RETHINKING THE CURRENT HOUSING CRISIS: AN IN-DEPTH ANALYSIS OF THE CAUSES AND SOLUTIONS

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ABSTRACT

The housing market in the United States is a substantial source of wealth for households and creates many jobs. However, since the onset of the COVID-19 pandemic, the housing market has seen a steep price increase. This paper finds that the increase in prices is due to high demand driven by low-interest rates, a desire for better homes, low supply of housing units because of construction limitations, and a rapid shift from city to suburban living in response to pandemic lockdowns and shelter-in-place orders. This research paper details the aforementioned causes of the current housing crisis in the United States along with proposed solutions and policy recommendations like increased interest rates, significant construction incentives for builders, and limitations on second home purchases. The information was collected via primary sources such as expert interviews with accredited individuals in the real estate sector and secondary sources like scholarly articles and former literature surrounding the same topic. The findings concerning the causes of the current housing market were analyzed through an interdisciplinary approach that considers the cause’s effect on demand and supply as well as its effect on consumers and producers.

Keywords: Real Estate, COVID-19, Real Estate Economics, Urban Economics

JEL classification: R3, R2, G15

1. Introduction

The housing market serves as a platform for buyers and sellers to interact independently or through agents in order to sell or buy a home. While housing generally serves as the most
significant purchase an individual can make, as of 2020, owner-occupied real estate was almost 25% of a household's net worth in the United States (Introduction to US). Moreover, the real estate industry provides widespread employment in the form of construction and maintenance jobs\(^1\). A significant sector of the housing market revolves around the value of land which has consistently been on the rise with minimal drops. As a limited commodity, land continues to rise in value as demand increases in direct proportion to population growth\(^2\). Historically, the world's population has increased by 1.1% annually, and real estate prices have followed suit (Population Growth). An example of this is the relationship between an urban city's population compared to a rural town's population. London, for example, has a population of 9 million people with an average price per house of 523,666 pounds (London). On the other hand, just outside of London, the town of Reading has a population of roughly 350,000 people, with an average price per house of 335,000 pounds (Reading, Berkshire). This example illustrates the positive correlation between a specific area's population density and the average house price in that respective area.

Previous studies conducted by Wen and Goodman verify this conclusion and provide more insight (Wen and Goodman 2013). The urbanity of an area therefore plays an important role in the corresponding price.

Additionally, as indicated by Figure A, the housing market also accounts for almost 18% of the U.S. GDP due to the financial costs of construction and maintenance along with the capital invested into a property, demonstrating the inextricable link between real estate and economies (Introduction to U.S.). Therefore, any significant real estate market shocks also impact the economy. For example, the crash of the real estate market in 2008 resulted in the US GDP falling by 4.3% and the unemployment rate doubling (The Great). In-depth studies conducted by Went et al. highlight the repercussions in more detail regarding the housing crisis of 2008 (Weng et al.2014). In addition, real estate has often served as an investment platform for many people across the globe who are looking for relatively low-risk investments.

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1 In the US, real estate accounts for almost 18% of the GDP (Evangelou).

2 A study conducted by Zhejiang University proves that housing price and land price have an endogenous interrelationship, and as a whole, housing price has a greater influence on land price (Wen and Goodman 2013).
Figure A

Fig. A displays the total spending on real estate between 1947 to 2019 as a percentage of the GDP of the United States.

Source: Bureau of Economic Analysis, National Income and Product Accounts, Table 1.1.5

2. Literature Review

This paper contributes to already present literature concerning the impact of COVID-19 on the real estate market. Liu and Su find that the pandemic has led to a shift in housing demand away from neighborhoods with high population due to diminished need for living close to work (Liu and Su 2021). D’Lima et al. examine the effect of COVID-19 shutdown orders on the housing market and find heterogeneous pricing effects (D’Lima and Pradhan 2021). Jiang finds that American real estate sales are declining, but with the influence of COVID-19, market sales in different regions are also changing (Jiang 2021).

Data sources used in this paper primarily belong to the Redfin, Zillow, and the Federal Reserve Bank of St. Louis. Moreover, evidence from other pieces of literature is also evident throughout the paper. The data is cross verified with other data sources and literatures.

3. Current Situation

The housing market has drastically changed over the last few years due to the COVID-19
pandemic, among other factors. Under these conditions, the increase in demand and shortage of supply has led to dramatically increased global housing prices. While Figure B illustrates an alarming drop in prices in the housing market, it also showcases that within a short period, there was a historic increase in prices due to which the value of real estate in the US rose by almost 15%, adding $3.1 trillion to the valuation of the sectoral assets. The initial trend of a drop in housing prices is predated by all pandemics induced since the Age of Exploration. A historical study by professor Francke et al. that analyzes plague and cholera outbreaks in Amsterdam and in Paris highlighted significant yearly losses for aggregate house prices of about − 6% on average until one year after an epidemic (Francke). Another study by the University of Pennsylvania that investigated how the price of individual residential properties was affected by the SARS outbreak in Hong Kong identified that the epidemic resulted in decreasing demand for housing, rather than a decline in supply. The author confirmed an average diminution of − 1% to − 3% in prices when an estate was directly affected by SARS (Wong 2008). However, the COVID-19 pandemic hasn’t followed this precedent; instead under this pandemic, the aggregate price of housing has reached record levels.

Figure B

Fig. B shows the year-over-year change in national median home sale price since 2013 to 2021 in the United States.

Source: Redfin analysis of MLS data and public records.

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3 Figure B demonstrates the almost 6 percentage point drop in the national median home sale price since the official declaration of the COVID-19 pandemic.
4. Causes

The housing market has been facing a considerable increase in prices due to various factors, such as low-interest rates, the COVID-19 pandemic, and a limited supply of houses. This part of the essay details these three main factors, among many others that have contributed to a steady increase in housing prices.

Firstly, in Economics, the law of demand and supply states that if demand increases and supply decreases, the commodity's price will also increase. Following this law, housing supply is low compared to housing demand due to a general increase in demand driven by various factors mentioned later and a decrease in supply. Figure C demonstrates that the construction of new housing units in the US has been cut in half from its peak of 2,200 in 2006 to 1,400 in 2020. The decrease in production can be partially attributed to the higher material costs associated with constructing new homes as displayed. Figure D showcases that shortly after the beginning of the COVID-19 pandemic, there was a steep increase in the price of inputs utilized in residential construction. These resources were limited in supply due to the pandemic's impact on supply chain and the transportation industry. Similarly, due to the restrictions on movement imposed by the government, the real estate industry faced labor shortages which increased labor costs and reduced the construction of new homes. Currently, while there are 434,000 job openings in the construction industry alone, there are just 389,000 unemployed workers fit to occupy these jobs (Bahar, Danny). All these factors combined have brought the overall housing supply below the rising demand.

Figure C

Fig. C demonstrates the total new units of privately-owned houses since 1970.

Source: Census; HUD
Figure D

Fig. D shows the price of inputs to residential construction since April of 2018.

Source: United States Bureau of Land Management

Secondly, the COVID-19 pandemic has affected many sectors, including the housing market. According to Rosaria "Sara" DiMaggio, a licensed real estate salesperson and the sales manager of one of the most prestigious real estate firms in New York City, the pandemic has led to a housing shortage due to a steady transition from city to suburban living. A drastic increase in the amount of time spent indoors led consumers to want better and bigger houses that can often only be found in the suburbs. As a result, housing prices in cities like New York could not keep up with the rates of the surrounding suburban region. Figure E showcases that during the pandemic, consumers witnessed a decrease in real estate prices in New York, approximately over a $250 drop per square foot. Simultaneously, real estate rates in the suburban regions gradually increased. As reported by Zillow, since July 2021, a typical suburban home has gained $66,500 in value in contrast to $61,700 for the typical urban home. Thus, overall, the pandemic has significantly impacted the housing market and caused the prices to increase by dramatically...
increasing demand, particularly in the suburban regions.

**Figure E**

*Fig. E displays the price per sqft. for Manhattan condos since 1999*

![Price per sqft. for Manhattan condos since 1999](image)

Source: Miller Samuel

Thirdly, historically low-interest rates have motivated consumers to invest in the real estate sector. Figure F showcases that compared to 2019 or before, the low-interest rates – less than 3% – during 2021 played a crucial role in creating the housing "bubble" and increasing demand as buyers were motivated to utilize the low interest rate offerings. These figures concerning interest rates have not surfaced since 2008. Per Rosaria DiMaggio, an industry expert, lower interest rates have been the most critical factor affecting housing demand.

Low-interest rates were arguably the most important contributing factor to the housing market crash of 2008. Even in today's market, low-interest rates have primarily influenced people's decisions to buy a home, making it a significant factor in determining housing prices.
Figure F

Fig. F showcases the 30-year fixed rate mortgage average in the United States since 2018.

![Graph showing 30-year fixed rate mortgage average in the United States since 2018. Source: Freddie Mac](image)

Lastly, another persisting problem is the increase in purchasing supplemental homes by upper-class individuals or real estate investors which is reducing the already limited supply.

Figure H shows the significant increase in houses bought by real estate investors since the introduction of the COVID-19 pandemic. Many individuals with uninvested cash consider real estate as a possible investment option to avoid the stock market's extreme volatility. The purchase of an additional home is aimed to either create a vacation home or to solidify an investment. Figure G showcases a substantial increase in the demand for vacation homes in the US in 2020. From about 50%, the demand for a second home rose to 120% after the pandemic began. Even though this is legal and ethical on the buyer’s part, it has resulted in a further reduction of the already low supply of housing units. Moreover, investors tend to pay above the asking price in all cash payments, resulting in an increased overall value of the property and the

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4 Figure H shows the investor market share of purchased U.S. homes reaching 18.4% in the Fourth Quarter of 2021
neighboring homes. According to Zillow's Consumer Housing Trends Report, all cash payments were responsible for 32% of all houses purchased in the US in 2021 – a substantial increase from the reported figure of 28% in 2021. Furthermore, Zillow's Home Sellers Guide also states that if "you sell to a traditional investor or an iBuyer, you can expect a quicker close, an as-is sale, and an all-cash offer." Conversely, when investors buy multiple properties in a specific area, they tend to influence the price for the neighborhood. Due to ownership of multiple assets, other homeowners are forced to follow their price trend, which is usually higher than the market average. Even though this trend may benefit homeowners, it is detrimental to buyers as they have to pay higher prices than expected.

Figure G

Fig. G displays the year-over-year change in mortgage-rate locks for second home purchases since October of 2018.

Source: Redfin
5. Solutions

How can the housing market be fixed? While some factors are controllable, others like pandemics and stock market volatility will keep impacting the housing market in unprecedented ways. Simultaneously, while controllable factors such as interest rates have witnessed a spike in the past few months, other controllable factors such as housing supply and frequent second home purchases remain in the same state.

Firstly, as low-interest rates are arguably the most important factor causing this historic increase in demand, the regulatory authorities need to increase the interest rates to burst the housing "bubble." In June 2022, the US Federal Reserve increased the interest rates by 0.75 percent, the most significant increase in three decades. This increase resulted in housing sales dropping by over 14% in June (Forbes). Following a similar strategy, the United Kingdom increased the interest rate four times over the past six months (Partington). The effectiveness of increasing interest rates can be attributed to its impact on consumer purchasing power. When consumers have to borrow money at a higher financial cost, their ability to purchase market services and products decreases. This reduction in buying power eventually leads to a decrease in the purchase of homes, resulting in a decrease in the record high demand. Simultaneously, increasing
interest rates also control inflation, reducing the cost of materials utilized in construction activities. This can eventually lead to an increase in the supply of housing units.

Commenting on the role of interest rates, DiMaggio has stated that "The hiking of interest rates have certainly slowed the market down considerably." In addition, Jesal Sanghvi also concludes that interest rate spikes will “surely make the market more realistic.” The higher interest rates can put the market into a stable equilibrium and effectively eliminate the housing market "bubble" by reducing buying power.

Secondly, another controllable factor is the supply of housing units which is down due to multiple factors, including rising material costs, lack of labor, and lockdowns. By undertaking measures to incentivize real estate construction, such as tax cuts on materials bought for construction, tax breaks for construction purposes, providing subsidies for house construction, and giving overall benefits to corporations, the government can assist in increasing the supply of housing units. More specifically, as pointed out by the expert DiMaggio, bringing back tax programs like 421a tax abatement and J51 in the US, can greatly encourage corporations to build more houses. If the demand for housing cannot be reduced, then the supply needs to be increased to create market equilibrium.

Thirdly, implementing simple laws can tackle the purchase of multiple properties by investors. By limiting the number of properties an individual or corporation can purchase during a specific time, the government can control the supply of housing units. Further, this will also help propagate fair pricing as investors tend to influence pricing. A combination of these solutions can be implemented to burst the housing "bubble" both in the short and long term.

6. Conclusion

Based on the evidence, this paper argues that the market is currently at a high and will correct itself soon. In fact, the market has already started to slow down since the Federal Reserve started increasing the interest rates in mid-2022. Furthermore, systematic policy introductions by the government can result in prices decreasing more rapidly. However, another blackswan event such as the COVID-19 pandemic can have an unprecedented impact on the already volatile market.

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References


Appendix

Sara DiMaggio Interview

Sara DiMaggio is a New York based real estate agent who has been involved in real estate for over 20 years. She is the sales manager of one of the most prestigious real estate firms of New York.

1. One year post the start of the COVID-19 pandemic the price of a house increased by over 20%, a change never seen before. In your expert opinion what factors have resulted in this historic increase in housing prices and demand all over the world?

a. Follow up question: Across the globe in developed nations, we’re seeing the same trends as in the US real estate market. Are the same factors at play, or are there different factors to consider
in the global housing market?

Answer: Covid caused a housing shortage. The housing shortage along with the increased buyer demand due to the lowered interest rates caused prices to go up.

2. Was today’s housing market situation inevitable, or was it precipitated by the pandemic?

What would the housing market look like if the pandemic had not taken place?

Answer: It was inevitable as inflation has been rising at a fast rate and the housing market followed this trend with prices increasing at a rapid rate until it becomes unsustainable. The prices when reaching this level start to level off and come down.

1. The hiking of interest rates in the US by the Fed is a solution implemented by the US government to tackle rising housing prices. Do you think this will finally slow the market down for good or will it only have a “band-aid” effect? Why or why not?

Follow up question: If it will have a “band-aid” effect, what would be a more effective monetary policy measure that will have a long-term market impact?

Answer: The hiking of interest rates have certainly slowed the market down considerably. This is the main factor for the slow down. Also, the stock market instability which is causing buyers money to decrease often means less liquidity to buy. There is a rise in panic inventory, buyers wanting to sell before they feel it will get worse as interest rates go higher. Inventory strangely has increased slightly along with decreased prices due to the hike in interest rates.

3. Housing inventory in the US has fallen by over 275% over the last 5 years, resulting in the current housing market “bubble”. What incentive measures could be enacted to create more affordable housing?

a. Follow up question: Is effectively eliminating tax for corporations building homestretch through tax-cuts and grants a desirable solution to increasing supply of housing? Should it be more generous or less? Why or why not?

Answer:
A. The creation of more affordable housing.
B. Increase multi-housing units
C. Financial Tax incentives- bring back the 421a Tax Abatement, less taxes for corporations
D. Also, other tax programs like the J51.
E. Require buildings to include affordable housing components to each development.
F. Create more multi-family homes with maximum rental use including basement levels.
G. Low interest rate loan programs for certain areas
H. Allowing for smaller down payments with no PMI- better rates.
I. Creative financing- less insurance costs, less closing costs- reduce the mansion tax aswell as the City and State Transfer Tax.

5. What are other possible solutions that can be implemented by the government in order to burst the housing “bubble”?

Answer: All of the above if possible

6. How does the current housing market compare to the market in 2008?

a. Follow up question: If and when this housing market “bubble” bursts, will any of the fallout be similar to the 2008 housing market crash?

Answer:

A. The current market is the drastic increase from the uniquely low interest rates to the drastically increased rates in such a small span of time. The speed of decline is one factor that is different between now and 2008.

B. 2008 - The derailment of the financial and banking systems, which left so many in debt. Today those systems are in check. In 2008, Business practices – loan offers were not controlled and many with no income received loans. The Infrastructure of banking systems was not fully developed causing a lack of regulation. Buyers bought homes that they could not afford.

C. Bear market in 2008 was one of the worst seen second to the 1930’s.

D. The current market has had Covid, which ultimately stopped businesses profits and caused buyers anxiety over the state of the market. 2008 did not have this external event.

Jesal Sanghvi Interview

Jesal Sanghvi is the founder of a funded real estate startup based out of Mumbai. After receiving his MBA in real estate from the Wharton School he ventured into the real estate field more than
25 years ago.

1. One year post the start of the Covid-19 pandemic the price of a house increased by over 20%, a change never seen before. In your expert opinion what factors have resulted in this historic increase in housing prices and demand all over the world?

a. Follow up question: Across the globe in developed nations, we’re seeing the same trends as in the US real estate market. Are the same factors at play, or are there different factors to consider in the global housing market?

Answer: Common factor is the need for larger housing and holding of real assets like land. This is common throughout the globe in countries like the UAE, Europe, US, and India. In the US this has been due to interest rates and printing of a lot of money. India prices have been nominal.

Speculation: extra funds from stock market helped create money and was liquid. Free money encourages higher risk.

2. Was today’s housing market situation inevitable, or was it precipitated by the pandemic?

What would the housing market look like if the pandemic had not taken place?

Answer: Definitely, directly due to larger house needs and indirectly through the breaking of supply chains and stimulus checks. If covid did not happen then the market would slow down as it has been happening. So without the pandemic the prices wouldn’t be where they are. But, in 2020 stagnation was coming up. NYC prices were also going up the roof. If a pandemic had not happened it would only be city buying that would face an increase in prices.

3. The hiking of interest rates in the US by the Fed is a solution implemented by the US government to tackle rising housing prices. Do you think this will finally slow the market down for good or will it only have a “band-aid” effect? Why or why not?

a. Follow up question: If it will have a “band-aid” effect, what would be a more effective monetary policy measure that will have a long-term market impact?

Answer: It is already having an impact on the housing market. This will surely make the market more realistic. However, a large impact won’t take place immediately. Covid was temporary, people have shifted to suburbs, since people normalize again they will shift back to the city as work is there. Furthermore, fixing the supply chain will have a long lasting impact.

4. Housing inventory in the US has fallen by over 275% over the last 5 years, resulting in the current housing market “bubble”. What incentive measures could be enacted to create more affordable housing?
a. Follow up question: Is effectively eliminating tax for corporations building homes through tax-cuts and grants a desirable solution to increasing supply of housing? Should it be more generous or less? Why or why not?

Answer: Tax cuts in areas with less urbanism are good, but not cities like NYC. Because NYC is already too crowded and suburban and rural areas aren’t. This can act as a good incentive for builders to take the step. A lot of demand comes from overseas investment. Restrict banks on real estate lending- will only have a limited impact on the demand choice. Giving builders incentives in low housing areas like Chinatown so they are attracted.

5. How does the current housing market compare to the market in 2008?

a. Follow up question: If and when this housing market “bubble” bursts, will any of the fallout be similar to the 2008 housing market crash?

Answer: Financial factors in 2008 were similar to the ones in 2020. For example, free money in covid and loaned money in 2008. The market won't crash like it did in 2008, but will get corrected as underwriting standards are better.