were vacant in 2011. The average unit size was 80 square metres in 2011. Owner-occupied units represented 37% in 2011 and 2010. Private rentals were 53%. The median price of new housing was $46,600 in 2011 while the median price of an existing unit was $39,200 in 2011. The construction cost for median-quality house was $233/m^2 (national) and $580 (urban). These figures manifest the acute affordability issue faced by a large part of population given a GDP per capita of $3,119 in 2012.

Egypt has been suffering from a chronic housing crisis for long time and became acute in the 1960s with a high population growth and urbanisation due to migration to cities. The urban population reached 43.53% in 2011 up from 43.38% in 2010 and went down to 42.8% in 2013, with an annual urban population growth of 2.11%.

The government enacted laws to decrease rental prices for the benefit of the poor, which led to the withdrawal of the private sector from investing in economic housing. The population is concentrated in only 4% of the total area. The estimated annual need is around 750,000 housing units to meet the need of limited-income people and replace random housing. The government contributed only 100,000 units annually through public programs. Random housing, which is usually built on unzoned or prepared land and without title or permits, is estimated to have reached 60% of the new housing units built between 1981 and

2002. Between 1952 and 1982, 1,118,000 housing units were built, while between 1982 and 2001, 3,037,000 units were built. The public sector executed 1,164,000 units while the private sector executed 1,873,000. Subsidised loans were extended from 30 to 40 years with a grace period of three years.

About 90% of Egypt's housing supply is built informally, while only 10% is built by professional property developers. More than 11 million, which is 13% of the total population, live in slums (Housing Finance in Africa, 2014).

The housing dilemma in Egypt is manifested by a persistent gap between incomes and the cost of new housing even at the middle-income level. It is estimated that around 200,000 new housing units are needed annually to keep pace with household formation, but only the top 10% to 20% of the income distribution can afford to acquire a formally recognised house. To help improve access to formal home ownership by low- and middle-income households, the government has in the past provided a range of subsidies through numerous special programs. Many of these public housing schemes involved large government subsidies (Nasr and Laila, 2012).

More than 85% of housing units are not registered in Egypt. The typical number of days needed to transfer title is 72 days. Housing Finance Supply

All the banks in Egypt offer housing finance products. The total amount of home mortgage loans outstanding at the end of 2011 was only $950 million, or less than 1% of the GDP. The total number of home mortgage loans at the end of 2011 was just 29,631. Typical LTV was 70%, while typical PMT to income was 25%. The lending rate was 12% in 2012 and 11.03% in 2011 and 2010. The percentage of urban units with state-lienable title was just 15% in 2011 and 2010.

The World Bank has supported many initiatives aimed the development of housing finance in Egypt. In 2002, a new mortgage finance law was enacted, and a special regulator was established to develop and regulate the sector. Mortgage refinancing has been possible after the establishment of a couple of mortgage refinance companies. The bank supported the launch of the Affordable Mortgage Finance Program Development Policy Loan Program to reform the then-existing system of inefficient and poorly targeted supply-side subsidies for housing for the broad low- and middle-income sector and replace them with a transparent and economically efficient demand-side subsidy system. The programme faced several obstacles among which are the following:

1. Unstable financial and macroeconomic environment.
2. The Egyptian Mortgage Refinance Company (EMRC) was established with the aim to issue its own bonds. The high inflation rate resulted in increasing mortgage interest rates across mortgage lenders, thereby affecting the size of loan which beneficiaries were able to afford.
3. Market risk: inability of a class of households drawn into mortgage obligations to pay according to amortisation schedules drawn up by lenders to expand initial affordability, risking loan default.
4. The political environment: stakeholder opposition actually weakened the government's attempt to pursue the needed policy and structural reforms. Budgetary allocations for the new subsidy programme on a sustained basis was disrupted, thereby impacting lenders' confidence negatively.

4.2.3.3.3 Financial Sector

The *banking sector* in Egypt had been dominated for a long time by the public sector before the economic liberalisation started in the 1970s. The private sector is suffering from crowding out by the public sector. The private sector's share is less than 38% of total loans. The interest rate is high while the Central Bank discount rate was 9.5% in 2012 and 2011, up from 8.5% in 2010. The average bank deposit rate was 7.64% in 2012, 6.74% in 2011 and 6.23% in 2010. The level of nonperforming loans was 9.1% in 2013, which was one of the highest in the region.

The *capital market*, which was opened in 1992 after almost three decades of freezing, is active in Egypt with an average turnover of 37.5% in 2013, which was one of the highest in the region.

4.2.3.3.4 People and Demographics

The *demographics* of the Egyptian population indicates that the total number of households was 19.1 million in 2011, up from 18.5 million in 2010, and the household size was 4.2. The population growth rate is 2.2%. The population density has been increasing over the years from 74.1 in 2003 to 82 in 2012. The population growth rate has been increasing as well despite all family planning initiatives launched by the government to reach 2.2% in 2013, up from 1.82% in 2000. The net migration rate has been negative. The population below poverty is estimated at more than 20%.

The development of an infrastructure for housing finance is a real challenge for many reasons, among which are the following:

1. Property Registration: It is estimated that over 90% of urban housing is in the informal sector, without formal title. Homeowners' lack of formal title to their property hindered the use of houses as collateral for other investments (Africa Housing Finance, 2014). According to the World Bank's Doing Business indicators, registering property requires seven procedures, takes 72 days and costs 0.07% of the property value, while the registration fee ranges from $75 to $300.
2. Property Valuation: There is an inconsistent approach to property valuations and a lack of valuation information, making an effective use of financing difficult (Africa Housing Finance, 2014).
3. Credit Information: There is lack of credit information about beneficiaries.

4.2.3.3.5 Discussion and Analysis

Players. The government, being in charge of designing and implementation the right pubic policies in housing and financial sectors, is the main player responsible for the insignificant penetration rate of housing finance supply. The low rate of registration of property is a clear indication of the failure of land policies and public administration as well, and the limitation of any initiative to develop a housing finance system. The government has followed central command policies which favoured migration from the country side to cities and led to the housing crisis. Any real change would start by the government adopting the right policies in the housing and housing finance sectors. In the housing sector, measures to tackle the affordability problem could include moving from a buy-down to an upfront subsidy and reducing the cost of construction through improved regulations or changing the mix of units between new communities and existing urban areas. Public finance is crowding out private-sector borrowing including housing finance and leading to a very high interest rates and cost of borrowing.

The *products* available in the market are basic and do not provide what is needed by the prospective demand.

People is an area where a lot is to be done, with an urbanisation rate of 43%, illiteracy rate of 21% among males and 31% among females in the population. A national programme for financial education is a prerequisite for the success of the development of any housing finance system. The risks related to the people building block would be mitigated through ensuring the issuance of decrees, amending relevant laws, launching public awareness campaigns and consulting with stakeholders.

4.3 General Discussion of Supply in Housing Finance in MENA

In industrialised countries, over 70% of investments in housing is financed with the assistance of financial intermediaries. In the poorest countries, the proportion is under 10% (Boleat, 1985). This is clearly a position where MENA countries fit in terms of development.

The analysis of the nine cases indicates not only the underdevelopment of housing finance but also the underusage of housing finance in achieving economic, financial and social agenda. Based on the comparison of the nine cases, which cover high, middle and low middle-income countries, we can see the development gap not only with developed countries, which is huge, but also with countries with similar level of income and development. Though the housing finance system could be engine for economic growth and social transformation, it could lead to catastrophes if it is not properly regulated and monitored. The housing crisis is believed to be one of the reasons for the Arab Spring.

Any housing finance system is the result of an evolution process. A successful housing finance system hinges on the players, products and people. The role of the government is pivotal. The government is the owner of economic policies, which are important for economic stability, and housing policies, which is about having realistic targets and having the tools and institutional framework and having the right regulations as laws and prudential regulations, leading the development of the system. The role of the government is very crucial in the development of any system. Generally in countries in MENA, the role of governments is an area where there is a lot to do to develop a market-based housing finance.

The role of private financial institutions and having the proper governance structure and working in tandem with the public policies are essential for success of the system. In all the countries, the market is fragmented, and all banks depend on short-term deposits to provide the long-tenure housing finance, which poses a real risk for the whole banking and financial system.

In all cases, the product offerings are very limited, as well as the terms of diversification and product reach. The social system plays an important role in the success of the system. In GCC countries, the housing is considered an entitlement for nationals, which is impossible to achieve, while in low-income countries, people look to the state to resolve all their housing needs.

The region has countries with high surplus of capital available while other countries suffer from deficiency in capital. However, the movement of capital between the countries is scarce. Such movement could not take place unless there is integration in capital markets and the banking sector. Many banking groups have presence across several countries. However, the movement of capital is quite restricted and limited.

The infrastructure for housing finance is a major challenge for all the countries. Economic stability, property registration and titling and credit information are just examples.

4.4 Barriers to the Development of a Housing Finance System in MENA

The main barriers to the development of housing finance are the following:

1. Lack of awareness at the level of public administration. In many countries, resorting to subsidies is the solution, which is quite restricted and scarce in many countries, while in others, it is the function of commodity prices such as oil and gas.
2. Underdevelopment of capital markets.
3. Dominance of depository institutions.
4. Banking regulations which do not regulate the mismatch between the average term of deposits and tenure of housing loans
5. Land policies which limit housing supply.
6. Culture which favours borrowing from friends and family rather than financial institutions.
7. Access to finance which is limited to a narrow market segment and targets the wealthy rather than the middle class.
8. Lack of financial education in general.

Chapter 5

THE THIRD PILLAR: PEOPLE AND CHARACTERISTICS OF DEMAND FOR HOUSING FINANCE

5.1 Introduction

In this chapter, we aim to cover the third pillar of the PPP framework, which is people. This coverage is done through primary field research about housing finance covering three countries. The three countries represent three subareas in the MENA region, Gulf Cooperation Council countries, Levant countries, Egypt and North Africa. In each country, a survey is conducted using a questionnaire to better understand the attitudes and behaviours of people regarding housing finance and the key characteristics for the demand for housing finance. The analysis in this chapter uses the PPP framework and is within the overall objective of the research topic, which is to identify attributes of a well-functioning housing finance system for the MENA region.

As we have seen in Chapters 3 and 4, the following are concluded:

1. Overall, the MENA market is underserved in terms of products available and market reach;
2. Islamic sharia is not an obstacle; rather, the absence of sharia-compliant products could be the obstacle;
3. Access to finance is an issue in majority of the countries;
4. Affordability of housing finance, in terms of cost, monthly payments and down payments, is an obstacle;
5. There is generally a lack of basic financial education which leads to developing financial literacy and better understanding of housing finance and would make people in need for housing use this tool to make the most important acquisition in their life, their home.

The research aimed at a better understanding the third pillar of PPP framework – people – in terms of their awareness, attitudes, behaviour and preferences for housing and housing finance.

5.2 The Research Topic

The research topic is people as a pillar in the PPP framework. In the research, five factors have been identified as influencing people. The first aspect is culture, which should play a very important role in the design and functioning of any housing finance system. Culture spans an array of factors, including education, attitudes towards homeownership and credit. A culture which supports fulfilment of contractual obligations and respects those obligations makes a difference in the risk profile in any housing finance market. Tailoring the products to cater to market needs while taking culture into consideration makes a difference as well. For example, success in a market which prefers Islamic finance will be achieved much easier by providing sharia-compliant products rather than by trying to change that culture.

The second factor is awareness about housing finance products and how to choose them, which is a very important factor and could be labelled as financial education. Mortgage or housing finance is a sophisticated financial instrument whether from a legal or financial perspective. The contractual relationships are long term and in certain cases extend over 25 years. The calculation of the cost of financing and comparing between the products and what to choose in case of availability of product diversification in a certain market is important as well.

The third factor is the level of financial education, which proved to be important in the success of a HFS. Financial education, while it should be established in school, is a lifetime process which involves making people aware of the different choices available and contributing to the success of the system. Financial education is almost never taught in the MENA region. Financial education is about the principles of wealth creation and management, or the importance of planning one's financial future. Financial education is almost not a part of any curriculum in the region.

The fourth factor is affordability, which is another factor in the success of any housing finance system, as it takes into consideration the ability of people, or consumers, to afford the cost of a home or financing of it. The price of a house is a multiple of the annual average income in any country. Tailoring the products to make finance affordable to people is also important for the development of sustainability of any HFS.

The fifth factor is infrastructure. Any HFS cannot operate without the required infrastructure, which spans many elements including the regulatory framework, the property registration, without which mortgage finance cannot be possible, and on top is the information available to market participants both on the supply and demand sides.

Information about products and exchange of information about market participants are basic inputs for decision-making by players and people to develop an efficient market. Players need to have the right and adequate information about the creditworthiness of potential borrowers. Moreover, people or consumers need to have the right and adequate amount of information about the different products available.

The regulatory framework is considered another element in infrastructure, which covers the laws and regulations including prudential consumer protection and legislation, which then cover mortgage security and financial instruments. Technology, whether in the financial system as a whole or at the level of financial institutions, is another infrastructure element in an HFS. The design of products depends on having a stable macroeconomic environment, the right and adequate information about consumers' needs, the right regulatory framework and the right level of technology.

5.3 The Research Objectives

Housing is the most valuable asset in one's life, and the housing finance market is attractive for both customers/investors as well as the sellers. From the customers' point of view, it is important to understand the housing finance scenario before making investment decisions.

The research aims to understand people in terms of culture, awareness and preferences in what relates to housing finance. Culture is about the beliefs, customs, arts, and others, of a particular society, group, place, or time. Culture defines attitude, which covers three components: cognitive, affective and behavioural. Awareness is also another important element as it affects the attitude and behaviour of individuals. Understanding preferences will help market players design products that meet the expectation of consumers. The overall objectives of the research are the following:

1. Assess knowledge and attitude towards housing finance in MENA;
2. Gauge criteria of affordable homeownership;
3. Evaluate homeownership versus renting homes and Islamic finance and formal finance versus informal finance.

5.4 Research Questions

The following are the research questions which the study aims to address:

- What is the level of knowledge about housing finance within a community?
- What is the perception on housing finance versus other modes of finance?
- Which factors encourage/discourage people from buying a house?
- Is there housing finance product diversity?
- What is the level of banking penetration? Access to finance?

- Are Islamic housing finance products a must or a choice in the MENA region?
- What is the perception on Islamic finance?
- Are current structures of housing finance affordable?
- What are the main selection criteria buyers use in choosing a financing institution?

5.5 Research Objective

As part of the research topic, which aims at identifying the characteristics of a market-based model for housing finance, the objective of the present study is to have a better understanding of the third pillar in the PPP, people, in terms of culture, awareness and preferences in what relates to housing finance.

5.6 Research Design

The research design used is descriptive and interpretive, analysed through the qualitative method. Questionnaires were used to evaluate the attitudes, behaviours and understanding of participants of housing finance**.**

5.7 Research Methodology

This section describes the research methodology used to achieve the objectives of the study and the advantages and disadvantages of this methodology.

Data can be obtained from primary or secondary sources. Primary data refer to information obtained firsthand by the researcher on the variables of interest for the specific purpose of the study. Secondary data refer to information gathered from sources already existing. The main sources of primary data are individuals, focus groups and panels. Data can also be obtained from secondary sources, such as company records or archives, government publications, industry analyses offered by the media, web sites, the internet, and so on (Sekeran, 2003). The three main primary sources of data related to people—individuals, focus groups, panels, the methods were considered in the selection process. Due to the large number of population involved, the nature of the research, the budgetary constraints, and the recommendation of the publication of OECD, focus group and panels were excluded.

Data collection methods are an integral part of research design. Interviewing, administering questionnaires, and observing people and phenomena are the three main data collection methods in survey research (Sekeran, 2003). These data collection methods, each with its own advantages and disadvantages. OECD has prepared a toolkit for measuring financial literacy and financial inclusion which was welcomed by G20 leaders in 2013. The toolkit, which was used as a guide in the design of the research and questionnaires, recommends the survey of individuals as means to measure financial literacy / knowledge.

Among the different methods of data gathering for research purposes, the survey method is preferred by many researchers due to its various advantages, strengths and benefits. The five main advantages of surveys are; firstly high representativeness giving a high level of general capability in representing a large population. As compared to other methods of data gathering, surveys are able to extract data that are near to the exact attributes of the larger population. Secondly, low costs one need to pay for the production and administration of survey questionnaires. On the other hand, other data gathering methods such as focus groups and personal interviews cost much more in terms of time and resources. The third factor being convenient data gathering, whereby surveys can be administered to the participants through a variety of ways such as face to face, sending via e-mail or fax, or the internet. The fourth advantage is that there is little or no observer subjectivity; hence providing all the participants with a standardized stimulus. With such high reliability obtained, the researcher's own biases are eliminated. Finally, the precise results, as questions in the survey should undergo careful scrutiny and standardization, they provide uniform definitions to all the subjects who are to answer the questionnaires.

However, surveys have four main disadvantages. The first one being the inflexible design as the survey that was used by the researcher from the very beginning, as well as the method of administering it, cannot be changed all throughout the process of data gathering. Although this inflexibility can be viewed as a weakness of the survey method, this can also be a strength considering the fact that preciseness and fairness can both be exercised in the study. Secondly, surveys are not ideal for controversial issues as questions that bear controversies may not be precisely answered by the participants because of the probably difficulty of recalling the information related to them. Third disadvantage is that the possible inappropriateness of questions as questions in surveys are always standardized before administering them to the subjects. The fourth disadvantage is survey bias; response bias can be defined as the difference between the true values of variables in a study's net sample group and the values of variables obtained in the results of the same study. A form of response bias, survey bias encompasses any error due to a study's survey design. Though survey bias can be found in any form of questionnaire, it is especially prevalent in internet surveys since they are completed privately by respondents. Usually a biased survey is one that encompasses errors caused by the design of the survey and its questions. To mitigate the risk of questionnaire or survey bias, the questions are designed so as to avoid trying to change the survey outcome. The way questions are worded, the structure of the survey and even its design, style are all done with the purpose of avoiding question bias.

We have mitigated the afore mentioned disadvantages through the design of the questionnaires and administrating it face-to-face.

5.8 Research Instruments

Research instruments are the fact-finding strategies. They are the tools for data collection. They include questionnaires, interviews, observation and reading. The researcher must ensure that the instrument used in the research is reliable and valid. A closed research instrument designed to test attitudes and perceptions on current product offerings or clearly defined future offerings may include quantitative and qualitative data.

The research instrument used in the survey is the questionnaire. Questionnaire as an instrument has the several advantages. The main advantages being an economical way of accumulating information; the privacy it affords to its subjects. With a questionnaire, all of the subjects' responses are written down and submitted. The data never passes through anyone's hands but those of the data gatherers and the clients. Moreover, customization is an important part of gathering research. One can determine how the subjects receive the study, the length of the questionnaire and what sort of questions are on it. Another advantage is consistency, questionnaires compared with interviews better contribute to reliability by promoting greater consistency. This is achieved through eliminating the variation in questioning that can occur when a number of different interviewers are employed. They also reduce the introduction of bias by eliminating the ability of interviewers to influence answers either intentionally or inadvertently. Questionnaires provide wide coverage as well. It is probably the best method to collect information, compared to the other methods like interview or observation, when the sample population is spread over a large territory. It permits a nationwide or even international coverage. Uniformity is another advantage as questionnaire helps in focusing the respondent's attention on all the significant items. As it is administered, in a written form, its standardized instructions for recording responses ensure some uniformity. Questionnaire does not permit much of variation. Anonymity, questionnaire ensures anonymity to its respondents. The respondents have a greater confidence that they will not be identified by anybody for giving a particular view or opinion. They feel more comfortable and free to express their view in this method. Finally, questionnaires may be analyzed more 'scientifically' and objectively than other forms of research. When data has been quantified, it can be used to compare and contrast other research and may be used to measure change

Questionnaires have disadvantages. Unlike survey interviews, questionnaires do not provide an opportunity for the researcher to clarify questions, verify that answers are understood, seek clarification or elaboration of answers or ensure that the respondent answers all questions on the form. There may not be an opportunity to go back to respondents if all the information needed to support a conclusion was not asked for or provided, or if it becomes evident that questions were not clear. Nor is it possible in most instances to seek corroboration of answers. In general, the same depth of information is not available from a questionnaire as through interviews. In addition, the respondents being surveyed must have the requisite literacy skills. Other disadvantages are: the limited response; the other major limitations of the questionnaire is that it can be applicable only to those respondents who have a considerable amount of education. It can neither be used for illiterate nor for semi-literate persons. Poor response such as in the case of mailed questionnaire method, the proportion of return is usually low.

5.9 Data Collection, Interview and Survey Techniques

Though the total number of respondents is 225, certain sections of questions are answered by a low number of respondents. In such cases, a demography-wise analysis is not carried out owing to the low number of responses in each case.

5.10 The Advantages and Disadvantages of the Selected Techniques

Four primary research tools were considered for the research: the interview, the focus group, which is usually small, structured group meeting consisting of 5 to 20 participants from a target population segment, the observation and the interview tool.

The research used with the population was the interview tool, which was one-on-one and structured. One advantage of this tool is that the data collected provide a rigorous foundation for qualitative methods, which is relevant to the study. Data collected is easy to tabulate and generalise from, assuming a reasonable sample size. This tool is quite convenient and relatively inexpensive. The disadvantage is that it has limited ability to probe responses, so questions need to be simple. In general, the tool used was quite convenient and reliable in the circumstances and assumptions of the study.

5.11 The Sampling Technique

Sampling is the process of selecting units (e.g., people, organizations) from a population of interest so that by studying the sample we may fairly generalize our results back to the population from which they were chosen. Purposive and cluster sampling were used in the study.

Cluster sampling is appropriate when a population dispersed over a wide geographic region and when it may not be feasible to conduct a simple random sampling of the entire population. In such case, it may be reasonable to divide the population into "clusters" (usually along geographic boundaries), randomly sample a few clusters, and measure all units within that cluster.

In purposive sampling, a sample with a *purpose* in mind. We usually would have one or more specific predefined groups we are seeking. All of the methods that follow can be considered subcategories of purposive sampling methods. We might sample for specific groups or types of people as in modal instance, expert, or quota sampling. The targeted market segment is the middle class.

Using the Toolkit of OECD, three countries were identified, middle class population was targeted as the upper and lower age limits were set for inclusion in the survey. The most common approach is to cover all adults within the population aged 18 and over, with no upper age limit. This is the approach the toolkit recommends. In most developed economies, and middle income countries as well,18 is the age when most individuals begin to adopt some autonomy with regard to their finances and become legally permitted to use the various sources of credit, including current accounts that can be overdrawn. In each of the three countries , 75 respondents were identified based on targeted response rate of 75%.

5.12 Questionnaire Design

The objectives of the research were realised using the descriptive approach. Questions were mapped according to the objectives. To analyse the above objectives, the survey included questions spanning across respondents' financial situation, housing and ownership, financial awareness as well as their awareness of housing finance scenarios. These questions were mapped to each objective to derive insights. (Mapped questions corresponding to each objective is presented in the appendix.)

Constructing a survey instrument is an art in itself. There are numerous small decisions that must be made -- about content, wording, format, placement -- that can have important consequences for the entire study. There are three areas involved in writing a question:

- determining the question content, scope and purpose
- choosing the response format to be used for collecting information from the respondent
- figuring out how to word the question to get at the issue of interest

Finally, once the questions are written, there is the issue of how best to place them in the survey.

Once the research objectives, research questions were set, the focus of the study was on questionnaire design. The study recognizes that sound questionnaire design principles should focus on three areas. The first relates to the wording of the questions. The second refers to planning of issues of how the variables will be categorized, scaled, and coded after receipt of the responses. The third pertains to the general appearance of the questionnaire. All three are important issues in questionnaire design should be well considered to mitigate the disadvantages of questionnaires.

The questionnaire and proposed methodology are based on the principles and recommendations developed in an OECD working paper (Kempson 2009)

Type of question refers to whether the question will be open-ended or closed. Form refers to positively and negatively worded questions. The study is mainly closed ended with several types of responses tailored to the objectives of the questionnaires, which is to understand and explore rather than to direct or influence. Open-ended questions were used as well.

The sequence should be such that the respondent is led from questions of a general nature to those that are more specific, and from questions that are relatively easy to answer to those that are progressively more difficult. (Sekeran, 2003). The study is conscious of the importance of the sequence of questions in the questionnaire.

The questionnaire design was developed based on a Toolkit developed by OECD. The questions in the said Toolkit developed by OECD incorporated several rounds of comments followed by a large scale pilot project in 13 countries. This final version has been created following feedback from the countries participating in the pilot, the views of expert subgroup members and the results of the analysis process. The questionnaire is based on a widely accepted working definition of financial literacy which stresses general behaviours, attitudes and knowledge that could be attained in a variety of ways.

5.13 Literature Review

Allowing people access to finance is a basic element of the business model of housing finance, whether from a public policy perspective or business perspective. The World Bank defines access to financial services – financial inclusion – as implying an absence of obstacles to the use of these services, whether the obstacles are price or nonprice barriers to finance. It is important to distinguish between access to – the possibility to use – and actual use of financial services.

Exclusion can be voluntary, where a person or business has access to services but no need to use them, or involuntary, where there are price barriers or discrimination, for example, bar access. Failure to make this distinction can complicate efforts to define and measure access. Financial market imperfections, such as information asymmetries and transaction costs, are likely to be especially binding on the talented poor that lack collateral, credit histories, and connections. Without inclusive financial systems, these individuals with promising opportunities are limited to their own savings (Finance for All, World Bank, 2008).

People, the third pillar in the PPP framework, should be the focus of any system for the following reasons:

1. They are the end consumer of housing and housing finance services. Accordingly, understanding their preferences and the characteristics of the demand they generate is very important for the success of any housing finance system.
2. Housing finance is a long-term relationship which could extend up to 30 years or longer, in which the financial institution has to maintain a relationship with customers. Such relationship should be established on a sound basis by understanding the preferences and requirements of the customers, while people should be able to make the right choices.

Though as individuals, the culture of people is considered as a given in any business relationship, collectively it could be considered as a parameter in the relationship, which could be influenced by policy makers and players with proper education and a regulatory framework which enriched trust and mutually responsible decisions.

Based on the literature review, four elements could be identified as essential to be considered for better understanding of the people pillar.

5.13.1 Culture

In the review of literature about the relationship between culture and development of financial sector, focusing on the culture aspect leads to a better understanding of path dependence and social institutions. Kuran (2007) considers culture as a pair of distributions, one of attitudes and the other of behaviours.

Islam is the predominant religion in MENA. There have been few studies about the impact of Islam on culture and on financial development in general or housing finance in particular. Bergsman (2006) claims that the introduction of the residential mortgage concept to Middle Eastern countries has been hampered by those followers of Islam who adhere to the strict sharia law, which forbids the giving or receiving of interest. This could be a simplistic explanation of a situation where a significant percentage of people in the Middle East do not have access to finance or housing. The reason for the underdevelopment of housing finance in MENA is an array of issues, on top of which is a lack of a market-based housing finance system as shown in Chapter 4.

Other observers who ascribe the Middle East's economic deficiencies to 'Islamic culture' maintain that conservatism, fatalism, personalism and incuriosity are more prevalent among Muslims than among non-Muslims. They claim, moreover, that these attitudes stem from Islamic teachings, making them essentially fixed. Kuran (2007) focused his study on two clusters of factors frequently invoked as cultural characteristics harmful to economic progress. The first entails closely related attitudes that breed immobility directly: conservatism, traditionalism, fatalism, lack of curiosity and low ambition. The second consists of personalism, which is the tendency to favour personal exchange over impersonal exchange. Kuran's (2007) thesis is that both personalism and immobilising attitudes are rooted in classical Islamic institutions.

An institution, as defined by Kuran (2007), consists of a set of social factors that produce interconnected social regularities. Being part of a system, its operation may depend on other institutions. Islamic law, which for many centuries gave the Middle East a distinct and persistent identity, formed a system of institutions. Its elements that are directly relevant to the region's economic development include a law of partnerships, inheritance regulations, and the waqf (Kuran, 2007).

Individually and jointly, Kuran (2007) considers that elements of Islamic law delayed the transition from personal to impersonal exchange, discouraged the use of the technologies of mass production, kept civil society weak and set the stage for sustained authoritarian rule. Their consequences have included the very traits that are commonly considered integral to Islamic culture. However, Kuran (2007) considers that institutions are not immutable, and neither are the cultural features that they produce. As institutions change, so does the associated culture.

Another element identified in the literature review which is important in the development of a financial sector related to culture and religion is investor protection. Stulz and Williamson (2001) have shown that investor protection is related to culture. This relation is especially strong for creditor rights. Stulz and Williamson (2001) find that Catholic countries have significantly weaker creditor rights than other countries. This result holds when one controls for the origin of the country's legal system as well as for GNP per capita. However, Stulz and Williamson (2001) consider that openness reduces the influence of religion on creditor rights so that Catholic countries where international trade is more important have better protection of creditor rights. Stulz and Williamson (2001) therefore find strong support for the view that culture matters, but there is also evidence that the impact of culture is tempered by openness.

Though Stulz and Williamson (2001) find evidence that culture and creditor rights are related, they do not find such evidence for a shareholder rights index once they control for the legal origin of a country's legal system. Yet there are striking differences between the rights of shareholders across countries that are correlated with religion and language, but they are harder to explain than the differences in creditor rights. Stulz and Williamson (2001) show as well that culture is related to the enforcement of rights, with Catholic and especially Spanish-speaking Catholic countries having weaker enforcement of rights.

5.13.2 Social Institutions

Housing finance, as a means of meeting a very basic need of everyone, is a cross-cutting subject which has significant social implications which are affected by social institutions. Culture also affects the development of economic institutions, which cover the financial institutions as well. Greif (1994) illustrated that cultural beliefs are likely to motivate the introduction of different economic organisations.

Social institutions are of particular importance in the development of a financial sector. In the sociologist context, institutions do not refer to organisations such as churches or hospitals. Kuran (2007) defines an *institution* to consist of a set of social factors that produce interconnected social regularities. *Social institution* is defined as a complex, integrated set of social norms organised around the preservation of a basic societal value.

Sociologists often reserve the term *institution* to describe normative systems that operate in five basic areas of life, which may be designated as the primary institutions in providing for the legitimate use of power. In shorthand form, or as concepts, these five basic institutions are family, government, economy, education and religion. These institutions play important roles in regulating the distribution of goods and services, transmitting knowledge from one generation to the next and regulating our relationship to the supernatural (Sociology Guide, 2014).

5.13.3 Path Dependency

Path dependency has been presented as an explanation to the underdevelopment of financial institutions in general and the housing finance system in particular. Path dependency is defined as the tendency of a past or traditional practice or preference to continue even if better alternatives are available (*Business Dictionary*).

Greif (1994) claimed that the capacity of a societal organisation to change is a function of its history since institutions are combined of organisations and cultural beliefs. Greif (1994) conducted a comparative historical analysis of the relationship between culture and institutional structure. He examined cultural factors that have led to premodern societies – one from the Muslim world and one from the Latin world – to evolve along distinct trajectories of institutional structure. It indicated the theoretical importance of culture in determining institutional structures, in leading to their path dependence and in foretelling successful inert-society adoption of institutions.

Greif (1994) thought that lacking an appropriate theoretical framework, economists and economic historians have paid little attention to the relationship between culture and institutional structure. This limits the ability to address a question that seems to be at the heart of development failures: why do societies fail to adopt the institutional structure of more economically successful ones? Greif (1994), through presenting historical examples, illustrates that collectivist and individualistic cultural beliefs are likely to motivate the introduction of different organisations.

Greif (1994) admits that further research is needed. However, he considers that past, present and future economic growth is not a mere function of endowment, technology and preferences. It’s a complex process in which the organisation of society plays a significant role. Greif (1994) considers that the organisation of society itself reflects historical, cultural, social, political and economic processes.

5.13.4 Legal Origin

The legal system in a country or its legal origin is presented as another factor in the development of the financial sector. La Porta et al. (1997) examined the relation between a country’s legal origin and investor protection. Based on that study, there has been developed a growing literature on law, governance and finance. La Porta et al. (1997) claimed that countries with English common-law origins provide the highest investor protection while countries with French law origin provide investors with the least protection.

Levine (1998, 1999) also investigated the relation between legal systems and financial sector development and concludes that countries with superior creditor protection directives have better-developed financial systems.

Beck, Demirguc-Kunt and Levine (2003) also examined the association between legal origin, initial endowment and financial development. They show that both legal origin and initial endowments are important in determining an institutional structure that contributes to financial sector development. Beck, Demirguc-Kunt and Levine (2003) considered that past work shows that legal origin helps explain financial development. They examined the mechanisms via which legal origin operates. The relationship between legal origin and financial development led to the development of the law and finance theory. This theory emphasises two channels. The political channel postulates that legal traditions differ in terms of the priority they give to private property rights relative to the rights of the state. Since private property rights form the basis of financial development, historically determined differences in legal origin explain financial development today. This channel holds that civil-law systems tend to promote the development of institutions that advance state power with negative implications for financial development. The other channel is the adaptability channel, which stresses that legal traditions differ in terms of their responsiveness to changing socioeconomic conditions. Since inflexible legal traditions produce gaps between legal capabilities and commercial needs, historically determined differences in legal tradition explain financial development today. The adaptability channel holds that French legal origin countries are more likely to develop inefficiently rigid legal systems than British common-law and German civil-law countries with adverse repercussions for financial development.

The results provide relatively more evidence for the adaptability channel than for the political channel. Beck, Demirguc-Kunt and Levine (2003) find the following:

1. The exogenous component of legal system adaptability explains cross-country differences in financial intermediary development, stock market development, and private property rights protection even when controlling for the political channel. Furthermore, the results are consistent with the view that legal origin does not explain financial market development beyond legal origin's ability to explain cross-country variability in legal system adaptability. Thus, the results suggest that legal origin matters because legal traditions differ in their ability to adjust efficiently to evolving socioeconomic conditions. Legal systems that adapt efficiently to minimise the gap between the financial needs of the economy and the legal system's capabilities will foster financial development more effectively than more rigid legal systems.
2. The exogenous component of the political channel does not explain cross-country variation in financial development.
3. German civil-law and British common-law countries have significantly better-developed financial intermediaries and markets and better property right protection than French civil-law countries, which is fully consistent with the adaptability channel. In terms of policy implications, these tentative results advertise the benefits of efficient legal system adaptability.

5.13.5 Quality of Government

Quality of government is cited as an important factor in the development of a housing finance system. There are many examples which evidence the importance of this factor. The foundation of the current American Housing Finance System was part of the New Deal introduced by the American president Roosevelt after the Great Depression between 1929–1939. The quality of the consecutive American administrations had a major impact on the development, successes and failures of the system. The British government is another example where it played a role in encouraging people to get housing loans. The most recent initiative being the introduction of the help to buy scheme with £10,000 which is aimed at helping first time home buyers.

The quality of government is a determinant of the development of housing finance. Cooray (2011) examined the impact of two dimensions of the government, namely, size and quality, on two dimensions of the financial sector, size and efficiency, in a cross section of

71 economies. The study finds that increased quality of the government as measured by governance and legal origin positively influence both financial sector size and efficiency. The size of the government as proxied by government expenditure and the government ownership of banks has a negative effect on financial sector efficiency, and a positive impact on financial sector size, particularly in the low-income economies.

5.13.6 Financial Education

Another aspect which is underserved in MENA is financial literacy and education. Increasing consumer financial literacy has become in the developed world a public policy objective to improve welfare through better decision-making. The creation of financial education programmes designed specifically to enhance financial literacy has been viewed as a solution to mitigating financial problems that individuals and families face (U.S. House of Rep- representatives, Financial Services Committee, 2009). Huston (2010) considers that the recent mortgage crisis, consumer over indebtedness and household bankruptcy rates provide evidence to support this goal.

The terms *financial literacy*, *financial knowledge* and *financial education* often are used interchangeably in the literature and popular media. Few scholars have attempted to define or differentiate these terms. Unlike health literacy, which is typically measured using one of standardised tests, there currently are no standardised instruments to measure financial literacy. Literacy in the broadest sense consists of understanding (i.e., knowledge of words, symbols and arithmetic operations) and use (ability to read, write and calculate) of materials related to prose, document and quantitative information. The standard definition of *literacy* developed by the Literacy Definition Committee in the United States and used by the National Adult Literacy Survey is ‘using printed and written information to function in society, to achieve one’s goals, and to develop one’s knowledge and potential’ (Kirsch et al., 2001). When operationalised, this definition covers three broad areas – prose (written information), document (tabular/graphical information) and quantitative (arithmetic and numerical information) – each with its own standardised testing instrument (Kirsch et al., 2001).

Marcolin and Abraham (2006) identified the need for research focused specifically on the measurement of financial literacy. Typically, financial literacy and/or financial knowledge indicators are used as inputs to model the need for financial education and explain variation. Marcolin and Abraham (2006) considered a successful measure of financial literacy will improve a researcher’s ability to distinguish when a deficiency in financial literacy may be responsible for welfare-reducing financial choices and will allow educators to identify education to achieve a desired outcome. Another important consequence of an instrument that effectively measures financial literacy is that researchers are better able to identify what outcomes are most affected by a lack of financial knowledge and skill.

It is increasingly apparent that financial mistakes can impact individual welfare as well as create negative externalities that affect all economic participants. Tracking variation and change in financial literacy rates is of interest to educators, policymakers, employers and researchers.

In summary, generally there is a lack of studies which addressed the people aspect of the housing finance system in MENA.

5.14 The Research Findings

The outcomes of the research reveal several interesting findings. Respondents prefer family and public banks for borrowing purposes. The cost of borrowing is the major criteria for the choice of loan provider indicating the presence of a high interest rate in the housing loan market. Agreement to the statement on ‘borrowing from family and friends is better than from a bank’ increases as age increases, which indicates a change in culture from collective to individual.

There is high financial ability to save money (65%), which indicates the potential for home purchase in case of financing. To attract potential clients of housing finance products, providers could form strategies including offering complimentary products such as life insurance coverage (as only 12% of the respondents are covered under life insurance), strategising the optimal time period for repayment (as 63% as averse of long-term debt) along with customising repayment amount.

The population that considers borrowing is better than waiting to create wealth to buy a house (66%) itself is a major encouraging factor for housing loan providers. Effective communication strategies can attract more home loan buys in the market. Potential buyers expect affordable housing prices and rising income to enable them to achieve their dream of owning a home.

Though the level of banking penetration is high, only 32% have used banks for loans. Irrespective of fair knowledge about the financial matters, a low level of loan application points towards more customer analysis.

Islamic housing finance products are a choice to people. Availability of conventional as well as public banks are major choices for customers, thus limiting the role of Islamic housing finance.

Reduction in interest rates, improving the loan facilities and reduction in monthly payment, and others, could attract more home loan buyers.

5.14.1 Demographic Profile of Respondents

This research focuses on the presence of housing finance in the MENA region. The survey interviewed 225 respondents covering various age groups, genders and educational qualifications. The following figure presents the age composition of the population surveyed:

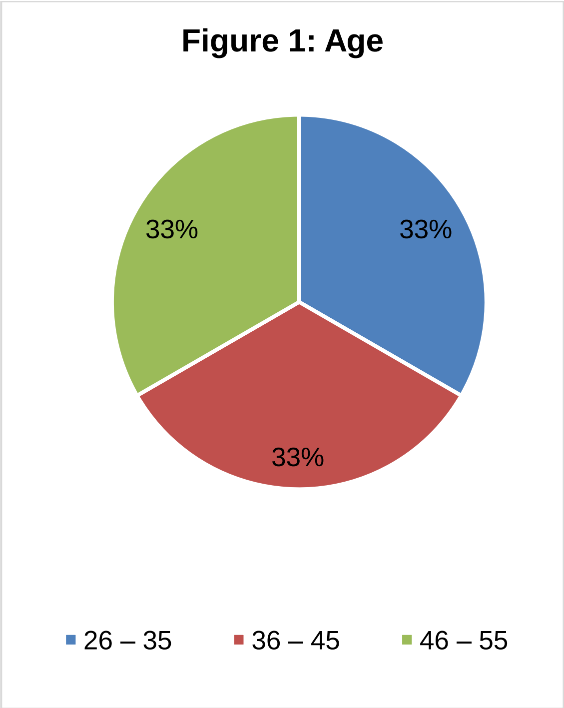


Figure 5-1: Age

The following figure presents the gender composition of the survey population:

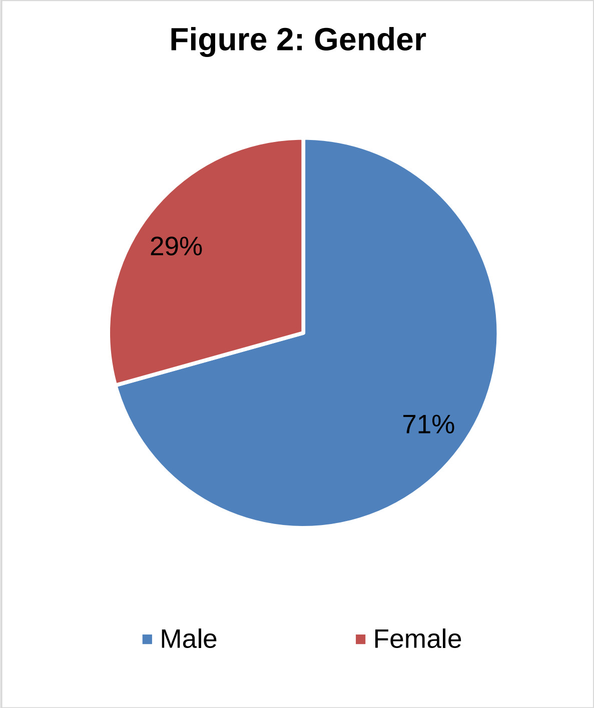


Figure 5-2: Gender

The following figure presents the educational attainment of the population surveyed:

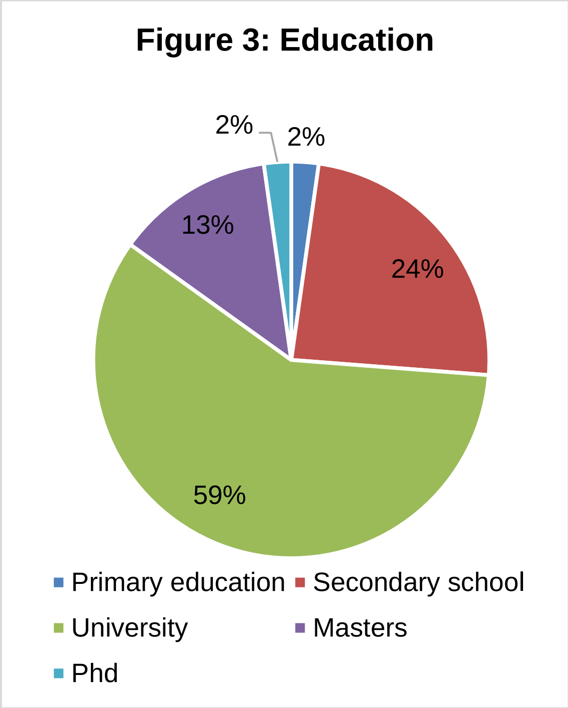


Figure 5-3: Education

The following figure presents the classification of the population surveyed based on the number of dependents:

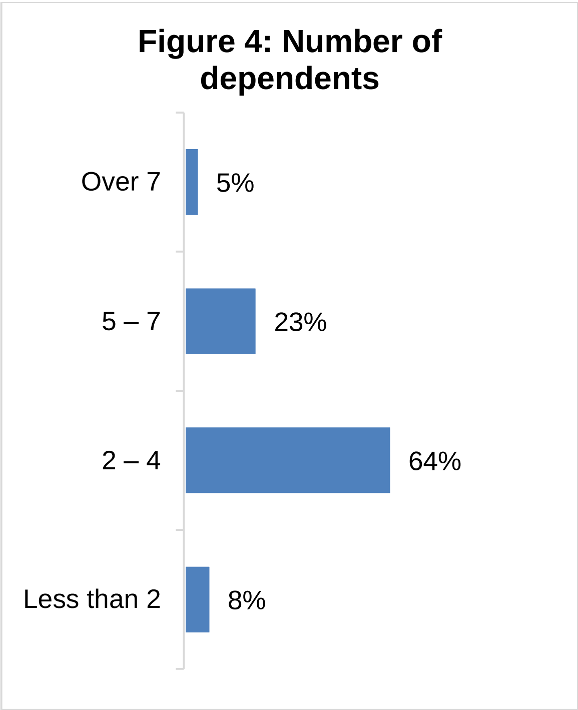


Figure 5-4: Number of dependents

The following figure presents the surveyed population classified by type of employment:

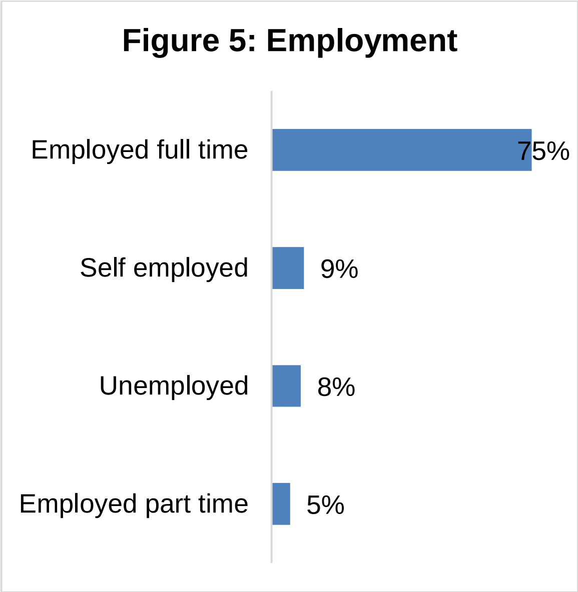


Figure 5-5: Employment

The following figure presents the classification of surveyed population by industry:

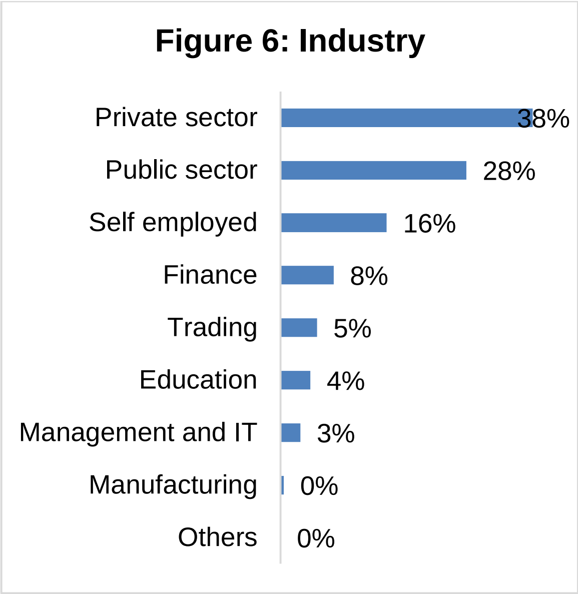


Figure 5-6: Industry

A brief demographic profile reveals the following:

- Predominance of males with 71% response in the survey.
- Three age groups spanning 26 to 55 years with a 10-year gap. Equal representation is maintained across age groups covering 75 respondents from each group.
- The largest number of respondents fall in the university education level (59%) followed by secondary school (24%).
- Majority of the survey respondents (64%) have 2 to 4 dependents including their spouse.
- Employment scenario reveals that 75% of the respondents are full-time employees of which 38% are working in the private sector.

5.14.2 Key Findings: Objective-Wise

5.14.2.1 Level of Knowledge About Housing Finance

Majority of respondents prefer banks (68%) in case they need to borrow to purchase a house. In case respondents need to get a loan, the majority prefer conventional banks (42%) followed by public banks owned by government (39%).

The following figure presents the borrowing preferences of the surveyed population:

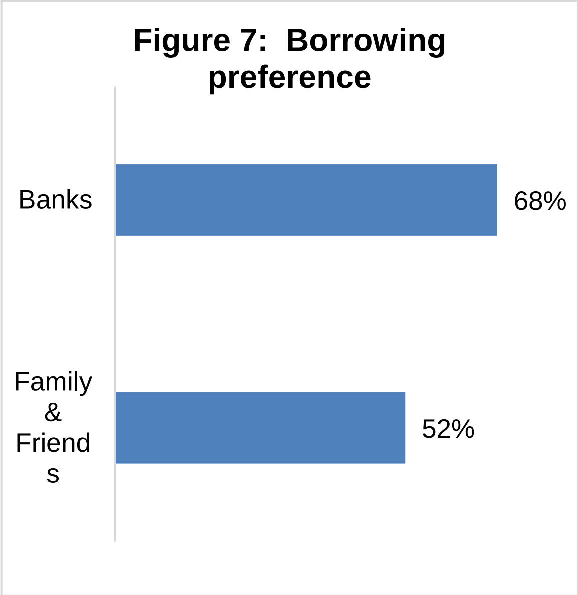


Figure 5-7: Borrowing preferences 1

The following figure presents the preference of the surveyed population for housing loan providers:

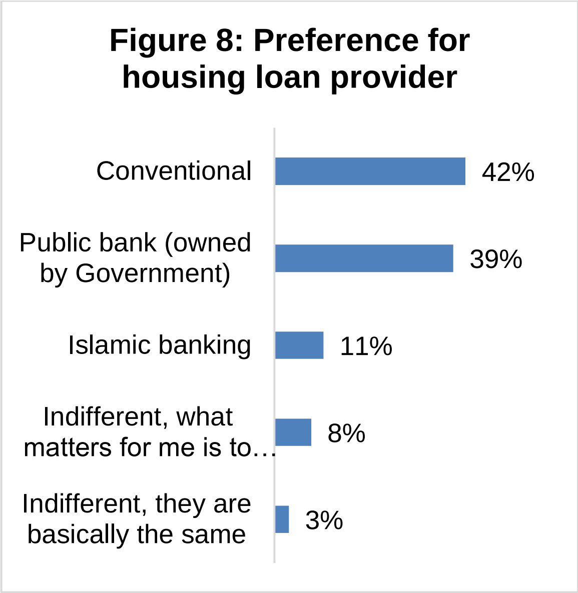


Figure 5-8: Preferences for housing loan providers

Cost of borrowing (52%) and advance payment (49%) are considered as major criteria while in selecting a housing loan provider and while taking out a mortgage, a low interest rate plays a crucial role (54%).

The following figure presents criteria the surveyed population uses in selecting a housing loan provider:

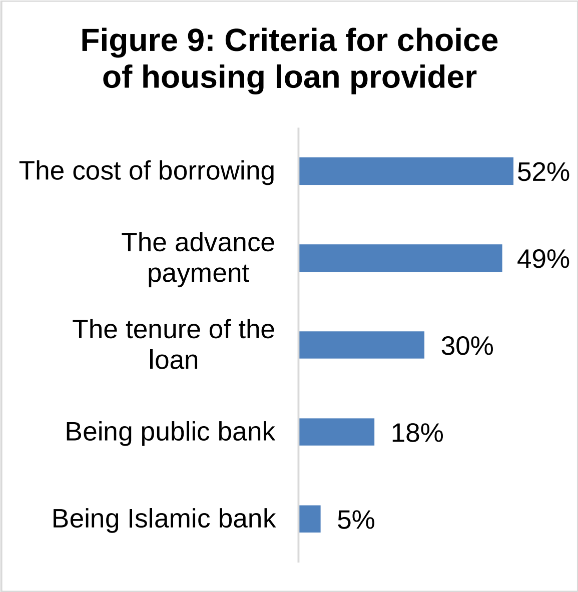


Figure 5-9: Criteria for choice of housing loan provider

The following figure presents the most important points in deciding to take mortgage:

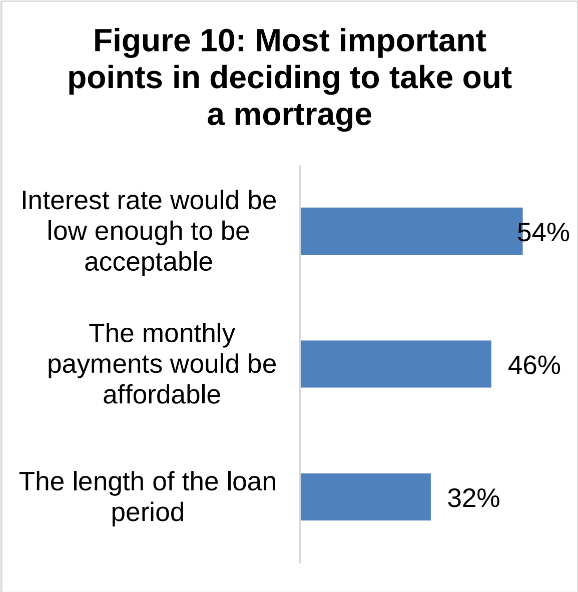


Figure 5-10: Most important points in deciding to take mortgage

In general, more than half (56%) of the respondents have heard/read about buying a house with mortgage in the past year, which is an indication of a simple penetration of a housing finance market in the country.

The following figure presents the percentage of the surveyed population who have heard/read about buying a house with mortgage:

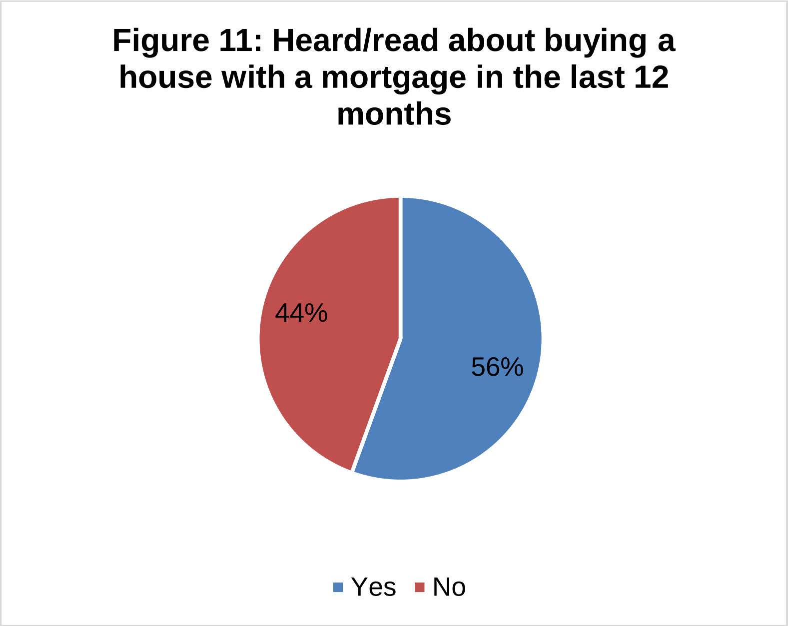


Figure 5-11: Heard/read about buying a house with mortgage

The survey tried to analyse respondents' ability to save as well as their risk covering products such as insurance and pension plans.

- Majority of the respondents (65%) have sufficient money and could afford to buy what they want as well as could save.
- Most of the respondents have insurance coverage (75%), 58% have medical insurance and 36% have full coverage insurance for cars.
- It is interesting to note that out of the 225 respondents, only 12 of them have life insurance coverage. It points to the urgent need for awareness programmes to be initiated by the authorities.
- Of the respondents, 64% have pension plans.

The following figure presents the percentage of the surveyed population classified based on the stretch of money earned to cover expenses/savings:

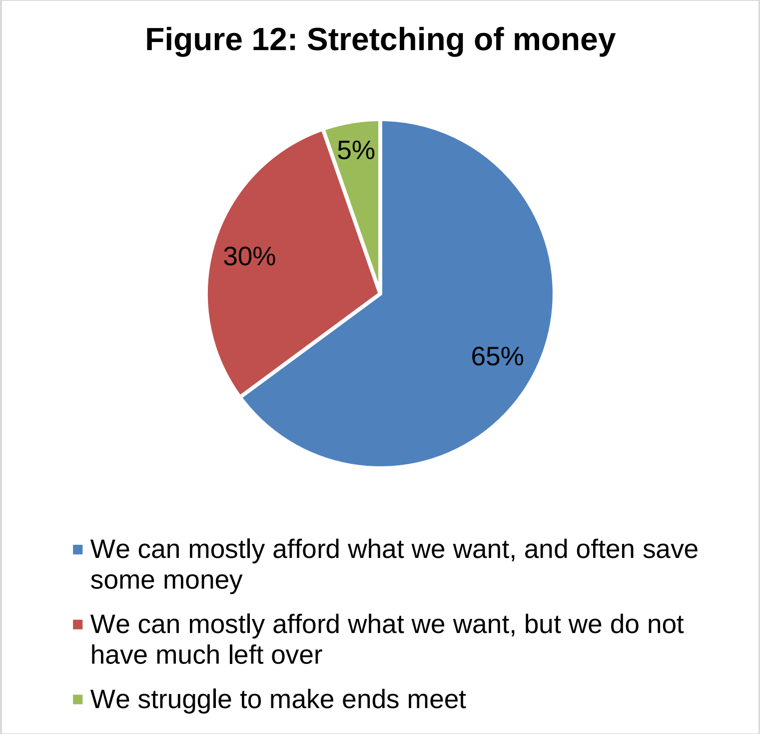


Figure 5-12: Stretching of money earned to cover expenses/savings

The following figure presents the insurance coverage of the surveyed population:

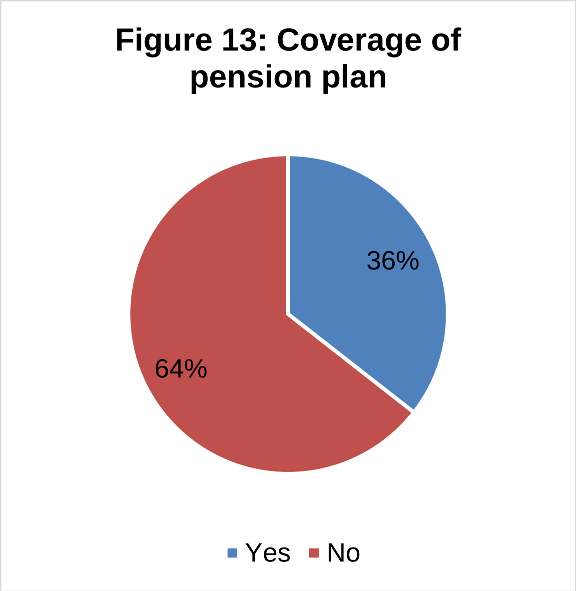


Figure 5-13: Coverage of pension plan

The following figure presents the insurance coverage by type of insurance of the surveyed population:

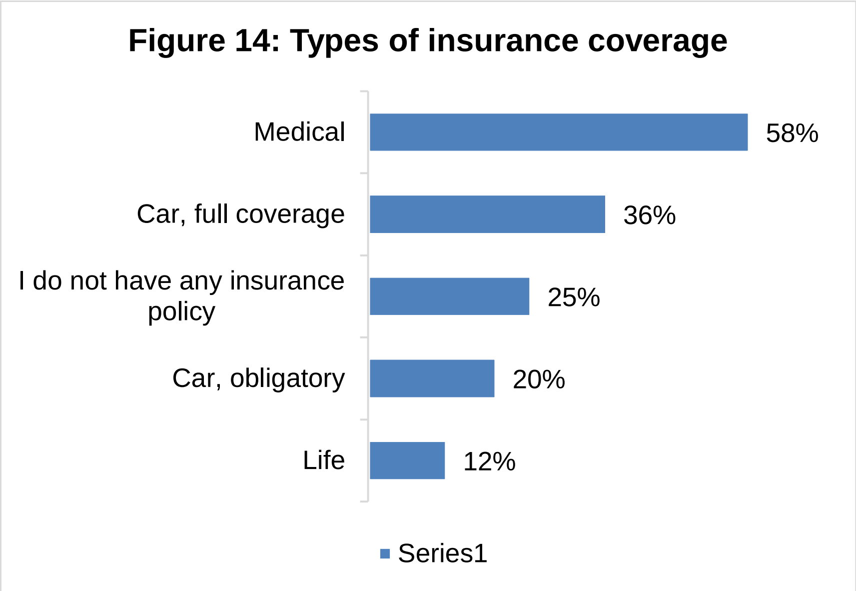


Figure 5-14: Types of insurance coverage

Financial awareness is analysed by using the various parameters, and it demands strategies to create a better learning environment especially regarding financial matters.

- Only 27% are aware that it is not necessary that variable interest rate be higher than fixed interest rate.
- Majority of the respondents (40%) know that it takes 25 years to pay off the mortgage if one amortises 4% per year of the original financing.
- However, when asked to calculate interest rate annually, 64% of the respondents opined that their annual rate is 36%.
- Similarly, in the calculation of years to double the money, given the interest rate, only 14% know the fact that it takes 7 years to double their money at an annual interest rate of 10%.
- Of the respondents, 59% opined that interest rate is directly related to inflation.

The following figure presents the percentages of responses to questions aimed at assessing the understanding of basic financial concepts/knowledge:

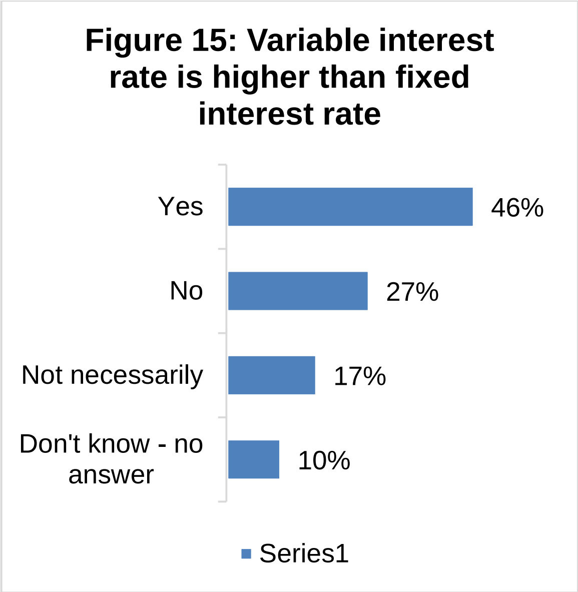


Figure 5-15: Variable interest rate is higher than fixed interest rate

The following figure presents the percentages of responses to questions aimed at assessing the understanding of basic financial concepts/knowledge:

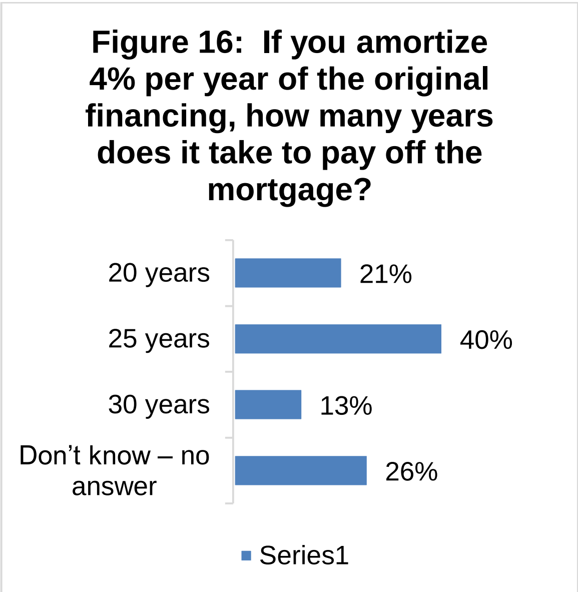


Figure 5-16: Amortisation of mortgage loan

The following figure presents the percentages of responses to questions aimed at assessing the understanding of basic financial concepts/knowledge:

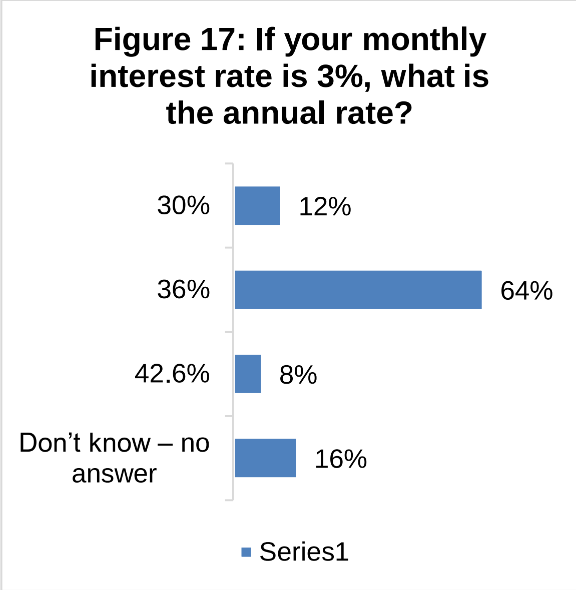


Figure 5-17: Compounding of interest rate

The following figure presents the percentages of responses to questions aimed at assessing the understanding of basic financial concepts/knowledge:

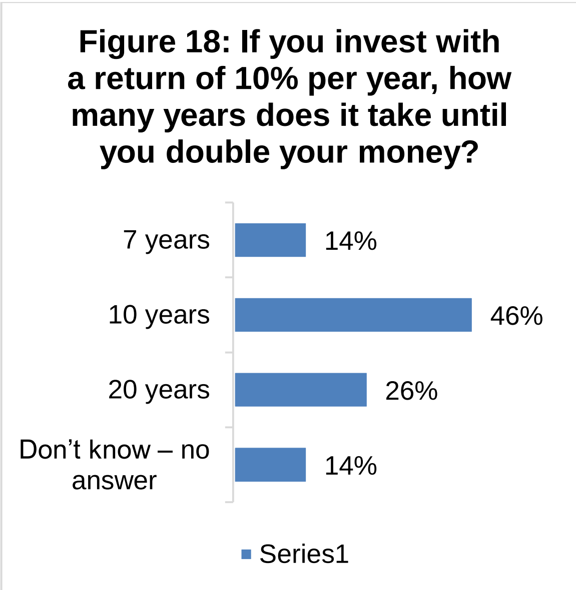


Figure 5-18: Time value of money

The following figure presents the percentages of responses to questions aimed at assessing the understanding of basic financial concepts/knowledge:

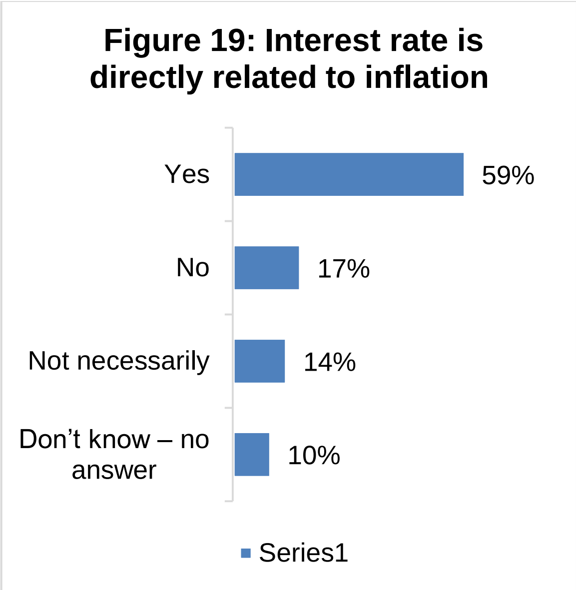


Figure 5-19: Relationship of interest rate and inflation

Regarding the fundamentals of housing finance, majority of the respondents are aware of the basic principles.

- Majority of respondents (63%) knew that buying with a mortgage will allow them to move in once the loan is made.
- As it is not possible to take multiple mortgages on the same property, most of the respondents are aware of this notion (75%).

The following figure presents the percentages of responses to questions aimed at assessing the understanding of mortgage finance concepts/knowledge:

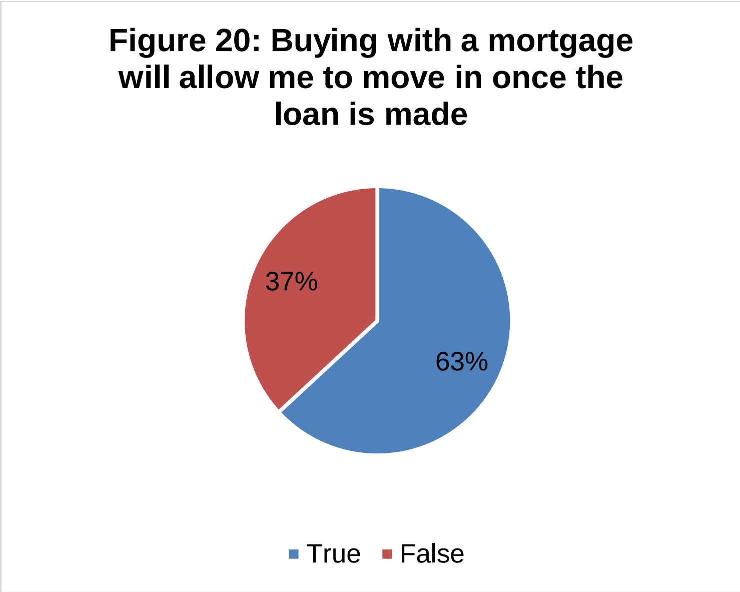


Figure 5-20: General knowledge of mortgage

The following figure presents the percentages of responses to questions aimed at assessing the understanding of mortgage finance concepts/knowledge:

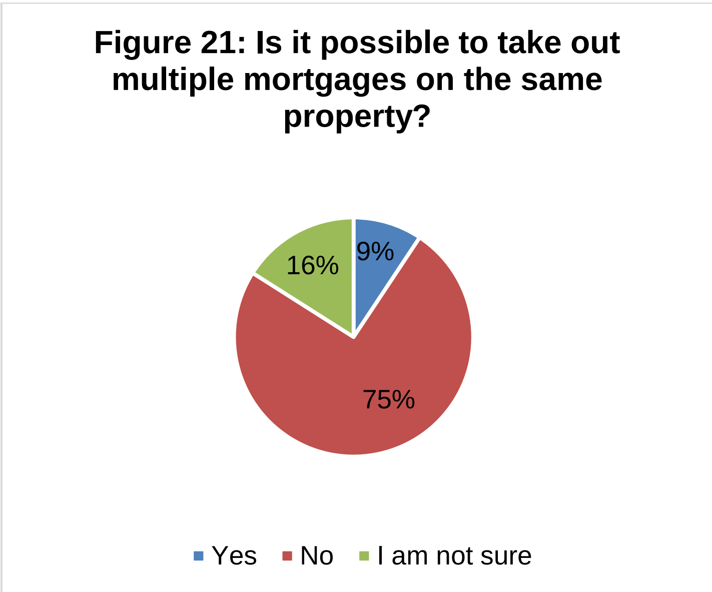


Figure 5-21: General knowledge of mortgage finance

- Sixty-eight percent believe that loss of property is the immediate consequence of not making required mortgage payments, and 29% consider rescheduling as the second possible outcome. Though it is possible to sell a house with mortgage, only 32% of the respondents are aware of it.

The following figure presents the percentages of responses to questions aimed at assessing the understanding of mortgage finance concepts/knowledge:

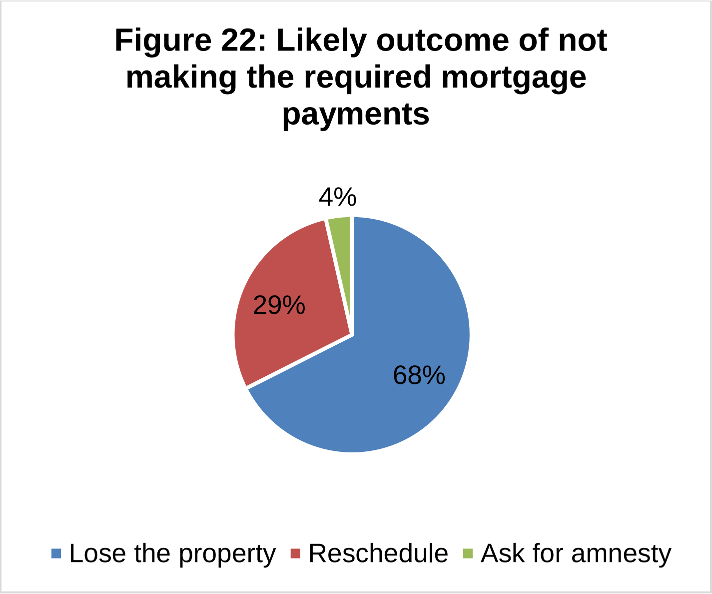


Figure 5-22: Knowledge of mortgage finance

The following figure presents the percentages of responses to questions aimed at assessing the understanding of mortgage finance concepts/knowledge:

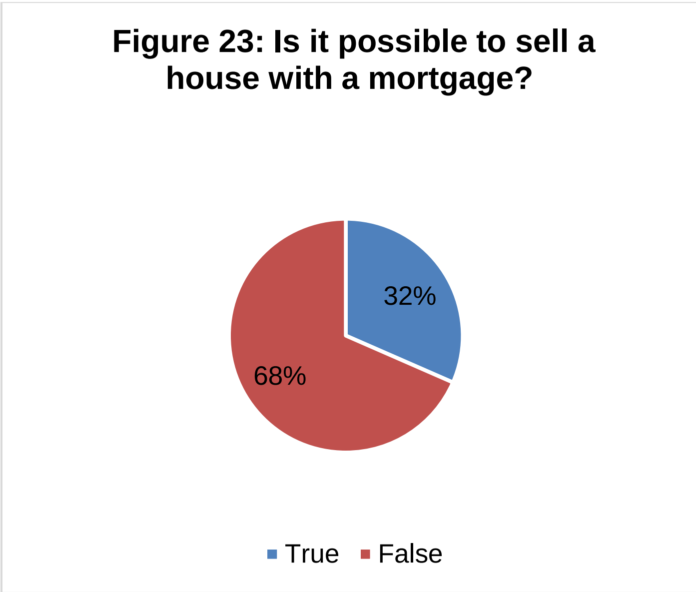


Figure 5-23: Knowledge of mortgage finance

- Eighty-six percent of the respondents are aware that it is not possible to get a mortgage without officially registering it.
- People are not ready for long-term debt, as agreed by 63% of the respondents.

The following figure presents the percentages of responses to questions aimed at assessing the understanding of mortgage finance concepts/knowledge:

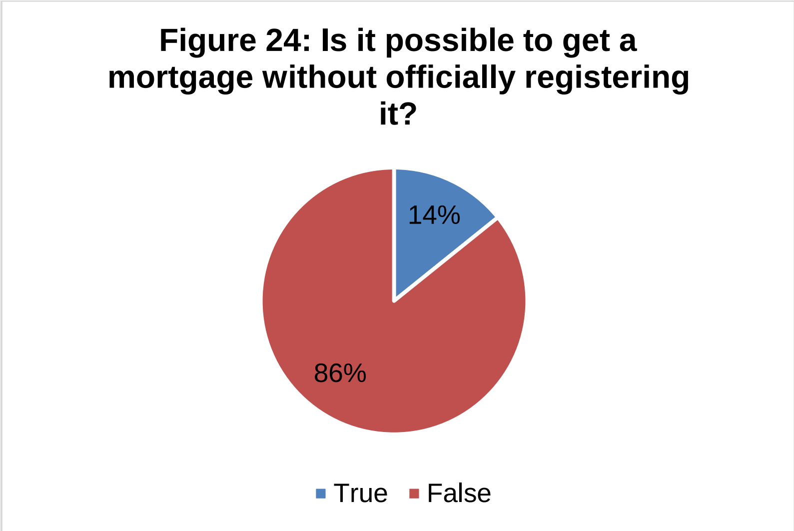


Figure 5-24: Knowledge of mortgage

The following figure presents the responses to questions aimed at understanding attitudes towards long-term debt:

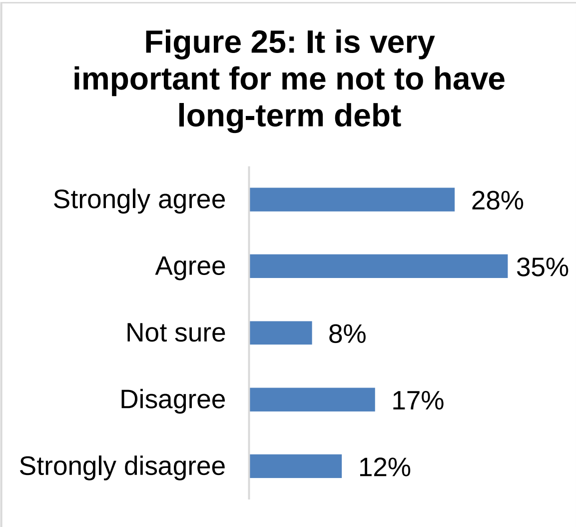


Figure 5-25: Attitude towards long-term debt

5.14.2.2 Perception of Housing Finance Versus Other Modes of Finance

While purchasing a house, 66% of respondents consider borrowing as a better financing option than waiting to build wealth.

The following figure presents the percentages of responses to questions aimed at knowing the preference of borrowing versus saving to buy a house:

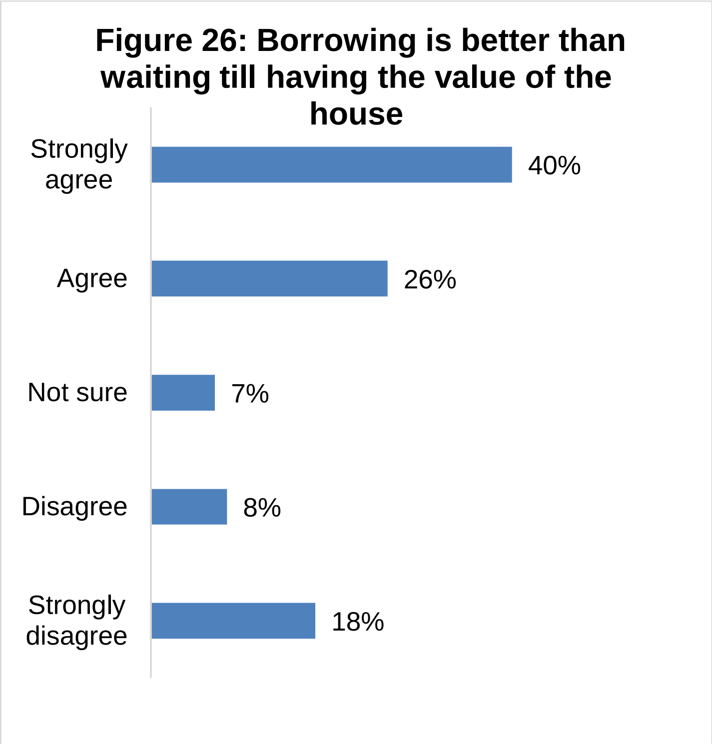


Figure 5-26: Attitude towards mortgage finance

The following figure presents the percentages of responses to questions related to borrowing preferences of the surveyed population:

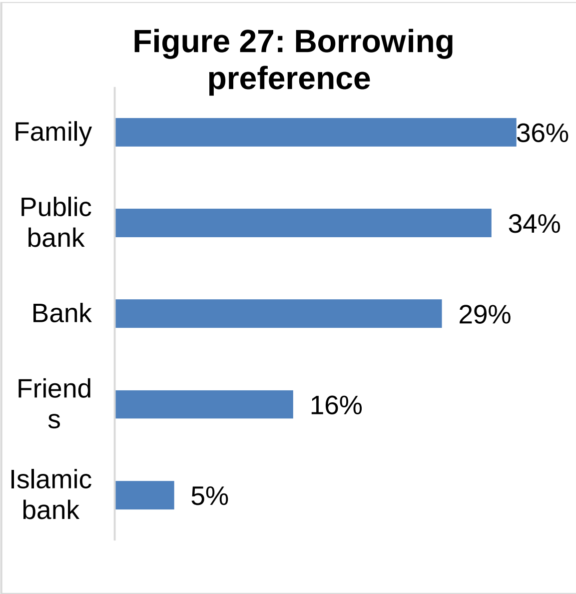


Figure 5-27: Borrowing preferences

- Overall, surprisingly, family as well as public banks are considered as a favourite source of finance (as 36% and 34% agreed, respectively).
- Even though respondents revealed high preference for banks (68%) as a source of borrowing, there is an anomaly in their response to the statement ‘borrowing from family and friends is better than from a bank’. Fifty-six percent support this argument whereas 31% disagree. It indicates conflict in the insight provided above. This could be because of misinterpretation of the question and its five-scale answers.

The following figure presents the percentages of responses to questions aimed at knowledge of the preferences of the surveyed population towards borrowing from family and friends versus borrowing from banks:

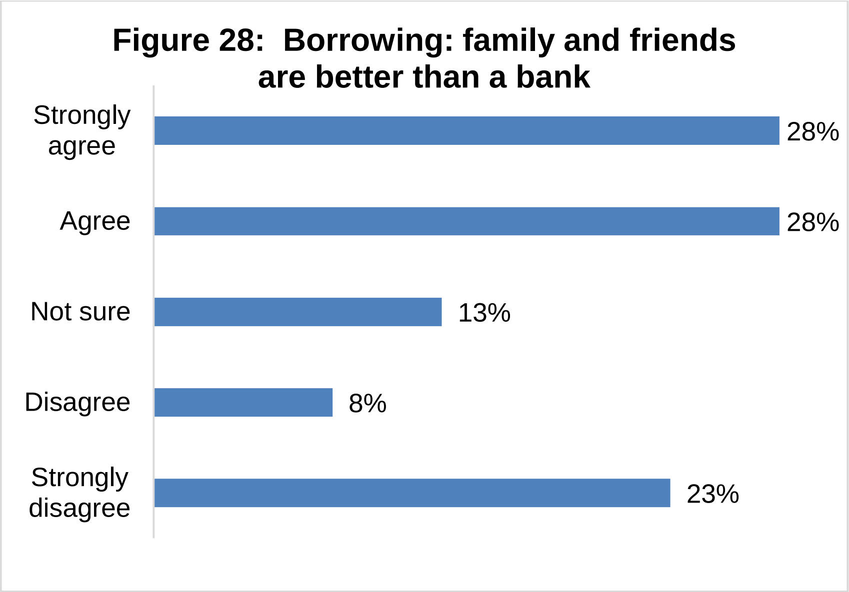


Figure 5-28: Preferences for sources of borrowing

5.14.2.3 Factors Encouraging/Discouraging People from Buying a House

Encouraging Factors:

- Respondents expect more affordable housing prices in the near future and consider it as a major encouraging factor to buy a house within a three-year period.
- Income rise is considered as the second most encouraging factor for buying a house in the near future as indicated by 42% of the respondents.

The following figure presents the responses to questions aimed at identifying factors encouraging people to buy a house:

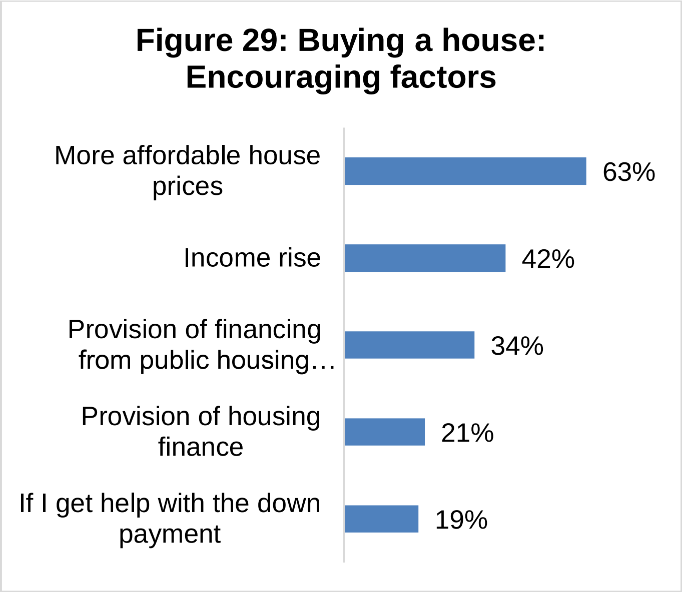


Figure 5-29: Encouraging factors for buying a house

The following figure presents the responses to questions aimed at identifying factors discouraging people from buying a house:

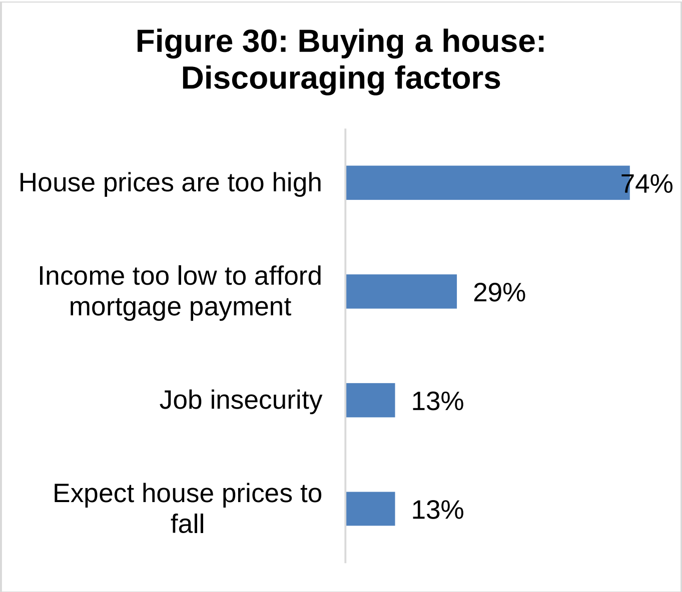


Figure 5-30: Discouraging factors to buy a house

Discouraging factors:

- High housing price remains a major deterring factor to buying a house in the near future by 74% of the respondents, irrespective of the expectation of affordable housing prices in the future.
- Income that is too low to afford mortgage payments is considered as the second most deterring factor for aspiring homeowners (29%).

5.14.2.4 Presence of Housing Finance Product Diversity

- Seventy percent of the respondents reveal the presence of product diversity while availing housing finance.

The following figure presents the percentage of respondents revealing the presence of product diversity while availing housing finance:

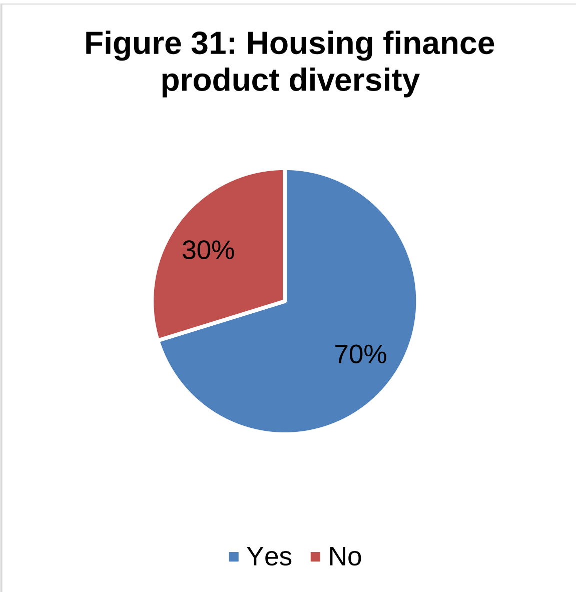


Figure 5-31: Housing finance product diversity

5.14.2.5 Level of banking penetration and Access to Finance

Out of the 225 respondents, 207 have bank accounts; 86% have it in conventional banks while 6% have it in Islamic banks. Of those who are availing banking service, the majority (85%) use current accounts followed by debit card service provided by the banks

(40%). This shows the low level of penetration of many financing options. People use banks to deposit their money rather than get finance.

The following figure presents the level of banking penetration in the surveyed population:

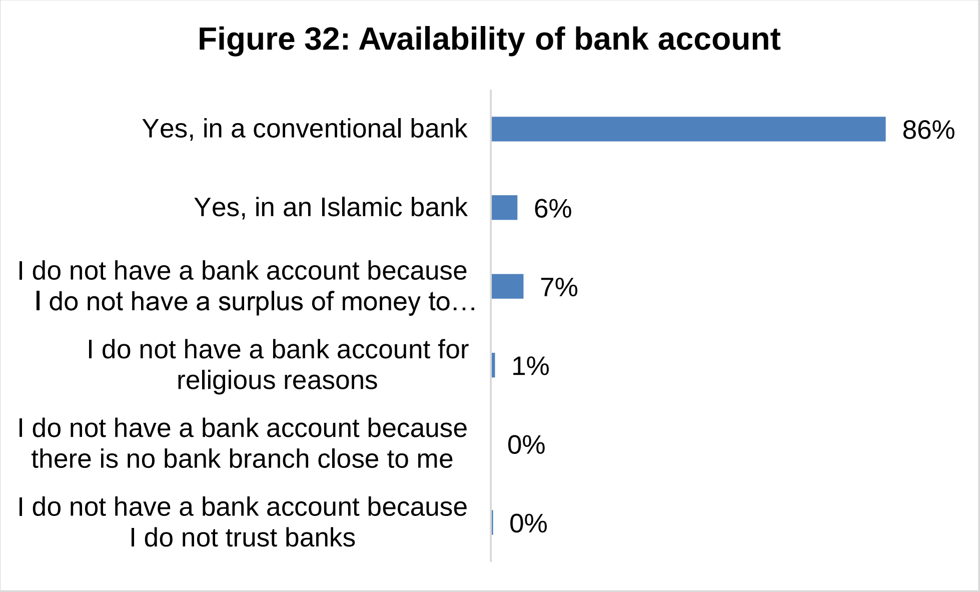


Figure 5-32: Availability of bank account

The following figure presents the availability of banking account services to the surveyed population:

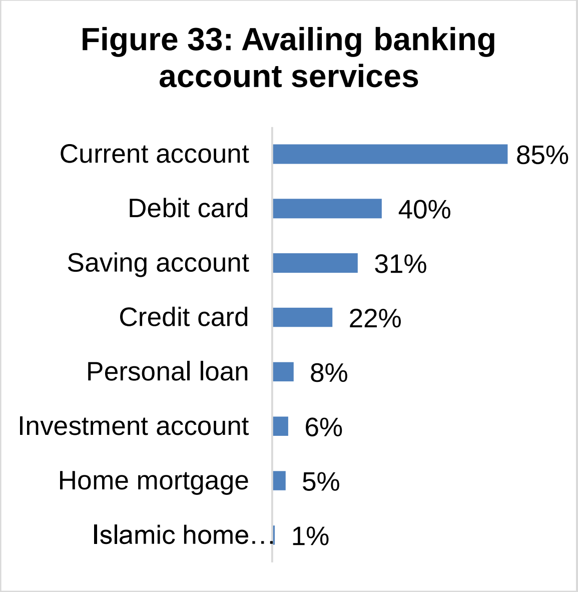


Figure 5-33: Availability of bank account services

- Home mortgages are also availed by respondents. While 5% use home mortgage, 1% use Islamic home mortgage.

- While 86% have deposited money in savings accounts, 14% deposited money with an unofficial party, indicating higher risk as well as need for creating awareness about the banking system among the public.
- Though 92% of the respondents have bank accounts, 68% have not applied for loans, and 26% have already used the loan from the bank.

The following figure presents the percentage of the population who managed to put money aside over the past year:

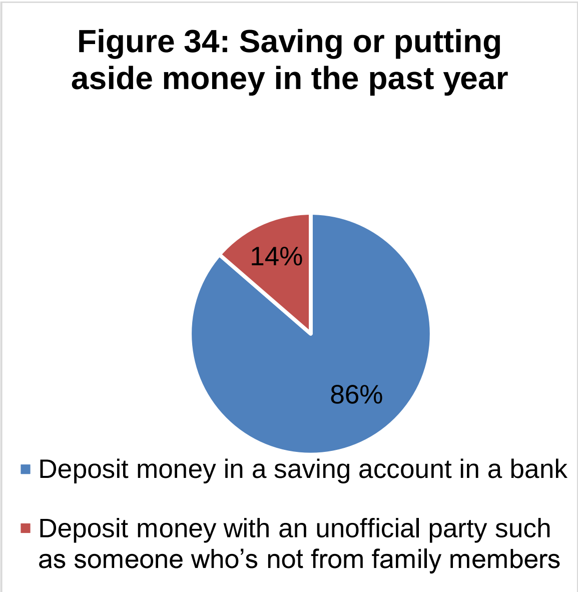


Figure 5-34: Saving over the past year

The following figure presents the percentage of the population who applied for a loan:

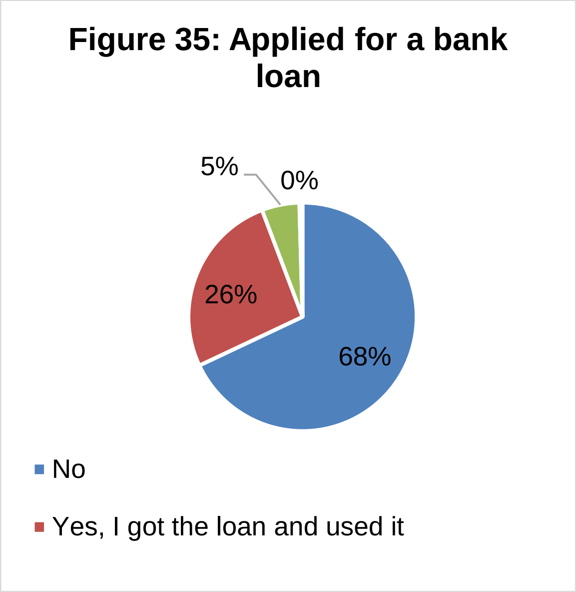


Figure 5-35: Applying for bank loan

5.14.2.6 Are Islamic Housing Finance Products a Must or a Choice in the MENA Region?

Islamic housing finance products are a choice for the respondents. This is evident from the following figure:

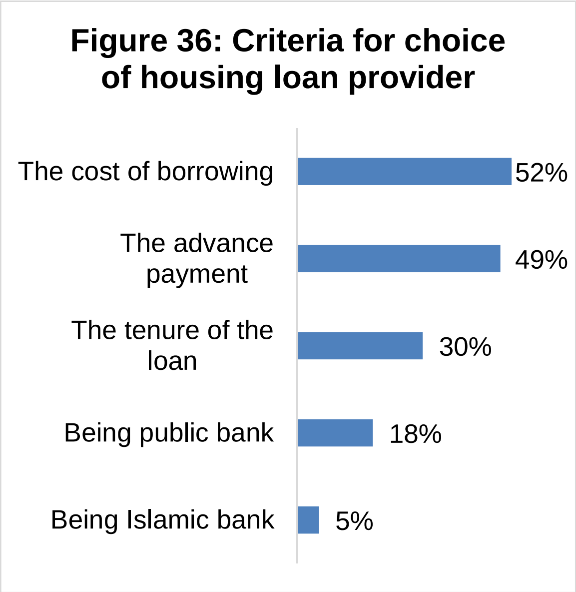


Figure 5-36: Criteria for choice of housing loan providers

The following figure presents responses to questions aimed at identifying preferences for housing loan providers:

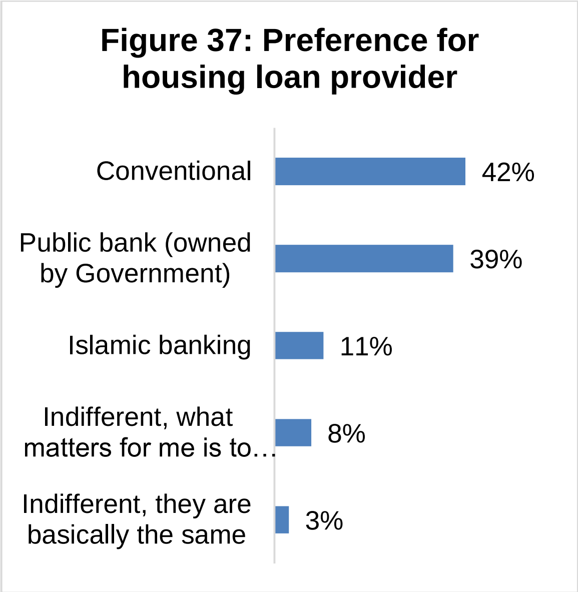


Figure 5-37: Preferences for housing loan providers

The following figure presents the level of trust in Islamic versus conventional banking:

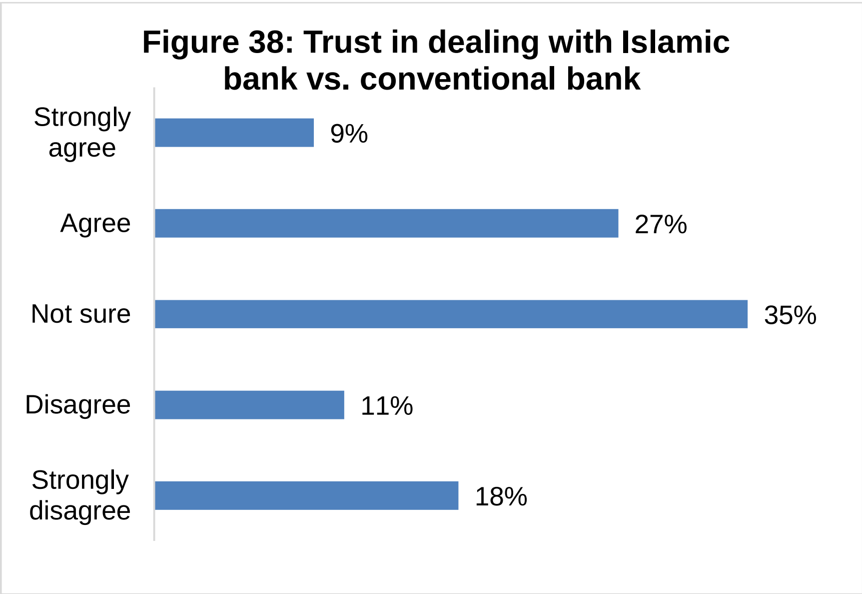


Figure 5-38: Trust in Islamic banking

- If the respondents have to apply for housing loan, only 5% consider Islamic banks as a criterion for loan application.
- Only 11% prefer to get housing loans from Islamic banks. The majority opt for loans from public banks and conventional banks.

- Irrespective of the low level of preference for Islamic banking, 36% of the respondents agree to the fact that they trust more when dealing with Islamic banks than conventional banks. Thirty-five percent remain neutral.

5.14.2.7 Perception of Islamic Finance

- Perception of Islamic finance varies widely, away from reality. The study indicates more awareness programmes are needed especially related to Islamic finance.

The following figure presents the perception of Islamic mortgage finance versus conventional mortgage finance:

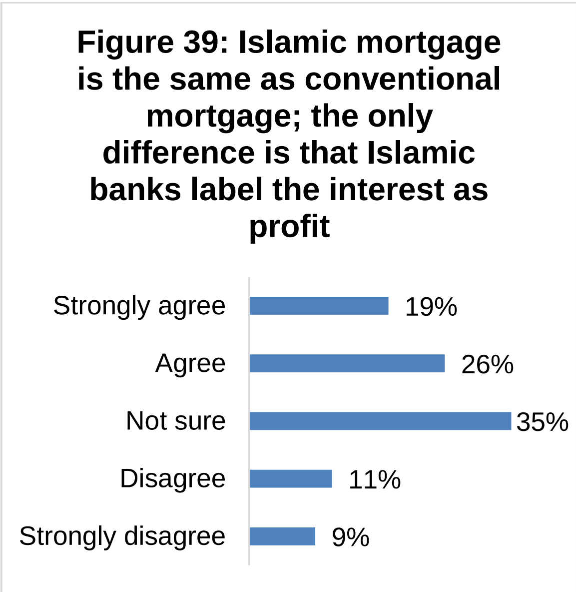


Figure 5-39: Perception of Islamic versus conventional housing finance

The following figure presents the perception of Islamic finance as sharia compliant:

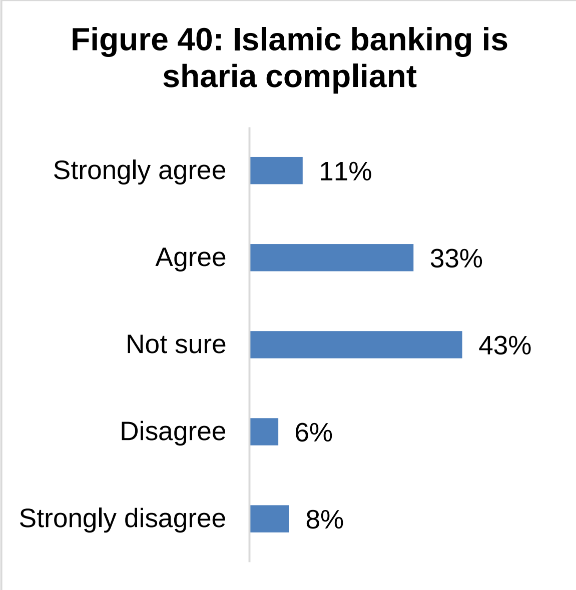


Figure 5-40: Perception of Islamic mortgage finance

The following figure presents the trust in Islamic versus conventional finance:

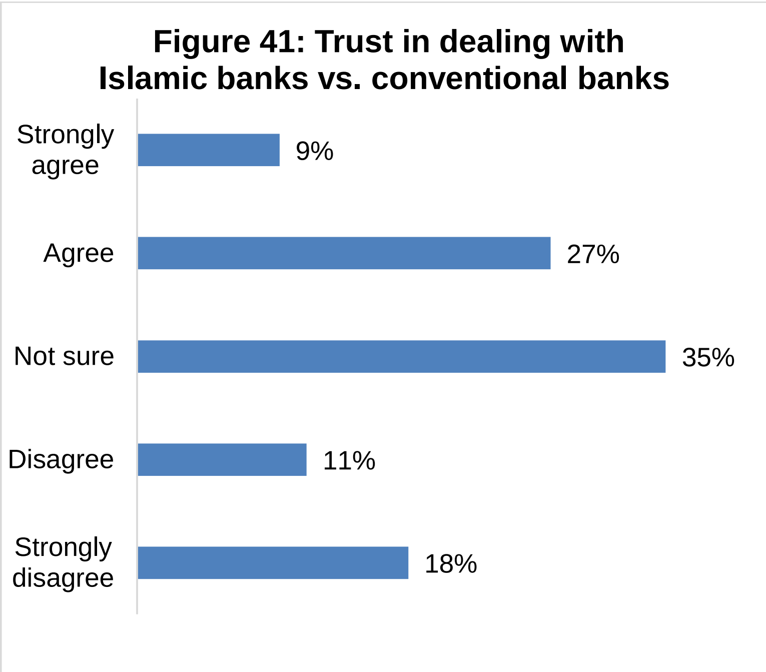


Figure 5-41: Trust in Islamic versus conventional finance

- Forty-five percent agree to the notion that Islamic banking is the same as conventional banking except that interest rate is termed as profit though 35% remains neutral and only 3% are aware as they disagree to this notion.

- Islamic banking can be termed as ‘sharia-complaint banking’. Forty-four percent of the respondents are aware of this fundamental fact, while 43% remains neutral to this statement.
- Trust in Islamic banking over conventional banking is indicated by 36%.

5.14.2.8 Are Current Structures of Housing Finance Affordable?

- The current structure of housing finance is not affordable to a significant share of respondents as explained by the following:

The figure in the next page presents the responses to an open question regarding how to improve housing finance in one’s country.

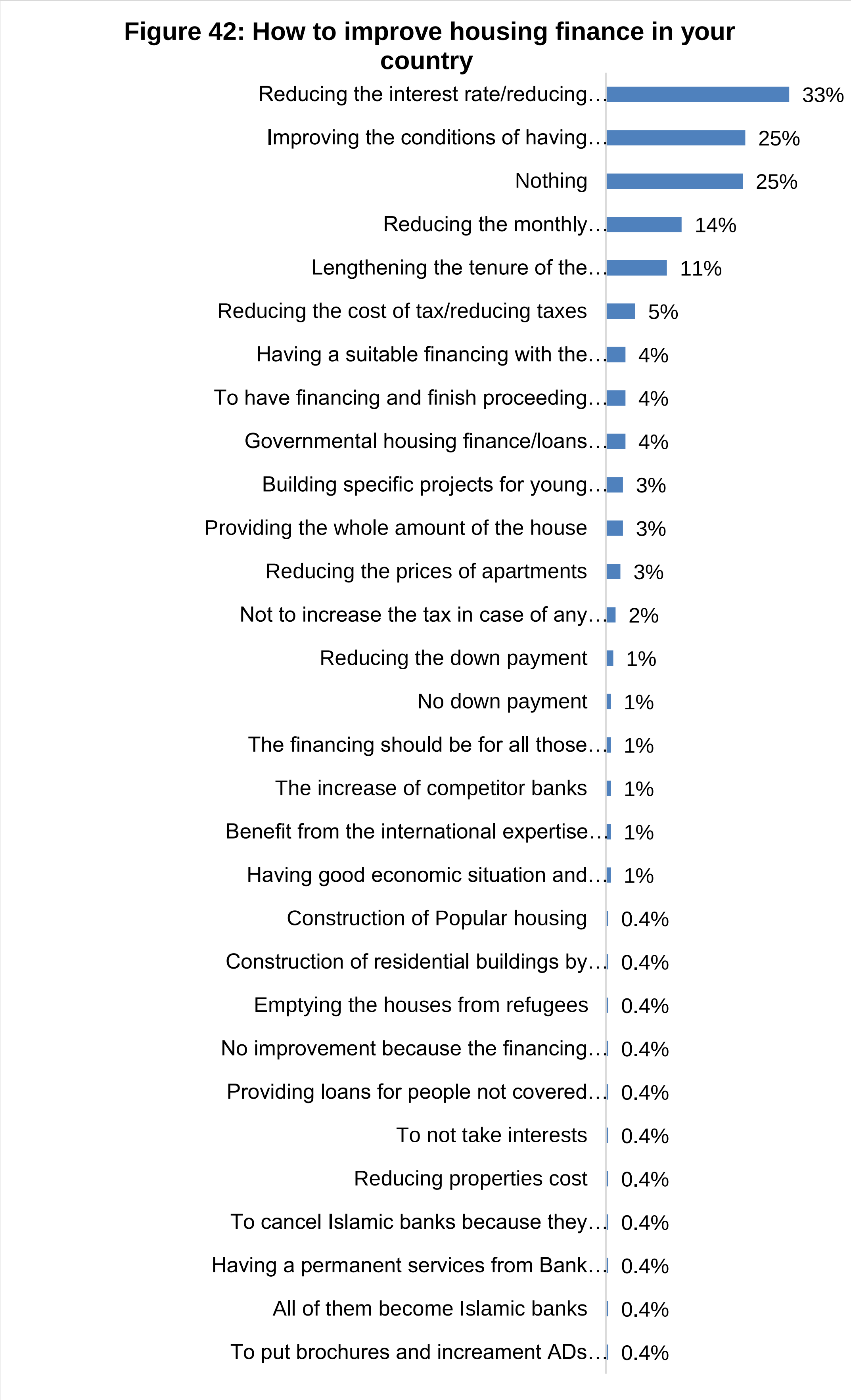


Figure 5-42: Suggestions to improve housing finance

- Overall, interest rate is considered a major hindrance as 33% suggested the reduction of interest rates on housing loans.
- Improving the conditions of having loans/more facilities could also make housing finance affordable as opined by 25%.
- Reduction of monthly payments could also make housing finance market attractive (14%).

5.14.2.9 What Are the Main Selection Criteria Buyers Use to Choose the Financing Institution?

- Cost of borrowing (52%) and advance payments (49%) are considered as major criteria while selecting housing loan provider.

The following figure presents the criteria for choice of housing loan providers:

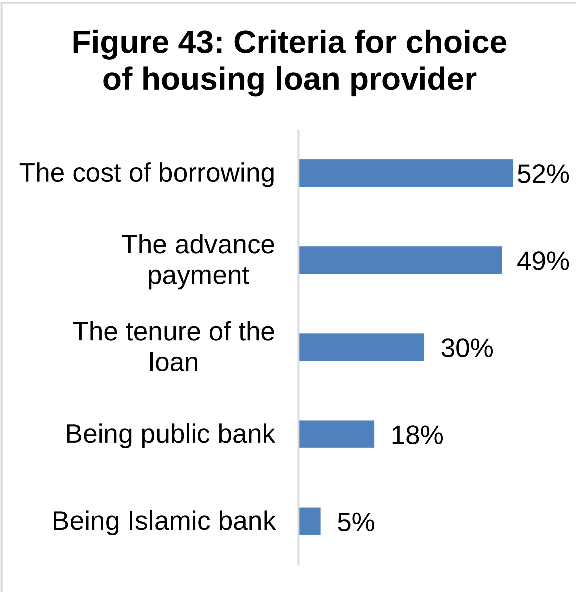


Figure 5-43: Criteria for choice of housing loan providers

5.14.3 General Discussion

Based on the findings of the survey in the three countries, which covered the GCC, Levant and Africa, and using the framework of analysis, many observations are in order. Respondents prefer family and public banks for borrowing purposes. Cost of borrowing is the major criteria for choice of loan provider indicating the presence of high interest rates in the housing loan market. Agreement to the statement 'borrowing from family and friends is better than from a bank' increases with age.

The study reveals a high financial ability to save money (65%) which indicates the potential for home purchase. To attract demand for housing finance products, providers could form strategies including offering complimentary products such as life insurance coverage (as only 12% of the respondents are covered under life insurance), strategising optimal time period for repayment (as 63% are averse to long-term debt) along with customising repayment amount.

A population that considers borrowing is better than waiting to build wealth to buy a house (66%) itself is a major encouraging factor for housing loan providers. Effective communication strategies can attract more home loan buys in the market. However, potential buyers expect affordable housing prices and income rise to enable them to achieve their dream of owning a home. Though the level of banking penetration is high, only 32% have used banks for loan purposes. Irrespective of fair knowledge about financial matters, the low level of loan application points towards more customer analysis.

Islamic housing finance products are a choice to people. Availability of conventional as well as public banks are major choices for customers, thus limiting the role of Islamic housing finance.

Reduction in interest rates, improving loan facilities and reduction in monthly payments, and others, could attract more home loan buyers. The cultural beliefs of the respondents as per their responses show a culture leading to voluntary financial exclusion. A significant percentage of respondents prefer to borrow from family rather than from financial institutions. This could be the outcome of a collective culture, but it is also due to the requirements of the banking system in terms of documentation and proof of income.

There is preference in dealing with public banks over private banks even in countries like Lebanon or KSA where the economies have been market-oriented.

In Egypt, there is an issue with enforcement of contracts where a significant percentage of respondents believe that the expected outcome of default is rescheduling.

In the three countries, financial education is an issue where a significant percentage of respondents were unable to get the right answer to questions about investment, interest rate and inflation. This weakness is despite the high educational attainment of the respondents. Assessing the current level of financial literacy will allow policymakers to identify education as a factor in achieving the development of housing finance in the region.

The social system plays an important role in the success of the system. In GCC countries, housing is considered an entitlement for nationals which is impossible to achieve, while in low-income countries, people look to the state to resolve all their housing needs.

There is an issue of affordability in terms of house prices or cost of borrowing.

There is synergy between insurance and housing finance. Penetration of insurance is very low with a high percentage of respondents having obligatory car insurance or medical insurance.

Islamic finance seems to be a product diversification rather than the option, as majority of respondents consider that Islamic mortgage is the same as conventional while others are not sure if there is any difference. In KSA, 9% prefer Islamic banks, in Lebanon 1% and in Egypt 21%.

While there is awareness of housing finance, there is little appreciation of the role of housing finance in homeownership.

Cost of finance and the down payment seem to be the major factors which encourage people to select housing finance.

Though majority of respondents said that they had product diversification, given the available products, it is clear that respondents do not have the level of knowledge and sophistication like other parts of the world.

The main selection criteria by buyers in choosing a financing institution are public banks, then conventional banks, then Islamic banks.

Chapter 6

TOWARDS A WELL-FUNCTIONING HOUSING FINANCE SYSTEM

In this chapter, we will be presenting a summary of the findings of the research, evaluate our findings and present a conclusion. Based on our evaluation of the findings, recommendations for policymakers, other different players and both supply and demand – people – sides will be presented. Furthermore, we will be proposing future research.

The objective of the research was to identify the characteristics of a well-functioning housing finance system for the MENA region. The study aimed to examine an important cross-cutting topic of political, economic and social implications relating to the developments and challenges of establishing a market-based housing finance system (HFS) in the MENA countries. The research aimed at a deeper understanding and awareness of relevant issues (including economic, financial and cultural) in the development of an HFS in the MENA region. It aimed as well to add to the growing literature, which tends to focus on the performance and infrastructure of housing finance systems in developed countries. Relatively speaking, little is known about the supply of HFS in emerging markets such as MENA. At the beginning of the study, seven research questions were set as follows:

1. What are the attributes of a well-functioning housing finance system?
2. How does a well-functioning housing finance model operate?
3. Who are the key players, public and private?
4. Are housing finance systems transferable, specifically to MENA?
5. Is Islamic finance a must or an option?
6. What are the characteristics of the demand for home financing in MENA?
7. What are the most popular Islamic products?

To fill the gap, the study uses the case-study approach to answer the key research questions about developed countries, emerging economies and MENA countries as well. Based on the cases considered in developed countries, a framework of analysis was developed, the three-pillar analytical framework (i.e., players, products, and people) to analyse the key factors that drive the supply of housing finance in MENA countries and identify what needed to be done to develop a well-functioning market-based HFS in the region.

The study consisted of three parts. The first part examined the housing finance systems in developed countries. Based on this, we have identified the characteristics of a well-functioning housing finance system. Moreover, in the first part, the 'Three-Pillar Framework' was developed as tool to analyse, compare and understand the interaction between the different pillars of the system and render recommendations.

In the second part, the housing finance supply in nine countries in MENA was analysed. Nine cases of housing finance supply in MENA have been considered to better understand the level of development and identify barriers.

In the third part of research, the people aspect has been covered through field research using the questionnaire method. The research questions which Part 3 aimed at addressing are as follows:

1. What is the level of knowledge about housing finance within the community?
2. What is the perception of housing finance versus other modes of finance?
3. Which factors encourage/discourage people from buying a house?
4. Is there housing finance product diversity?
5. What is the level of banking penetration, and what is the level of access to finance?
6. Are Islamic housing finance products a must or a choice in the MENA region?
7. What is the perception of Islamic finance?
8. Are current structures of housing finance affordable?
9. What are the main selection criteria buyers use to choose a financing institution?

6.1 Findings of the Study

In *Part 1*, In the literature review, we have identified certain attributes of a well-functioning market-based housing finance system to be used in the analysis of the case studies of developed and emerging economies, and supply of housing finance in MENA. In this section, we list those attributes and how the findings of the study relate to these attributes.

Efficiency was identified as the first attribute. Diamond and Lea (1992) consider efficiency to be an important attribute of a well-functioning market-based housing system. Major benefits of improved efficiency include reduction in the costs of credit intermediation and significant increases in the availability of funds and range of contract terms. We have seen that efficient housing finance systems as measured by the spread between cost of funds and the interest charged for extending housing finance loans is a measure element in the success of a housing finance system. Denmark is an example of an efficient system. Malaysia is another example of efficient system where originators charge minimum of difference of interest rate as competition made this difference very thin.

Affordability is the second attribute. In the literature review, the definition of affordability of housing finance as determined by average price of a house compared with the average annual income per capita is relevant to MENA. In the consumer survey presented in

Chapter 5, affordability is mentioned as one of the buying criteria for people to consider housing finance.

Accessibility is the third attribute. Ebrac and Notha (2002) believe that lower-income households have limited access to mortgage markets. While access to mortgage financing for low-income families is limited even in some developed financial markets, limited access even for middle-income families is a fact in many developing countries, including those in the MENA region. However, we noticed in Chapter 5 that accessibility is not only constrained by factors related to financial sector, but there is self-exclusion due to cultural factors. Respondents prefer family and public banks for borrowing purposes.

Market based. Warnock and Warnock (2008) also examined also the extent to which markets enable the provision of housing finance across 62 countries. Across all countries, controlling for country size, Warnock and Warnock (2008) found that countries with strong legal rights for borrowers and lenders (through collateral and bankruptcy laws), deeper credit information systems, and a more stable macroeconomic environment have deeper housing finance systems. We have seen that in countries with strong legal rights and deeper information system such as Canada, the penetration of housing finance is increased and market participants are encouraged to grow their outreach. In Denmark, a market based housing finance system led to continuous growth which is not constrained by banking deposits and is driven by efficient market pricing mechanism.

Stability is identified as one of the most important attributes of a well-functioning housing finance system. Stability is ensured by extending credit on sound basis to avoid any shocks to the housing or financial sectors or the economy in general. We have seen that economic stability is essential to make the housing finance on long term basis available as it financial institutions are able to price their products and market participants have confidence in the system

Market penetration. A well-functioning housing finance system should witness proper growth rate and expand its outreach. The penetration rate should not only be sufficiently large at the macro level, but should be uniform across different social and economic classes, which leads to the issue of access to finance. We have seen that for housing finance to penetrate the different market segments, proper institutional framework should be developed. As a good example, in Morocco, the mortgage guarantee fund plays important role in enabling self-employed to have access to housing finance.

In the study of the cases in Chapter 3, we have seen that though a housing finance system could be an engine for economic growth and social transformation, it could lead to economic and social catastrophes if it is not properly regulated and monitored. In Spain and Ireland, where there was a couple of decades of unchecked economic growth, the system led to the deepest economic crisis in both countries. In the United States, where homeownership became part of the American dream, it was the main cause of the global financial crisis.

Based on the comparison of the seven successful and unsuccessful cases and using the framework of analysis, we see the importance of having the different players working and interacting to grow the sector and make it accessible to the largest market segment.

Any housing finance system is the result of an evolution process over time. The role of the government is pivotal. The government is the owner of macroeconomic policies, which are important for economic stability, and housing policies, which are about having realistic targets and having the tools and institutional framework, having the right regulations as laws and prudential regulations, and leading the development of the system. In Denmark and Germany, governments have led the development of national systems through public institutions and the right mix of policies.

In Spain, Ireland and the United States, governments were to a large extent responsible for the failures. In the United States, the Federal Reserve's policy of low interest rates was partially responsible, as the government's failure in playing its role as regulator and having unrealistic housing policies whereby homeownership was encouraged at any rate were root causes of the crises. In Ireland and Spain, the government was a stakeholder in the housing bubble whereby sale and stamp duty taxes on sale of property comprised a significant percentage of fiscal resources.

A successful housing finance system hinges on the players performing within the right rules and roles, having diversified products which meet the needs of different market segments and aiming at meeting the needs of people. The role of private financial institutions and having the proper governance structure and working in tandem with the public policies are essential for the success of the system. In Germany, public and private institutions work together in consortia to provide finance for homeownership. In Canada, where the prime market dominates, the six largest banks follow sound lending policies in the extension of housing finance. In the United States, the greed in certain private institutions contributed to the overall failure. In Spain, the cajas, which were neither properly regulated nor properly run, contributed to the failure.

The social system plays an important role in the success of the system. In Denmark, where the spread in interest rate is less than 50 basis points, the role of the social system is clear whereby the major mortgage banks have gone through a transformational process from cooperatives into financial institutions. This is a model to be learnt from. In Germany, the public and private institutions collaborate to meet the housing finance need of the population.

Having diversified products increases the market penetration. Fixed-rate products, variable rates and Islamic and conventional banks in a free competitive market increase market efficiency and penetration. Malaysia is an example of this diversification, which led to an increasing market penetration.

Culture is not a barrier but rather a factor to be considered while designing the system or developing it. In Germany, the rate of homeownership, which is one of the lowest in Europe, has kept the housing finance system and the housing sector in balance. In Denmark, the credit culture, which encourages honouring obligations, helped in the soundness of the system. Meanwhile, in the United States, where it is normal to see borrowers walk away when they have negative equity, the risk of lending increases.

In *Part 2*, we have seen that the MENA region lags behind other OECD countries in terms of depth of housing finance whether as a general comparison or when we take into consideration the fundamentals and key indicators of the economy.

The findings in Part 2 demonstrated that a housing finance system is the result of an evolution and that the role of government is very crucial in the development of any system. In all countries, the governments in MENA have a lot to do to develop a market-based housing finance.

Considering the nine countries' cases studied in the MENA, we see again that a successful housing finance system hinges on the players, products and people. In all cases, the product offerings are very limited in terms of diversification and product reach. The role of private financial institutions and having the proper governance structure and working in tandem with public policies are essential for the success of the system. In all the countries, the market is fragmented, and banks depend on short-term deposits to provide long-tenure housing finance, which poses a real risk for the whole banking and financial system.

The social system plays an important role in the success or underdevelopment of the system. In GCC countries, housing is considered an entitlement for nationals, which is rather an aspiration impossible to achieve, while in low-income countries, people look to the state to resolve all their housing needs.

The region has countries with a high surplus of capital available while other countries suffer from deficiency in capital. However, the movement of capital between the countries is scarce and rather constrained. The infrastructure for housing finance is a major challenge for all the countries. Economic stability, property registration and titling and credit information are just examples.

It is clear that inadequacy in government roles, a fragmented market and a closed culture are the major barriers to the development of a housing finance system in MENA. Integration of the capital markets in the region will lead to a quantum leap in the development of a market-based housing finance system.

Part 3 aimed at better understanding the people pillar through a survey done in three representative countries in MENA. The findings are significant when related to literature review or in general.

Culture is cited in the literature review as a barrier for development of housing finance in MENA. Bergsman (2006) claims that the introduction of the residential mortgage concept to Middle Eastern countries has been hampered by those followers of Islam who adhere to the strict sharia law, which forbids the giving or receiving of interest. This could be a simplistic explanation of a situation where a significant percentage of population in the Middle East do not have access to finance or housing. The reason for the underdevelopment of housing finance in MENA is an array of issues, on top of which is a lack of a market-based housing finance system as shown in Chapter 4. Kuran (2007) considers that elements of Islamic law delayed the transition from personal to impersonal exchange, discouraged the use of the technologies of mass production, kept civil society weak and set the stage for sustained authoritarian rule. Their consequences have included the very traits that are commonly considered integral to Islamic culture. Greif (1994) conducted a comparative historical analysis of the relationship between culture and institutional structure. He examined cultural factors that have led to premodern societies – one from the Muslim world and one from the Latin world – to evolve along distinct trajectories of institutional structure. It indicated the theoretical importance of culture in determining institutional structures, in leading to their path dependence and in foretelling successful adoption of institutions across societies.

Stulz and Williamson (2001) have shown that investor protection is related to culture. This relation is especially strong for creditor rights.

The survey conducted in MENA countries hold significant findings. Self-exclusion which is not due to Islam and affordability seem to be major constraints. Islamic finance seems to present product diversification rather than an exclusive option, as majority of respondents consider that Islamic mortgage is the same as conventional while others are not sure if there is any difference. In KSA, 9% prefer Islamic banks, in Lebanon 1% and in Egypt 21%.

Respondents prefer family and public banks for borrowing purposes. The cost of borrowing is the major criterion for the choice of loan provider indicating the presence of a high interest rate in the housing loan market. However, this is changing: the proportion of agreement with the statement on 'borrowing from family and friends is better than from a bank' increases as age increases, which indicates a change in culture from collective to individual.

Cost of borrowing is the major criterion for choice of loan provider indicating the presence of high interest rates in the housing loan market. While there is awareness of housing finance, there is little appreciation of the role of housing finance in homeownership. Cost of finance and the down payment seem to be the major factors which encourage people to select housing finance.

Financial education is another barrier. Though majority of respondents said that they had been exposed to product diversification, given the available products, it is clear that respondents do not have the level of knowledge and sophistication similar to other parts of the world.

Path Dependency is mentioned in literature review as one of the reasons for underdevelopment of housing finance in MENA. Greif (1994) claimed that the capacity of a societal organization to change is a function of its history, since institutions are combined of organizations and cultural beliefs. We have seen in certain countries such as South Korea and Malaysia, when the Government takes the lead, proper institutional framework is developed, then a double-digit growth of housing finance is possible. This proves that path dependency could be addressed.

Quality of Government is another factor mentioned in the literature review as factor in development of housing finance system. Cooray (2011) examined the impact of two dimensions of the government, namely, size and quality, on two dimensions of the financial sector, size and efficiency, in a cross section of 71 economies. The study finds that increased quality of the government as measured by governance and legal origin positively influences both financial sector size and efficiency. We found that in majority of MENA countries, the role of government or absence of this role is behind the underdevelopment of the system.

The survey conducted in the three representative countries in MENA, respondents prefer family and public banks for borrowing. Agreement to the statement ‘borrowing from family and friends is better than from a bank’ increases with age, which indicates a change in attitude across generations.

Cost of borrowing is the major criteria for choice of loan provider, indicating the presence of high interest rates in the housing loan market; a market sensitive to cost and considers affordability is priority. A good ability to save money (65%) indicates the potential for home purchase. To attract buyers of housing finance products, providers could form strategies including offering complimentary products such as life insurance coverage (as only 12% of the respondents are covered under life insurance), strategising the optimal time period for repayment (as 63% were averse of long-term debt) along with customising the repayment amount.

Potential buyers expect affordable housing prices and a rise in income to enable them to achieve their dream of owning a home. A population that considers borrowing is better than waiting to build wealth to buy a house (66%) is itself a major encouraging factor for housing loan providers. Effective communication strategies can attract more home loan buys in the market.

Though the level of banking penetration is high, only 32% have used banks for loan purposes. Irrespective of fair knowledge about financial matters, the low level of loan applications points towards better customer analysis.

Islamic housing finance products are a choice to people. Conventional as well as public banks are major choices for customers, thus limiting the role of Islamic housing finance. Reduction in interest rates, improving loan facilities and reducing monthly payments, and others, could attract more home loan buyers.

6.2 Reflecting on the Findings

6.2.1 Attributes of a Well-Functioning Housing Finance System in MENA

6.2.1.1 Regulatory Framework

A robust regulatory framework is essential for the foundation of a sound housing finance system. The regulatory framework consists of several pervasive components. One of the components is land policy and regulations, which sets the stage for housing market. The second component is the regulatory framework for mortgage, which sets rights of obligations between parties to a legal instrument, the mortgage finance agreement. Another component is prudential regulations in which regulators supervise financial institutions. The prudential regulations should aim to maintain the stability of the system while encouraging growth and innovation. In market-based housing finance systems, different types of financial institutions, among which are investment banks, are involved. Strong and enabling regulations will lead to innovation in products while maintaining the stability of the system.

6.2.1.2 Institutional Framework

The regulatory framework is just the foundation for any well-functioning housing finance system. However, what matters as well is the institutional framework in which public and private players perform and interact to make the system develop and meet the expectations of stakeholders. Clear policy objectives for the public players will set the stage for private players to perform. Private financial institutions have an important influence on the development of the housing finance system. The case of Denmark is a clear example of the private sector playing a very efficient and responsible role by following responsible lending practices and offering affordable finance. While financial institutions make profit, they are still efficient and play well an intermediary role as part of the financial sector.

Another interesting finding is the role of capital markets in the functioning of a housing finance system. One finding of the study is the extremely limited movements of capital surplus among MENA countries, which is one of the main impediments to the development of an HFS within the region.

6.2.1.3 Government Role

The principal observation is that the government plays a crucial role in the success and failure of any HFS. The government is in charge of managing the cycles of the economy and in discharging its responsibilities in housing. The government has to take the lead in the development of a housing finance system by adopting the right mix of economic, social, housing public policies, setting the right regulatory system, intervening whenever the market fails to perform and create an enabling institutional framework.

6.2.2 Recommendations of the Study

6.2.2.1 Public Policy Recommendations

A better understanding of the role of a market-based housing finance system and the development of medium- to long-term policies for the development of the system are crucial. It is recommended that any policy design should look at the system as a public-private partnership. Only such partnership will provide resources which are not subject to budgetary constraints, beyond the means of any single institution or government and sustainable in the long term. The cost of proper policy design and enacting the right regulatory framework are of immaterial cost for governments compared with cost of underdevelopment of the system or market failures. The value of such policies and regulations cannot be overestimated. The government role should not be limited to intervention in case of market failure, but how to develop and enable the market to meet the demand for housing finance, which is a reflection of demand for housing and finance.

6.2.2.2 Supply Recommendations

A better understanding of market need is crucial. One size cannot fit all. The market has different consumer needs and profiles. Accordingly, the design of diversified products is important. The region has a large segment of the population who have different levels of sophistication, and the ability to finance is a success factor.

6.2.2.3 Demand-Side Recommendations

Culture is another success factor. A housing finance system is about enabling people to turn their need for housing into demand, as well as engaging people. Any housing finance system depends on mobilising market resources, which should come from investors, but to a large extent from household savings. Also, people are the beneficiary of any housing finance system. In both sides of the equation, culture plays a significant role. A culture which favours borrowing from family and friends over financial institutions is not conducive to the development of a housing finance system. Accordingly, more research aimed at better understanding the culture is important. Moreover, the design of products which consider culture is a success factor as well. Policymakers should adopt policies conducive to the development of a housing finance system which takes into consideration the cultural aspect while encouraging a nurturing culture of responsible lending and borrowing.

Consumer protection is very important for the success of housing finance system. Consumer protection is not just a legal question; it is also an institutional question.

Enablement is another success factor. Housing finance is about enablement of the largest market segment of the population to have access to finance and be able to comply with obligations. Access to finance is a question in many developing countries. Cultural and regulatory factors could lead to exclusion of a large segment of the population.

Financial education is another success factor. Housing finance leads to a long-term relationship between the beneficiary and the financial institution. The beneficiary has to make choices and informed decisions to select what best suits his/her needs. Questions of saving and spending and managing personal finance all depend on financial education.

6.2.3 Limitation of the Study and Areas of Future Research

Housing finance is financing the home purchase. Accordingly, its success depends on the housing market and the financial system. It depends on housing market in terms of supply and demand, and the overall success and development of the financial sector in any economy. A market-based housing finance system depends on capital and money markets to provide the funds required to lend. Denmark is an example, where the success of the capital market reflected on the performance of housing finance system. The study did not cover the financial sector in general or the capital markets in particular. It neither covers as well the housing sector.

A market-based housing finance system aims at the middle class; it does not cover the low-income class where microfinance could be the solution. For many countries in the region, the availability of microfinance would provide financing to a large segment of the population especially in rural areas or the lower-income market segments.

Future research should focus on more field studies to find more relationships among the variables of a housing finance formula, which would measure the success of the housing finance system in any economy, and developing a theory for housing finance. Such theory would give policymakers the legitimacy to lead this cross-cutting sector and intervene whenever required. Future research should explore the potential not only for the development of discrete housing finance systems but also the integration of capital markets to make funds move from surplus markets to markets with funding gaps.

Appendix

Sample questionnaire:

1. Personal Background

Q1 - Your age is?
Q2 - Your gender?
Q3 - What educational qualification do you have?
Q4 - Your employment?
Q5 - Which industry are you working for?
Q6 - Are you registered/covered by the social security?
Q7 - How many dependents do you have in your household apart from your spouse?
Q8 - Your marital status?
Q9 - Is your spouse working?
Q10 - Which industry is your spouse working for?
Q11- Income of my spouse is?
Q12 - Does any of your sons or daughters contribute to the finances of the house?
Q13 - How much is your annual income?
Q14 - Do you have a bank account?
Q15 - If yes, is it with (you may tick more than one)
Q16 - What banking services are you availing? (you may tick more than one)

2. What is the level of knowledge about housing finance within the community?

Q17 - How far does your money stretch?
Q18 - Sort of insurance you have
Q19 - Do you have a pension plan?
Q20 - Variable interest rate is higher than fixed interest rate
Q21 - If you amortise 4% per year of the original financing, how many years does it take to pay off the mortgage?
Q22 - If your monthly interest rate is 3%, what is the annual rate?
Q23 - If you invest with a return of 10% per year, how many years does it take until you double your money?
Q24 - Interest rate is directly related to inflation
Q33 - Factors that encourage you to buy a house in the next three years
Q36 - What are the major reasons to buy a home?
Q38 - Homeownership is more economical than renting a house
Q40 - In case you need to borrow, you prefer to borrow from
Q42 - In the last 12 months, have you heard or read something about buying an apartment or house with a mortgage?
Q43 - Buying with a mortgage will allow me to move in once the loan is made
Q44 - If you are to apply for a housing loan and there are a range of providers of financing, the main criteria to choose from the available options are
Q47 - Is it possible to take out multiple mortgages on the same property?
Q48 - What is the likely outcome of not making the required mortgage payments?
Q49 - It is possible to sell a house with a mortgage
Q50 - It is possible to get a mortgage without officially registering it

Q51 - A mortgage would enable me to buy a much bigger apartment or house than I could otherwise
Q52 - Most important points in deciding to take out a mortgage
Q53 - It is very important for me not to have long-term debt
Q55 - In case you would like to get a loan to finance the purchase of your home, do you prefer to use

3. What is the perception of housing finance versus other modes of finance?

Q39 - Borrowing to buy a house is better than waiting till I have the value of the house
Q40 - In case you need to borrow, you prefer to borrow from
Q56 - Borrowing from family and friends is better than borrowing from a bank

4. Which factors encourage/discourage people from buying a house?

Encourage Q33 - Factors that encourage you to buy a house in the next three years
Discourage Q34 - Factors that discourage you to buy a house in the next three years

5. Is there housing finance product diversity?

Q54 - If you used housing finance loan, did you have choice in the product offered?

6. What is the level of banking penetration? Access to finance?

Q10 - Availability of bank account
Q11 - Banking account service you are availing
Q13 - During the last 12 months, did you save or put aside any amount of money by
Q14 - Did you apply for a loan from a bank?

7. Are Islamic housing finance products a must or a choice in MENA region?

Q44 - If you are to apply for a housing loan and there are a range of providers of financing, the main criteria to choose from the available options are
Q55 - In case you would like to get a loan to finance the purchase of your home, do you prefer to use
Q58 - I have more trust dealing with Islamic banks than conventional banks

8. What is the perception of Islamic finance?

Q46 - To what extent do you agree with the statement 'Islamic mortgage is the same as conventional mortgage, the only difference is that Islamic banks label the interest as profit'?
Q57 - Islamic banking is sharia-compliant
Q58 - I have more trust dealing with Islamic banks than conventional banks

9. Are current structures of housing finance affordable?

Q59 - Suggestion to improve housing finance in your country

10. What are the main selection criteria buyers use to choose a financing institution?

Q44 - If you are to apply for a housing loan and there are a range of providers of financing, the main criteria to choose from the available options are

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