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**Mortgage Credit Supply, Homeownership, and Household Wealth:
Evidence from Saudi Arabia, USA**

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Abstract

Housing plays a central role in shaping household wealth, intergenerational mobility, and long-term financial security. As more people gain access to mortgage loans, greater numbers become homeowners. This could result in major changes to the socio-economic landscape of countries. The purpose of this research was to investigate the relationship between mortgage loan supply and homeownership and household wealth accumulation in two very different markets; the United States and Saudi Arabia. Utilizing financial liberalization theory, credit markets and Institutional Characteristics in both the U.S. and Saudi Arabia. The literature in Saudi Arabia demonstrates that as a result of legislative and economic reforms related to achieving the goals of Vision 2030, the volume of mortgages has increased significantly due to the potential for increased homeownership through the modernization of mortgage financing laws and regulations, creation of the Saudi Real



Estate Refinance Company (SRC), and implementation of subsidized housing programs. Many researchers also identify that several issues remain, including: high housing prices in large urban centres, heavy reliance on government subsidy programs; and the absence of an active secondary mortgage market, which has created significant barriers preventing low- to moderate-income families from accessing the housing market. The literature in the United States shows that the real estate market structure in the United States is much more developed compared to that of Saudi Arabia. The United States housing market includes a variety of real estate product offerings and includes government-sponsored enterprise (GSE) institutions. The results indicate that while availability of Credit increases the likelihood of becoming a homeowner, the Long-term effect on Wealth is affected by differences in Market Regulation, Subsidy Programs, and Risk Distribution, Housing Affordability, and Demographic Trends. Policy recommendations are provided to support Long-term Sustainable Access to Mortgage Credit, and Mitigate Systemic Risk Associated with Rapid Credit Growth.

Keywords: Mortgage, Housing, Credit Supply, Homeownership, Mortgage loans, Household Wealth

1. Introduction

Housing economics and financial policy research have long focused on the relationship between the supply of mortgage credit, homeownership, and household wealth. In addition to being a basic human need, housing is one of the main ways that people build and preserve wealth. Residential real estate frequently accounts for a larger portion of household net worth than financial assets like equities or retirement savings in many economies. Therefore, social mobility, economic stability, and the transfer of wealth across generations are all significantly impacted by



the systems that control access to mortgage credit, whether through banks, government initiatives, or secondary markets (Alkhalaf, 2024).

Global mortgage markets have experienced significant change in the past few decades. The way families fund homeownership has changed as a result of financial liberalization, technological advancements, securitization, and increased government involvement. The significance of comprehending how mortgage credit affects economic outcomes has increased as a result of these developments. An increasing amount of economic literature contends that a major factor influencing the dynamics of the housing market is the supply of mortgage loans rather than just interest rates. According to this theory, credit is a separate factor that influences housing demand and has the power to intensify both economic booms and downturns (Taşkın & Yaman, 2023).

An especially fascinating case study is the housing market in Saudi Arabia. The Saudi market, which was formerly dependent on cash purchases, family support, and a small number of mortgage options, has grown significantly as a result of Vision 2030 reforms. Access to house financing has been greatly expanded by the establishment of the Saudi Real Estate Refinance Company (SRC), the launch of long-term Sharia-compliant mortgage products, and extensive government subsidy schemes. One of the fastest increases in housing finance among emerging countries was brought about by these reforms, which led to a sharp increase in homeownership rates. However, despite these successes, concerns about the long-term viability of credit growth, its effects on wealth accumulation, and its capacity to alter Saudi households' socioeconomic structure still exist (Ajeeb & Lai, 2024).

The mortgage market in the US, on the other hand, is extremely developed and heavily financialized. Liquidity, risk dispersion, and wide credit availability are guaranteed by organizations like Fannie Mae, Freddie Mac, and the Federal Housing Administration (FHA). Although the American system provides a wide range of mortgage products, it also shows recurrent patterns of boom-bust cycles caused by changes in the credit supply. A clear illustration of how excessive credit expansion may destabilize consumers, financial institutions, and international



markets is the 2008 financial crisis. Asymmetries in mortgage access across income groups were recently exposed by the COVID-19 epidemic, underscoring the fact that credit supply is still unequal despite market depth (Alwazir, 2021).

Comparing Saudi Arabia to the United States presents a unique analytical opportunity. Financial institutions, the frequency of securitization, cultural norms around homeownership, and regulatory frameworks all differ structurally between the two nations. These variations have an impact on the relationship between the supply of mortgage finance and wealth and homeownership. Policymakers and scholars can gain a better understanding of the advantages and disadvantages of various mortgage finance schemes by looking at both systems (Ajeeb & Lai, 2024).

1.1 Research Problem and Questions

Despite the rapid expansion of mortgage credit markets in both Saudi Arabia and the United States, considerable concerns remain over how increases in credit availability translate into genuine improvements in homeownership and long-term consumer prosperity. It is unclear if the increased availability of mortgage credit is permanently improving homeownership prospects or just contributing to rising house prices, even though Saudi Arabia is witnessing historic growth in mortgage finance due to government initiatives and market reforms. Comparably, a developed and highly financialized mortgage market in the US has produced both potential and systemic vulnerabilities, raising concerns about how well increased loan availability fosters wealth creation among various socioeconomic groups. Thus, the first issue this study aims to solve is the dearth of precise, comparative data about the impact of mortgage credit supply on household wealth formation and homeownership rates in two structurally distinct markets, Saudi Arabia and the United States (Alkhalayal, 2024). Therefore, the problem of the research lies in answering the following questions:



1. What impact does the availability of mortgage loans have on homeownership rates in the US and Saudi Arabia?
2. How much does each nation's increased access to mortgages contribute to the creation of household wealth?
3. What effects do institutional variations have on the link between wealth outcomes, homeownership, and credit supply?

1.2 Research Objectives

The main objectives are described as follows:

- Investigate the impact of mortgage loans on homeownership rates in the US and Saudi Arabia.
- Investigate how much each nation's increased access to mortgages contributes to the creation of household wealth.
- Highlight the effects of institutional variations on the link between wealth outcomes, homeownership, and credit supply.

1.3 Research Significance

- The scientific importance of this research lies in the scarcity of studies that specifically dealt with the impact of mortgage loans on homeownership rates in the US and Saudi Arabia, which makes this study a new scientific attempt to identify the nature of the relationship between the variables and develop appropriate scientific recommendations.
- The research is important as it is a serious attempt to determine how much each nation's increased access to mortgages contributes to the creation of household wealth.
- The research is also important as it explores the effects of institutional variations on the link between wealth outcomes, homeownership, and credit supply.



- This research would represent a good reference for future studies as long as it provides subsequent researchers and interested scholars in the field of finance with valuable literature, recommendations, and suggestions that are important for their proposed studies.

2. Literature Review

2.1 Housing & Mortgage in Saudi Arabia

In recent years, Saudi Arabia has witnessed significant development in the housing and mortgage sector, driven by economic and demographic shifts and the Vision 2030 initiatives aimed at increasing homeownership to 70%. 2020 marked a turning point, with the value of new mortgage contracts for individuals reaching SAR 136.2 billion, an 83% increase compared to 2019. The Sakani program also enabled more than 138,000 families to acquire housing, reflecting the success of partnerships between the Ministry of Housing and the financial sector in expanding housing finance options (U.S.-Saudi Business Council, 2021). This growth is primarily attributed to significant demographic factors, most notably the population increase to 34.2 million in 2019, with 69% of the population under the age of 40. Internal migration to major cities such as Riyadh, Jeddah, Mecca, and Dammam has further increased the pressure on housing demand (Elsegaey et al., 2014; Opoku & Abdul-Muhmin, 2010).

The shrinking size of the Saudi family, from 6.45 in 2010 to 5.86 in 2019 (GASat, 2019), has also led to a greater need for new housing units, revealing a widening gap between supply and demand, especially given that the growth of the housing stock did not exceed 23% during the period 2010–2019. Regarding housing affordability, the government aimed to reduce the housing price-to-income ratio from 9.9 to 5 within five years. However, prices varied across regions, and citizens faced additional challenges, including high living costs, building material prices, and a weak savings culture, as noted by Alfouzan & Khalafallah (2014). Regulatory reforms contributed



to strengthening the mortgage market. The Saudi Arabian Monetary Authority (SAMA) implemented measures to raise the loan-to-value ratio from 70% to 90%, launched subsidized products, and imposed a 2.5% vacant land tax to curb land speculation (Al-Darwish et al., 2015). The Real Estate Development Fund also provided financial support of up to 100% for low-income families (Smolo, 2019). Despite these efforts, the gap between supply and demand persists, due to high population growth, the dominance of the young age group (71.9% of the population aged 15–65), and the high cost of land in major cities (GASTAT, 2022). Economic literature confirms that the expansion of mortgage credit often leads to higher house prices in the short term due to increased demand, but it supports market sustainability and price stability in the long term by boosting supply and raising homeownership rates (Carbó-Valverde & Rodríguez-Fernandez, 2010; Panagiotidis & Printzis, 2016; Worthington & Higgs, 2013). Other studies (AL-Nahdi et al., 2015; Alshuwaikhat & Mohammed, 2017; Sidawi & Meeran, 2011) indicate that mortgage lending is a cornerstone in linking economic growth to the development of the housing market, and that its formal implementation in the Kingdom has contributed to raising the homeownership rate from 45% to 64%, thus supporting families' ability to build real estate wealth in the long term. Therefore, it is clear that the expansion of the mortgage market in Saudi Arabia was not merely a response to an urgent housing need, but rather the result of a structural interaction between demographic, regulatory, and economic factors. This makes it one of the most important drivers influencing homeownership and household wealth formation. Continued reforms are necessary to reduce the supply and demand gap, enhance affordability, and ensure the sustainability of real estate growth in line with the goals of Vision 2030.

2.1.1 Saudi Arabian Financial Concerns

The Islamic rules and regulations matter a lot to Saudi citizens; they do not like to deal with a bank that is charging interest, so most conventional banks have adopted (or converted) to the Islamic banking concept (SAMA, 2013). Islamic Finance Solutions as they are currently structured are extremely poorly regulated and are perceived to have costs that make them unattractive to most



citizens, especially those in lower-income brackets. It is also perceived that there are intentions on the part of Islamic Financial Institutions to profit more with this kind of structure (Cole, 2023). The Saudi Bank sector holds the largest assets in Islamic and Conventional Banks within the GCC countries and is recognized as having the most advanced level of capabilities and products within the Arab world (SAMA, 2013). Because the majority of the Saudi population is comprised of Muslims, conventional banks have offered Islamic options (windows) to capture more of the market share (Tarawneh, 2006). Through the increased focus on consolidated competition, sufficient resource allocation, and the development of innovative Islamic Saving Products and Technology Platforms, several financial institutions within the Saudi Banking sector may evolve towards a higher quality than currently exists (Cole, 2023). Based on the above observations from the secondary data analysis, any proposed financial saving solutions need to be well structured based on Sharia-compliant (Learn, 2023).

2.1.2 Saudi Arabian Home Ownership

Over recent years, the biggest challenge for Real Estate has been the increasing number of individuals unable to acquire affordable housing, mainly due to limited supply of land and supportive fiscal measures (Asfour, 2023). This lack of supply is also attributed to lenders having insufficient security when mortgages default. To alleviate these issues, SAMA established the Real Estate and Financing Act as the lead policy maker. MOMRA and Private Sector continue to work hard towards providing affordable housing, land and mortgage products in order to encourage Saudi citizens to own their own homes. Currently, it is estimated that 50% of the Saudi national population doesn't own their homes, with a total of approximately 13 million individuals living in rental housing (GASTAT, 2018). The high price of land continues to be an obstacle for the Private Sector as they cannot meet the price expectations for the mid-to low-income potential homeowners.

The Government of Saudi Arabia had little to no regulatory framework available to regulate land trading. Many participants in the market were primarily focused on making an investment



with little regard to what the actual value of the land was. Prior to the establishment of the Lands Authorized Entity (LAA), MOMRA, in 2012, there were no established policies regarding land distribution. Consequently, the LAA distributed millions of plots of land to individuals and agencies without the implementation of clear policies on land use. Thus, the majority of the land distributed in this manner is unutilized and not helping to address the housing needs of the Kingdom. Presently there is an overwhelming amount of awareness within MOMRA that there is a need for a regulated real estate market in order to address the concerns and needs of the citizens of the Kingdom. However, most people are unsure of how to address the problems associated with the current unregulated state of the housing industry or what policies to implement to correct the situation. Currently the most significant problems are the practices of real estate brokers, the lack of professionalism associated with property management, and the lack of a regulated land trading market. An emerging consensus appears to exist with regard to the negative impact of an unregulated real estate market on the citizens of the Kingdom. As a result, one of the primary objectives of the housing strategy is to establish the Real Estate General Authority, which would provide a framework for how to establish and implement the regulatory side of the issue (Alkhayal, 2025).

2.2 Mortgage Markets Evidence in Saudi Arabia and the USA

According to the conventional economic theory, supply-side and demand-side factors both have an impact on housing markets. Mortgage credit is the main enabling mechanism on the demand side, enabling consumers to buy homes without needing all of the money up front. Therefore, the demand curve can be shifted outward by easier access to credit through reduced interest rates, loosened lending requirements, or government-backed loan programs. The supply of housing is comparatively inelastic in the short term, and homebuilders react to changes in financing circumstances, albeit with time lags. When the credit supply grows quickly, this imbalance frequently causes pressure on home prices to rise (Ajeeb, Sieng, & Elorabi, 2023).



Numerous studies demonstrate that loan supply shocks can have a substantial impact on homeownership and prices. The pre-2008 credit boom in the US was marked by the growth of securitization and subprime lending, which increased housing demand and fueled a speculative bubble. Tighter requirements following the financial crisis hindered first-time buyers' ability to obtain finance and slowed their recovery (Wind, Lersch, & Dewilde, 2017).

Credit supply is a key factor in the housing boom and bust cycles; more readily available or less expensive mortgage financing boosts borrowing, home purchases, and aggregate demand. The COVID-19 epidemic, which occurred more recently, caused mortgage credit conditions to tighten for low-income households while greatly expanding for prime borrowers, demonstrating how the supply of credit can differ across different demographic groups. In the United States, there is substantial empirical evidence that homeownership and household wealth are positively connected. For middle-class families, housing accounts for over 60% of total wealth, making mortgage availability a critical factor in determining long-term financial well-being (Eerola, Lyytikäinen, & Ramboer, 2021).

Deep financialization and the existence of a sizable secondary market define the U.S. mortgage industry. By buying mortgages from lenders, Government-Sponsored Enterprises (GSEs) facilitate liquidity and a steady supply of credit. Products include FHA-insured mortgages, subprime loans, adjustable-rate loans, and fixed-rate mortgages. Monetary policy, macroeconomic cycles, and regulatory changes all affect the state of the credit supply. The 2008 financial crisis brought to light the dangers of excessive leverage and inadequate underwriting requirements. Stricter monitoring was brought about by post-crisis reforms, strengthening the mortgage system's resilience (Alwazir, 2021).

The lack of a secondary mortgage market, a lack of financing institutions, and regulatory restrictions have all contributed to Saudi Arabia's mortgage sector's historical underdevelopment. However, the market has expanded significantly since Vision 2030 introduced its housing strategy. Homeownership rates have increased, and mortgage issuance has increased because of government



initiatives, including Sakani, subsidized loans, and the development of mortgage refinancing through the Saudi Real Estate Refinance Company (SRC). Previous research indicates that homeownership rates have been positively impacted by increased access to mortgages, particularly for young families. However, data limitations continue to hinder empirical studies, and the long-term wealth implications have not been thoroughly examined (Ajeeb & Lai, 2024).

The mortgage industry in Saudi Arabia has rapidly changed. Mortgage products were restricted and heavily regulated before to 2015. The industry was greatly revolutionized with the passage of the Mortgage Law, the Real Estate Finance Law, and SRC. These modifications made it possible for banks and financial institutions to provide long-term, fixed-rate mortgages that complied with Islamic law. These days, government-backed initiatives are crucial, with subsidized profit rates lowering the cost of owning. The mortgage sector has grown in line with Vision 2030's goal of raising homeownership to 70%. Despite advancements, several issues still exist, such as growing home costs, a shortage in large cities, and a dependence on government subsidies (Alkhayal, 2024).

2.3 The Impact of Mortgage Loans on Homeownership Rates in the US and Saudi Arabia

There have been a multitude of studies evaluating the housing boom throughout 1990s and 2000s. The majority of earlier studies focused on how a relaxation in borrowing constraints from households caused the housing boom (Kiyotaki et al., 2011, Sommer et al., 2013, Favilukis et al., 2017). In contrast, Justiniano et al. (2019) focused on how a relaxation in lending constraints is to blame for the housing boom. According to Justiniano et al. (2019), the increase in available mortgage credit enabled the increase in home prices and debt, while maintaining a stable debt-to-value ratio and decreasing mortgage rates. Therefore, they argue that this phenomenon is best represented by the sharp decline in the borrowing constraints imposed on borrowers, i.e. an increase in available mortgage credit, would lead to a sharp increase in mortgage rates and a subsequent decrease in home prices. The aggregate data support Justiniano et al.'s arguments and all of the identified aggregate relationships, but their calibration does not provide a clean



identification of how the relative increase in credit supply affects the identified aggregate relationships, as they use data that is not arguably exogenous and good measurements of the increase in credit supply. They argue that the credit supply was increased due to the increasing use of mortgage-backed securities and overall increased activity within international markets.

Johnson and Rice (2008), Rice and Strahan (2010), and some later studies (Favara and Imbs 2015; C'elierier and Matray 2019) have identified and used a specific exogenous change in the supply of credit in their research. They built a measure of deregulation of the banking industry, especially the ability of banks to establish branches outside their home states, called the Bank Branching Deregulation Index, using the provisions included in the Interstate Banking Inefficiencies Act of 1994 (IBBEA) that allowed states a measure of discretion to limit the growth of out-of-state banks in their states. The other provisions of the act created four limits to the number of banks allowed to establish branches and the number of branches an out-of-state bank was allowed to open in the state: 1) a minimum age for target institution acquisitions, 2) a prohibition against de-novo subsidiaries by out-of-state banks, 3) a limitation on the concentration of state-wide deposits resulting from the acquisition of a bank outside the state; and 4) a prohibition against allowing an out-of-state bank to acquire a bank in the state. In Rice and Strahan (2010) the IBBEA is described at length, and they created an index from 0 to 4 based on the restrictions imposed by each state at a specific time to limit banking competition.

All through history, the banking system of the United States placed heavy restrictions on banks' ability to expand geographically. Beginning in about the mid-1970s, there was a gradual trend for states to ease their restrictions on intrastate and interstate banking. In the period from 1970 through 1994, there were 38 states that removed limits on being able to branch throughout the state. The same period saw the removal of limits on inter-state operations for Bank Holding Companies on a reciprocal basis. This wave of deregulation on branch expansion ended with the signing of the IBBEA Act in 1994. Johnson and Rice (2008) found that states that deregulated their interstate branching were able to achieve a higher share of interstate-branched banks than states that



maintained these restrictions. Favara and Imbs (2015) showed that the ability of commercial banks that operated in multiple states to engage in interstate branching contributed to the ability of these banks to promote the issuance of more mortgage loans, leading to increases in the price of homes. C'elerier and Matray (2019) demonstrated that the increase in access to branch banking, due to deregulatory actions, also allowed increased access to finance for low-income households.

Buying a home is a significant investment that could cost up to half of one's monthly income. Therefore, Saudi Arabia has developed the real estate market by establishing a set of regulations for the real estate market, which were officially implemented in 2012 through the application of the mortgage law, to increase the proportion of homeownership to 70% by 2030 and to increase the production of residential units to 2.8 million housing units by 2024. using the use of the most popular Musharakah and Ijarah system, this rule gives low- and middle-class people the chance to buy properties by obtaining real estate financing using cutting-edge goods and mechanisms provided by Islamic banks. Additionally, through the Real Estate Development Fund, the Saudi government offers people real estate loans starting at SAR 500,000 (about USD 133,000) per individual, which can be repaid over 25 years in simple, interest-free installments (Taşkın & Yaman, 2023).

The main tool used to connect the expansion of the housing industry, the real estate market, and economic growth is the mortgage. By maintaining a balance between supply and demand, the mortgage law, which went into effect in 2016, seeks to accomplish both immediate and long-term objectives in the housing industry. However, the majority of low-income earners cannot afford the enormous financial resources needed to provide housing. It is now recognized that Saudi Arabia has a higher demand than supply for housing. The most significant causes of this high demand imbalance are limited funding sources, the lack of a saving culture among the majority of the populace, high inflation, the high cost of building materials, and the rapid rate of population



expansion. A well-structured mortgage plan, which accounts for 70% of the GDP of some industrialized nations like the USA, Denmark, and Britain, is a frequent way to acquire a home (Alkhayal, 2024).

Although local factors often drive housing markets in American cities, the spread of macroeconomic shocks exposes them to national cycles. Short-term price swings are often assumed to be driven by demand, with supply having a greater influence over longer time periods. Strong cycles in real estate prices are typical in many places, but the dynamics are milder in others. This section's model aims to identify a city's baseline housing price, or the long-term equilibrium for the area where prices will trend. This equilibrium is always changing due to the underlying price drivers and may be specific to a certain region at a given moment. The housing-to-population ratio, rents, income, use costs (such as interest rates, property taxes, insurance, and anticipated appreciation), credit availability, and other supply and demand factors are some of the fundamentals of the housing market that are discussed in the literature. This household's presence in the market tends to affect the equilibrium price, and it usually borrows under leverage and income restrictions (Wind, Lersch, & Dewilde, 2017).

Ajeeb and Lai (2024) conducted a study to analyze the impact of mortgage lending on the Saudi Arabian real estate market by examining the causal relationships between mortgage finance, residential investment, and the employment of Saudis. The study employed a quantitative methodology based on the analysis of long-term data covering the period from 1970 to 2019, relying on official data from the General Authority for Statistics, the Saudi Central Bank, and the World Bank. This methodology is considered suitable for studying long-term economic changes and their impact on the real estate sector. The study's findings revealed a strong positive correlation between the expansion of mortgage finance and the growth of the Saudi real estate sector's GDP. The results also demonstrated that residential investment significantly contributes to supporting



the sector, and that employing Saudis in real estate-related activities enhances its performance and stimulates economic growth. Thus, the study confirmed that mortgage lending is a key driver of the real estate market's recovery in the Kingdom. The study also highlighted several research limitations, most notably the need to investigate the impact of mortgage finance on other economic sectors, as well as its correlation with employment and unemployment rates. The researchers also recommended applying the model to other countries for comparison and to identify similarities and differences in mortgage policies and their impact on real estate growth. In its practical aspect, the study emphasizes the government's responsibility to promote investment and provide a stable regulatory framework that ensures a balance between supply and demand in the real estate market. It also stresses that mortgage financing impacts not only individuals but also investors, workers, and real estate-related sectors. This study is a significant addition to the literature, providing empirical evidence to support the hypothesis that expanding mortgage lending clearly contributes to the growth and stability of the Saudi real estate market.

2.4 The Effects of Institutional Variations on the Link between Wealth Outcomes, Homeownership, and Credit Supply

A collateral limit against the value of the home has been used to model household credit limits. In order to explain the housing bubble of the 1990s and 2000s, many articles remove this borrowing constraint. Four aggregate data points are qualitatively and statistically consistent with a loosening of lending constraints: both housing prices and family debt grew. Mortgage rates decreased as the debt-to-home value ratio stayed steady. On the other hand, if borrowing restrictions are loosened, mortgage rates should rise, and home values should fall as a result. However, because other researchers' calibration exercise lacks arguably exogenous and precisely measured variation in credit supply, they do not provide a clear identification of how key outcomes are affected by an increase in credit supply. Instead, they suggest that lending limits have been alleviated by a general rise in accessible mortgage credit through the growing usage of mortgage-backed securities and other international variables (Eerola, Lyytikäinen, & Ramboer, 2021).



Due to legislative initiatives to make property more appealing than renting, homeownership rates have increased throughout Europe since World War II. The idea that homeownership helps households accumulate wealth is a major justification for the growth of homeownership. Housing wealth has grown in importance as a component of socioeconomic stratification as more people have owned homes. However, the interaction between the political economy and the growth of homeownership determines the opportunity for various social classes to amass housing wealth. Seven systems of housing wealth accumulation are given to illustrate transnational disparities in the political economics of housing. The expansion of homeownership up until 1980 and the shifts in the political economics of housing during the 1980s serve as the foundation for these systems. Opportunities for accumulating housing wealth have been impacted, in particular, by the privatization of social housing and the liberalization of housing financing, which made homeownership available to an increasing number of low-income households (Wind, Lersch, & Dewilde, 2017).

Increased housing wealth disparity among professional classes is typically linked to an increase in homeownership. Lower socioeconomic households are drawn to homeownership as a result, and their average share of housing wealth declines as a result of their diminished purchasing power. The liberalization of housing finance, which enables lower-income households to buy homes without paying off their mortgages, is partially responsible for this process. The main reason for the growing disparity in housing wealth between professional classes seems to be the accumulation of mortgage debt and its continuation into old age (up to 43% of the home value for the lower-income Baby Boomers) (Alwazir, 2021).

In market-based housing systems, the growth of homeownership may have raised housing wealth inequality among occupational classes, whereas in housing systems where labor income is unrelated to housing consumption, it may have decreased it. Market-based housing systems have been politically supported since the 1980s as ways for the lower and middle classes to accumulate

wealth. Ironically, compared to some of the "older" housing systems that came before the growth of market-based homeownership, such as state-led household pooling and wealth redistribution (communism), these systems are less supportive of this objective (Taşkın & Yaman, 2023).

2.4.1 The Role of Credit Cycles in Economic Activity

The literature suggests the existence of predictable credit cycles linked to fluctuations in real economic activity. López-Salido, Stein & Zakrajšek (2017) and Krishnamurthy & Muir (2017) demonstrated that narrowing credit spreads typically precede subsequent widenings, reflecting a clear credit cycle. Borio (2014) supports this pattern through a broad review of Bank for International Settlements (BIS) research. Evidence from Mian, Sufi & Verner (2017b) shows that a sudden surge in the household debt-to-GDP ratio leads to a three-year expansion followed by a sharp seven-year decline, constituting a boom-and-bust cycle with ripple effects on economic growth. The IMF (2017) and Drehmann, Juselius & Korinek (2017) have confirmed this link between household debt shocks and subsequent growth downturns.

2.4.2 Explaining Credit Expansion: Credit Supply or Demand?

Studies explore whether increases in household debt arise from shocks to the demand for credit (income, expectations, demographics) or shocks to the supply of credit (increased willingness of lenders to lend). Evidence from Mian, Sufi, and Verner (2017b) shows that periods of rapid growth in household debt are typically associated with narrowing credit spreads, supporting the supply-supply hypothesis. Jordà, Schularick, and Taylor (2015) also demonstrated that monetary policy shocks in countries with fixed currency pegs lead to credit expansion and rising property prices. Krishnamurthy and Muir (2017) showed that narrowing of historically low-quality bond spreads often precedes financial crises, reflecting an expansion in the credit supply prior to the crisis.

2.4.3 Evidence from Specific Historical Episodes of Credit Supply Expansion



Specific cases provide clearer evidence for credit supply shocks. Di Maggio & Kermani (2017) demonstrated that the repeal of anti-loan laws in some US states in 2004 led to a boom in mortgage credit and soaring home prices, followed by a sharper collapse after 2006. Mian, Sufi & Verner (2017a) showed that states that had deregulated their banking sectors earlier in the 1980s experienced a stronger credit boom and higher economic growth, followed by a more severe recession. In Europe, the introduction of the euro and the reduction of sovereign risk premiums led to a significant expansion in credit, followed by strong growth between 2002 and 2007, and then a severe recession after the 2008 crisis.

2.4.4 Credit Expansion and Housing Prices

Rising home prices raise the question of whether the increase is a cause or a consequence of expanding household debt. Most evidence suggests that the expansion of credit supply is the primary driver of rising prices. Studies by Adelino, Schoar & Severino (2014), Favara & Imbs (2015), Di Maggio & Kermani (2017), and Mian, Sufi & Verner (2017a) have demonstrated that externalities in the supply of credit significantly raise house prices. Macroeconomic models (such as Favilukis et al., 2017, and Justiniano et al., 2015) also confirm that credit shocks lead to immediate price increases followed by a gradual return to normal levels. Data from 30 countries (Mian, Sufi & Verner, 2017b) indicate that a shock to household debt directly raises prices, while a shock to housing prices themselves does not generate a boom-bust cycle.

2.4.5 The Household Demand Channel

Evidence suggests that the impact of credit expansion on the economy operates primarily through the household demand channel, rather than through businesses. Mian, Sufi, and Verner (2017b) found that higher household debt is associated with higher household consumption and consumer goods imports, without a corresponding increase in corporate investment. IMF data (2017) also confirms that the growth and decline cycles of the household economy are more pronounced than the output cycle. Historical studies (Jordà, Schularick, and Taylor, 2016) show



that a high mortgage-to-GDP ratio is a strong predictor of future crises. Evidence from Europe and Latin America (Bahadir and Gumus, 2016) indicates that higher household debt leads to increased employment in non-exporting sectors (such as services and construction) and an appreciation of the real exchange rate, unlike corporate debt, which does not exhibit the same correlation. Studies of US banking deregulation in the 1980s (Mian, Sufi, and Verner, 2017a) confirm that credit expansion boosted employment and wages in non-exporting sectors, further supporting the interpretation of credit expansion as driven by household demand.

Historical and cross-country comparative evidence shows that an expansion in credit supply often leads to a housing price boom, increased household debt, and a short-term surge in growth, followed by an economic slowdown and a contraction in asset prices. These findings are central to understanding the dynamics of mortgages, homeownership, and wealth formation, particularly in economies experiencing rapid credit expansion, such as Saudi Arabia and the United States.

3 Previous studies

Many studies have looked at how housing prices are determined; however, few have considered how mortgage rates relate to housing prices. Economists have studied housing prices using multiple theories; for example, in 1957, the Friedman Permanent Income Hypothesis showed that people spend money based on what they think their lifetime wealth will be, which means that when house prices go up or down it impacts their perception of their future wealth and subsequently their consumption patterns. The most recent studies show that when house prices rise, consumer spending will increase, as well, based on the perceived value of the equity created from a home. Benjamin et al. (2004), Case et al. (2005), Kishor (2007), and Lettau & Ludvigson (2004) all presented studies to support this finding. In addition, these researchers found that a greater portion of consumption is influenced by changes in housing wealth than by changes in financial wealth. Most importantly, financing plays a key role as it represents one of the major structural and institutional factors affecting the housing market. In addition, the mortgage



financing process is part of the financing component. Geng (2018) conducted a multi-nation study comparing the effects of various elements upon housing prices in twelve developed OECD countries. This study provided a framework for understanding housing price determination by categorizing the underlying factors contributing to housing prices into three broad groups: demand, supply, and structure/institutional factors. The results of the panel cointegration testing conducted showed that household discretionary income, net worth from financial investments, demographic changes/type of families, and interest rates all significantly influenced housing prices.

Worthington & Higgs (2013) found housing affordability is connected with housing finance, housing approvals, and financial assets. Other issues, such as economic conditions and demographics, only affect housing values for a short time. For their study in Australia, they employed an ARDL method to examine their model, reviewed from 1985-2010. Additionally, the Netherlands experienced increases in home values after implementing an efficient mortgage law, as well as after raising the level of the national mortgage warranty following the global financial crisis in 2007, which also contributed to reviving the housing market and stimulating further interest in residential real estate. For their research, they performed analysis of data from 2006-2014 using Multiple Linear Regression. Consequently, they evaluated the interaction between mortgages and housing markets; controlling for income and demographic factors (Nigon, 2019). In Nigeria, Udoka, C. O, and Kpataene (2017) assessed the impact of mortgage loans on housing construction from 1990 through 2014. To analyze the data, the researchers used Unit Root, Cointegration, and Granger Causality tests to establish a meaningful and positive correlation between financing through mortgages to home-building activity.

As recommended through the study, infrastructure, diversification of the sources of financing for real estate and strategies needed to develop the infrastructure to maximize the effectiveness of mortgages, and their subsequent effects on the housing market, must all occur simultaneously. Consequently, in order to create the best environment for both the financial and housing sectors to operate at their most efficient levels, the association between house prices and mortgages must



take on a specific form. In their equilibrium model on the housing and mortgage markets, Anenberg et al. (2015) concluded that non-agency mortgages exert enormous influence on house prices when in conjunction with low-risk-free rates or when the loan limits have been set to high levels. Shared appreciation mortgages help housing prices increase; thus housing prices are comprised mainly due to mortgages. This does not necessarily mean that mortgage-induced housing prices will lead to a financial crisis. Additionally, as demonstrated by Udoka & Kpataene (2017), a long-term relationship exists among the three variables used; therefore, mortgage financing positively influences the growth of the housing sector in Nigeria, while the cost of building developments negatively influences the growth of the housing sector. Furthermore, the causality model developed using Granger causality demonstrates how the three variables interact in a dynamic way throughout the years 1990 through 2014.

Despite providing positive effects for the development of the housing sector, a mortgage can negatively influence the housing price level.

Numerous studies demonstrate that housing finance has a negative and positive influence on home prices. In addition, Chong et al. (2019) conducted a study in Malaysia, covering the time period from 2010 Q1 through 2017, that used Ordinary Least Squares (OLS) regression as a means to identify the primary influences on the price of a home in Malaysia. Their results indicated that the lending rate has a significant negative effect on house prices, while the exchange rate has a significant negative effect as well, but GDP and unemployment have no effect on house prices.

Another study conducted by Lee et al. (2016) regarding the effect of mortgages on house prices also found that a mortgage has a negative effect on house prices. The authors conducted their research from 2011 to 2013, and they analysed the impact of selected variables and house prices using OLS, cointegration tests and the Granger causality test for both long- and short-term periods of time. The researchers recommended that the government develop a proper plan for the support of middle- and low-income individuals in obtaining affordable homes.



In agreement with this, Ryan-Collins (2021) states that deregulated financial systems lead to a greater rate of house price growth than income growth. This gap occurs when the supply of affordable homes is low (when they are close to desirable places for living) and the demand is strong. Similarly, Carbó-Valverde and Rodriguez-Fernandez (2010) found similar results.

Kohl (2020) has established that having more mortgages (housing finance) does not equate to a greater quantity of housing being produced; instead, an increase in overall demand will lead to an increase in house prices. This conclusion was made after conducting an analysis of data from 17 countries over a time period from 1913 – 2016. In Greece, Panagiotidis and Printzis (2016) examined how mortgage financing related to the house price indices between 1997 - 2013, utilizing a VECM methodology. The findings from that study determined that both short- and long-term growth for the mortgage market increases house prices. Without mortgage financing, the house price index does not show any significant growth. Additionally, changes in CPI and Retail Trade Shock greatly influence the value of the housing market, while changes in the Index of Industrial Production do not contribute to any major changes in the Housing Price Index (HPI). Kubuta (2013) concurs with these findings. The absence of mortgage financing, limited availability of housing supply due to the pressures of rapid urbanization has created a demand exceeding the available supply which has led to increased values within the housing market. The findings of Kubuta (2013) were based upon data collected through a field survey conducted on 150 Government Agencies in Kenya.

Hlaváček and Komárek (2008) established that there is no correlation between mortgage value and housing prices, however demographic factors and unemployment do have an impact on housing prices. The researchers utilised the following study variables: land values, FDI, GDP, unemployment, net migration and natural population growth to assess housing supply and demand. In conclusion, there is evidence to suggest that mortgages are useful for the housing market, but there needs to be appropriate strategies in place. Those countries experiencing substantial increases



in house prices due to high loan to value ratios can create booms in their property markets by utilising both securitisation and wholesale markets. Therefore, the best way to avoid booms in the property market, and to stabilise house prices, is through the structuring of financing for housing. This conclusion investigates the evolving interaction between consumer credit booms and housing prices over a period of 50+ nations Cerutti et al. (2017). Conversely, Islamic Bank's approach to financing has been to produce many different methods for providing finance consistent with Shariah principles (Smolo, 2019). Obaid (2020) used a time series analysis on income, house prices, population growth rate, loan demand and CPI to establish housing demand during the time interval of 1987 and 2016.

Following the contributions of Campbell & Cocco (2003) and Kung (2014), this research employs multiple data sources through unit root testing, granger causality analysis and OLS regression. The study's findings suggest that Saudi Arabia's housing demand is largely driven by population growth rate, CPI, and housing loan application activity, and is therefore crypto-inelastic as to changes in these variables. Such findings contradict the principles of most economic theories. A different approach has been taken by Bin Mohanna & Alqahtany (2020), who rely on qualitative analysis of survey results to describe house-buying preferences in Saudi Arabia from 2016 through 2017 (177 total participants). This study's ultimate goal is to assess housing demand and, through understanding the types of housing that will be required by government and real estate companies, create or facilitate their supply. Several factors were identified as influencers of housing demand: geographical location of the community; socioeconomic characteristics of the community; primary housing finance method used to purchase a house; size of family; and level of income. Interestingly, most of the surveyed homeowners report using a mortgage to purchase their home, indicating a clear need for government assistance to diversify the types of financing available within the housing sector. Although the studies discussed the role of the mortgage in the housing sector, there is a lack of analyzing the impact of the mortgage on house prices in Saudi Arabia, especially after applying the mortgage law officially in 2016.



Tewari (2014), Favara and Imbs (2015) and Célerier and Matray (2019) are papers that are similar to ours because they utilise deregulation via branching to explore the relationship between credit supply and the housing market, as well as how households make their decisions on the purchase of property and the use of finance. However, our research is different from theirs as well as the wider body of existing research that addresses issues of financial markets / housing in many ways. We are using individual level panel data which helps to reduce the concerns about the identification of individuals to specific geographic areas, and how this identification is linked to the differences in regulation across states, and we are providing evidence, which has not been previously published, on this connection. Also, Tewari (2014) and Célerier and Matray (2019) use individual-level data, but neither of them uses the individual fixed effects model; thus, we provide methodologically and conceptually excellent evidence that a within-person examination of the effect of credit supply has a valuable contribution to make to the growing knowledge base in the literature. Even though Célerier and Matray (2019) focus on access to finance, our research focuses on housing-related outcomes due to the influence of this relationship. A final area of difference between this research and previous studies is that the individual level data we collect will allow us to conduct an exploration of the comparative effect of credit supply based on geographic location (MSAs vs. non-MSAs), demographics (young vs. older), and income (low income vs. high income).

In Tewari's research (2014), she also looks at similar demographic data from the United States, however, she has put much more focus on the process of intra-state deregulation occurring throughout the 1980s versus the process of inter-state deregulation during the 1990s. With that being said, the overall amount of growth in both ownership rates and home prices between 1980 and 1990 is significantly less than the levels observed after deregulating interstate mortgage lending during the late 1990's. The authors also address the amount of homeownership and mortgagor ownership that was created by the IBBEA's deregulation of the interstate mortgage



market. Tewari (2014) looked at similar contributions from deregulation in the mortgage market in the late 1980's, while Favara and Imbs (2015) quantified the deregulation's influence on housing prices. Also unlike most other studies, we are focused on the early stages of homeownership growth and the availability of mortgage finance prior to the collapse of the housing market during the Great Recession of the late 2000's.

Favara and Imbs (2015) and Célerier and Matray (2019) use the same deregulation episode (IBBEA) and find that deregulation-induced credit supply increased for-purchase mortgage loan originations, house prices and financial access of low-income households. Along similar lines, we observe an increase in homeownership and mortgage likelihoods in deregulated states. Moreover, we find that deregulation enhances access to home equity loans in non-MSAs and for low-income households in MSAs.

Tewari (2014) conducted an investigation into the impact of the era of intrastate deregulation in the 1980s on the distribution of homeownership within households. Tewari's investigations determined the removal of intrastate branching restrictions resulted in a 5% increase in mortgage lending and a 2% increase in homeownership. Tewari also found the increase in homeownership following deregulation had a strong impact on younger black and lower middle-class households. Tewari also determined that an increase in interstate branching resulted in no increased likelihood of homeownership or holding a mortgage by very low-income households; however, younger and lower middle-class household members were able to take full advantage of increased credit access.

During the boom and bust of the housing market in 2008, there was considerable attention paid to the role that the increase in the availability of credit is playing in home prices and homeownership. Many factors have been attributed to the increase in availability of credit, such as the Community Reinvestment Act (Saadi, 2016), pre-emption of anti-predatory lending legislation



(Di Maggio and Kermani, 2017), and the Interstate Banking and Branching Efficiency Act (Favara and Imbs, 2015).

Recent economic literature indicates that the debate surrounding the role of borrowing constraints versus lending constraints in shaping homeownership decisions and household debt levels has gained significant importance in recent years. Justiniano et al. (2019) and Favilukis et al. (2017) presented theoretical models demonstrating that the expansion of mortgage credit directly impacts households' ability to make homeownership decisions and their level of leverage. In the context of the US experience, studies such as Célerier & Matray (2019), Rice & Strahan (2010), and Favara & Imbs (2015) show that deregulation of interstate branch expansion led to increased domestic competition among banks, higher branch density, and lower interest rates on loans. These studies suggest that increased banking competition and improved geographic diversification of risk were key factors in increasing the supply of credit and, consequently, enhancing households' access to mortgages.

Studies have also shown that the impact of expanded credit supply is not uniform across all income brackets. Evidence indicates that low-income households did not experience a significant increase in homeownership despite the expansion of credit, and that their debt levels were limited compared to higher-income groups (Justiniano et al., 2019). This is likely due to persistent constraints related to income and creditworthiness, meaning that the increased supply primarily serves to ease lending restrictions rather than improve the financial capacity of low-income households.

Within the framework of life-cycle theory, models such as those presented by Fisher & Gervais (2011), Attanasio et al. (2012), Sinai & Souleles (2005), and Ortalo-Magné & Rady (2006) emphasize that homeownership decisions are influenced by a range of individual factors, including marital status, income risk, rental price volatility, and credit constraints. Empirical evidence, as in Ortalo-Magné & Rady (1999), Fetter (2013), and Agarwal et al. (2015), has shown that changes



in these factors have a greater impact on younger households, who have greater flexibility in the timing of their homeownership decisions.

The distribution of mortgage debt across different income levels has also generated considerable interest. According to Mian & Sufi (2009), low-income households experienced a disproportionate increase in mortgage debt during the early 2000s, while Adelino et al. (2012) and Foote et al. (2016) argued that mortgage debt growth affected all income groups, not just low-income ones. Taken together, this evidence suggests that increased credit supply may lead to higher debt levels across all income brackets, but its impact on increasing homeownership among low-income groups remains limited. These studies collectively contribute to providing an important theoretical framework for understanding the differences between the Saudi and American experiences. While the United States has an advanced credit market and a diverse range of financing products, Saudi Arabia is still working on developing balanced mortgage financing policies that ensure greater benefit for low- and middle-income groups in light of the economic transformations associated with Vision 2030.

There are several ways in which interstate banks can supply credit and make money because of the increase of bank branching through interstate banking legislation (IBBEA). According to Favara and Imbs (2015), banks that operate in multiple states can generate profits from geographic allocation since it allows them to serve as a source of loans in areas where previously there has not been sufficient supply. Geographically diversifying their loan portfolios provides opportunities for economies of scale that large, successful banks can then use to increase their market share. On the other hand, increasing competition between local lenders is a result of interstate branching, according to Chu (2018). The increase in competition caused by interstate banks in local credit markets will provide the opportunity for further development and production of additional credit, which is essentially the same as saying that the competition between lenders will result in the availability of more credit for homes. Although the methods through which branching affects mortgage lending are not necessarily incompatible with one another, all of them will lead to an



increase in the number of mortgage loans available to homebuyers and will likewise have implications for how people make decisions regarding housing tenure and their balance sheets.

Despite the injection of over 600 billion riyals into the real estate market over the past decade, investment remains low and needs to increase due to its direct impact on housing prices. Therefore, the Saudi government should support local companies and attract foreign investment to bolster the real estate market. Furthermore, providing affordable construction solutions is crucial for stabilizing housing prices. Policymakers should also encourage urban expansion, the development of smaller towns and villages, the planning of undeveloped land, and the provision of public services. This will help redistribute population density, thereby reducing the high demand for housing in major cities. This, in turn, will curb the continued rise in housing prices, as recent reports indicate that the Saudi government needs to deliver 153,000 units by 2030, averaging 124,000 units over the next ten years. Finally, future research may explore these relationships in other economies or regions to determine whether the outcomes will be similar or different.

4 Conclusion

This research addresses one of the most important topics related to economic and social stability: the impact of mortgage lending on homeownership and household wealth formation. It presents a comparative analysis between Saudi Arabia and the United States. The theoretical and analytical findings demonstrate that mortgage finance is a key enabler of households' access to the housing market and an effective tool for achieving long-term wealth accumulation, provided it is available within a stable regulatory environment and comprehensive housing policies.

Housing finance systems as a potential contributing factor to the growth of homeownership are proved by many researchers to be one of the most positive relationships in the United States on average. While the US has a very mature system of housing finance due to its large and diverse pool of international mortgage lenders and the fact that it has an established secondary mortgage



market, it also has a history of rapid periods of excessive credit growth, resulting in periodic financial crises which harmed household wealth and homeownership. With regard to Saudi Arabia, several scholars have found that the reforms of Vision 2030—specifically, the expansion of available mortgage products, the improvement of housing policies, and the increase of government support—have played a key role in increasing the rate of homeownership in the country and have had a positive impact on the overall economy. However, the high price of private homeownership, a lack of savings culture, and the high cost of living have created barriers for many families from accessing the available financing resources.

The literature reveals that changes in the availability of mortgage credit can have a significant impact on household decision-making with regard to homeownership; as well, credit supply can impact the amount of mortgage debt households have, and it impacts the long-term ability of households to build and maintain household wealth. Many scholars have conducted studies on the effect of increasing mortgage credit supply on homeownership rates and access to mortgage finance, isolating the effects of credit supply from other macroeconomic variables. In the context of the US experience, studies have used regulatory indicators such as interstate banking expansion restrictions as exogenous variables reflecting the true change in credit supply. The literature shows that easing these restrictions has led to increased competition among banks, greater portfolio diversification, and consequently, a significant expansion in mortgage lending.

The research also demonstrated that the institutional and regulatory environment is a crucial factor in determining whether the expansion of mortgage finance will lead to a positive increase in wealth or to undesirable financial risks. Effective regulatory systems, a balance between supply and demand, sustainable government programs, and adequate financial literacy for households are all elements that contribute to transforming mortgage finance into a tool for achieving financial stability, rather than simply an expansion of household debt. The research emphasizes that promoting homeownership and increasing household wealth requires an integrated approach that combines: improving the design of mortgage programs, developing housing savings tools,



expanding affordable financing options, and raising financial awareness among households. It also reveals that there are significant opportunities for policymakers in Saudi Arabia to develop programs targeting low- and middle-income groups, ensuring that the expansion of mortgage credit translates into real and sustainable growth in household wealth.

Against this international backdrop, a comparative analysis between Saudi Arabia and the United States reveals the importance of well-designed financial and housing policies in promoting homeownership and increasing household wealth. In Saudi Arabia, despite the significant development in the mortgage market under Vision 2030, the optimal use of mortgage loans still requires a robust savings environment, targeted financing incentives, and housing programs aimed at low- and middle-income groups. The literature indicates that the high cost of living and a weak savings culture limit households' ability to accumulate real estate wealth, making it essential for government policies to encourage housing savings and provide affordable and competitively priced mortgage products.

Accordingly, the research concludes by emphasizing the importance of developing a comprehensive financing and regulatory framework that supports households in making sound financial decisions and strengthens the role of mortgage finance as a means of wealth creation, thereby achieving long-term economic and social stability. Further field and empirical studies that directly measure the impact of government policies and interventions remain necessary, especially given the rapid economic changes in both Saudi Arabia and the United States.



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