FACTORS INFLUENCING RESIDENTIAL HOME PRICES

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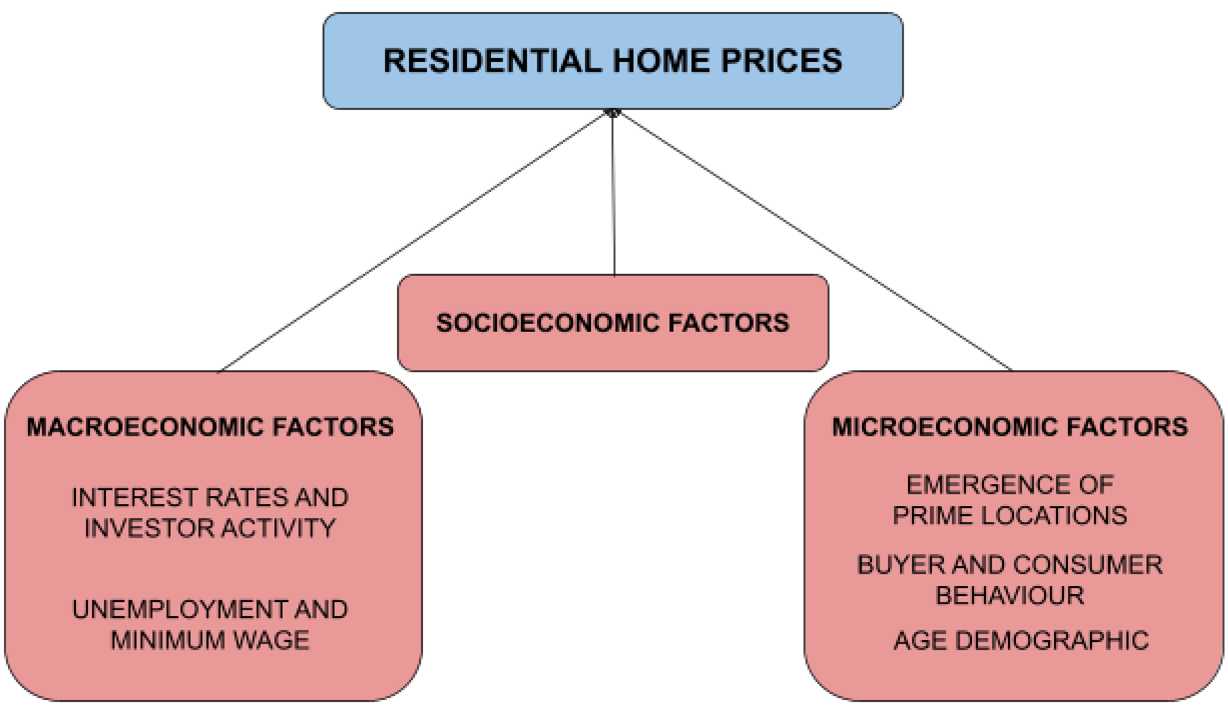
1. Introduction

Residential home prices depend on a large number of factors such as the state of the economy, interest rates, demographic trends, consumer confidence and many more. Each of these factors can be generally classified into 3 categories -

- **Macroeconomic Factors**
- **Microeconomic Factors**
- **Socioeconomic Factors**

Studying these factors and their interdependencies allows us to analyze the residential real estate market with clarity, help us quantify changes in the market and eventually allow us to make educated guesses about the future of the market. Each of these factors and their influence on the market are described briefly, and their expected trend over the next 10 years are discussed.



Note : Very short term = 0.5-1 years ; Short term = 3-5 years ; Long term = 5-10 years
In this report I have considered trends which can be studied over the timeframe of
10 years and hence does not include events of massive uncertainty like the covid pandemic

2. Macroeconomic Factors

Macroeconomic factors encompass interest rates, economic trends, supply and demand, and government policy with respect to employment. These factors are generalizable to a certain degree over the entire market and help explain broader trends in the residential houses market.

2a. Interest Rates and Investor Activity

Contrary to popular belief, mortgage rates are only a factor of the interest rates spectrum which influence the residential real estate market. Here we study mortgage rates, interbank exchange rates and discount rates which are factors that drive supply and demand of both capital and houses. Investors play an active role in the residential housing industry as they carefully study market trends and invest their money when the risk premium of an investment is high. Since they control a large amount of capital, they are an integral part of the condition of the housing market.

Mortgage rates have been on a steady decline in the last two decades and have been at record low values due to the weakening of the economy caused by the pandemic.[1] This effect is forecasted to be felt for the next couple of years after which it should normalize to steady levels. Low mortgage rate gives the consumer higher buying power which when coupled with the new norm of working from home leads to a large uptick in the demand for houses. [2]

Interbank Exchange rates and consequently, **capital flow** in the real estate market also define prices by regulating supply and demand of funds for development and financing. When rates are low, capital flow is high, cost of development is reduced leading to lower prices for consumers. The opposite is experienced when rates are high and capital flow is low. Even though Interbank exchange rates have been on a steady decline since late 2020 [3], the capital flow has become extremely constrained due to poor health in the economy. Since capital flows have been low and construction during the pandemic has in general been slow, there is a big dearth in the supply of houses.

Discount rates are calculated using the risk free rate (rate on U.S Treasuries) plus a risk premium which is derived majorly using supply and demand in the residential market, rent/lease forecasts, property value appreciation etc. In the present scenario when the supply is high and demand is low (for the next 3-5 years), the risk premium is high, making investment in the real estate industry favorable. This is enabling the closure of the supply demand gap as more investors are providing capital for development thus driving the prices down. [4]

Low mortgage rates (causing increase in demand) and low capital flow (causing supply dearth) have led to an increase in the prices of residential properties in the short term.

In the long term, the stabilization of mortgage rates at higher values and closure of the supply demand gap due to relatively free capital flow will lead to a fall in prices.
In the short term, closure of supply demand gap caused by investment due to high risk premiums will lead to decreased demand, hence the prices of residential houses are projected to fall.

2b. Unemployment and Minimum Wage

A large volume of lower strata single family homes are purchased by consumers with lower incomes. If there is higher risk of unemployment, they will be less inclined to make large purchases. Additionally the high prices due to low supply make purchasing houses inaccessible to people of low incomes.

Unemployment rate plays an important role in regulating market prices for residential properties. Higher the unemployment rate, lower is the demand for housing as the percentage of people who can afford to purchase houses reduces which causes the prices of available housing units to eventually drop. The United States experienced a steady decline in employment rate leading up to the pandemic which then caused a massive surge in employee layoffs. It is also forecasted to remain at higher levels in the coming 10 years unless actively countered by the government. [5] [6]

Minimum wage increase and **higher wage stability** will make it more accessible for families with more than one working individual to afford houses.[7] Considering the low mortgage rates, it would introduce more people into the market for affordable homes thus driving up demand. Again, if this demand is not sufficiently met by speedy development, it will drive prices above the affordability of even the increased minimum wage workers. However the effect of this increase will take a couple of years to be realized hence in the long term, these policy changes will lead to an increase in residential housing prices.

In the long term, the improvement in minimum wage and wage stability will lead to increased demand thus increasing prices of residential properties.
High unemployment rates (set off by the pandemic) in the short term will lead to a drop in the number of families who can afford to buy properties thus leading to decreased demand and reduction in prices.

3. Microeconomic Factors

Microeconomic factors quantify the behaviour of individuals and location based markets. They are used to explain characteristics of the general real estate market with higher granularity. Topics mentioned above included the macroeconomic drivers behind consumer behaviour, market behaviour and supply-demand trends. These trends will be discussed in a microeconomic viewpoint here.

3a. Emergence of Prime Locations

Due to the explosion of living expenses in the heart of populated cities and the newly introduced flexibility of working from anywhere, there has been an increased demand for suburban housing. This increase in demand for suburban housing can be quantified by the uptick in sale prices and decrease in list time or properties, which has resulted in the emergence of pockets of polished housing communities across the country. However, this trend is not an indication of an exodus from urban areas as demand in urban areas has slowed down slightly or remained the same in general. This trend is expected to continue for the long term as working away from an office becomes more accessible and more prime locations are developed due to higher demand. [8]

The increase in demand for suburban housing has pushed prices higher and will continue to do so in the short term as well as long term. It has also led to development of new suburban housing communities to feed this demand.

3b. Buyer and Consumer Confidence, Consumer Affordability

Here we discuss the general trends in Buyer and Consumer behaviours. They can be characterized using the indices mentioned below.

Realtor Confidence Index is a key indicator of housing market strength and off late has been very low mainly due to the surge of covid cases. This has led to an ever widening gap of supply and demand. As more consumers begin to move into the market due to pent up demand, there will be an increase in prices due to seller pessimism in the very short term. It is hard to predict in a broader horizon as sellers are very responsive to market demand and often try to meet it without much delay. [9] [10]
Consumer Affordability Index is an average person's ability to purchase an item such as a house inclusive of the living expenses in the area. It has been steadily worsening from the late 2000s[11] and is slated to worsen further due to the decrease in median household income despite the record low mortgage rates. This leads to a lower number of buyers in the market thus driving the prices down in the short run. In the long run there are hopes to bring down the

Consumer Affordability Index through increase in minimum wage, tax breaks for first time home owners and other policy driven incentives.[12]
Consumer Confidence which is measured using the Consumer Confidence Index is slowly making its come back and is slated to breach 100 points over the course of the next two years. CCI can be used as a proxy for consumer confidence in the real estate market giving us the indication that people are turning optimistic about developments in the economy and can be expected to enter the market for residential homes in the short term.[13]

In the long term with the decrease in Consumer Affordability Index and improval of Consumer Confidence Index in the short term, there are going to be more buyers in the residential homes market leading to an increase in prices. In the very short term (6 months - 1 year) there will be an uptick in prices due to seller pessimism.
In the very short term due to poor consumer affordability and slightly pessimistic consumers, there is going to be no net change or a slight decrease in the demand leading to decrease in prices.

3c. Age based demographic trends

There have been several observed trends in the residential real estate industry tied to the behaviour of different age groups in the market.

Baby Boomers (1946-64) and Gen Xers (1965-80) are projected to rapidly start selling their homes as they will soon become empty nesters, singles or prefer to move to smaller houses closer to friends and family. This will lead to a surge in the number of high quality houses in the market but it is unlikely that the millennials and Gen Zers will be able to afford these houses at their actual intrinsic values. Hence they will be forced to sell them at lower prices causing a dip in the residential home prices.[14]

Millennials (1980-98) and Gen Zers(1999-Present) have been observed to show higher interest in buying homes as opposed to earlier studies. It was earlier believed that millennials are generally averse to home ownership but present situations and buying patterns say otherwise. However a large group of millennials (younger millennials) are entering their first homeownership stage which has led to a high demand in affordable houses. Over the course of 10 years a large portion of the younger millennials and older Gen Zers will be on the market for their first home and the older millennials will be looking to trade up their homes. This shows a strong demand in the long term.[15]

In the long term there will be a large uptick in the demand for affordable residential properties caused by generational factors leading to an increase in prices.
However there will also be an influx of modest suburban housing which may be out of the price range of the consumers causing a dip in prices of expensive residential properties.

4. Socioeconomic Factors

Socioeconomic factors have recently been brought into the spotlight, highlighting the noticeable discrepancy in the home ownership experience for people from different cultural backgrounds. Some of these issues have been ingrained in society causing racial/sexual minorities to be disadvantaged towards owning homes in terms of ownership burden (Systemic racism), and equality and fairness in procurement (Individual racism).

Policy Improvements such as revisions of the Fair Housing Act and the Home Mortgage Disclosure Act was done in mid 2020[16] due to the observed trend that families from racial and sexual minorities were more likely to be denied mortgages. [17]
The government has begun to revise and implement policies to make it harder for sellers to express personal bias in the sale of residential properties. The effect of these policy changes will be experienced over the course of the coming decade. [18]
These policy changes and efforts toward inclusion open up opportunities for people from these backgrounds to buy properties which were earlier not accessible to them. Thus there is going to be a steady uptick in residential property demand in both the short term and long term as these policies will become more effective in time.

In the long term and short term there will be a large uptick in the demand for residential properties due to policy changes geared towards inclusion causing an increase in prices.

5. Conclusions

Listed below are the conclusions that were drawn from the various macro,micro and socio economic factors taken into consideration

Factors causing Increase in prices	Factors causing Decrease in prices
MACROECONOMIC	
• Low mortgage rates (increase in demand) and low capital flow (decrease in supply) in the short run.	• Stabilization of mortgage rates at higher values in long term, closure of the supply demand gap due to relatively free capital flow in long term and investment due to high risk premiums in the short term will lead to decreased demand.

• In the long term, the improvement in minimum wage and wage stability will lead to increased demand.	• Increasing unemployment rates in the short term will lead to a drop in the number of families who can afford to buy properties.
MICROECONOMIC	
• The increase in demand for suburban housing has pushed prices higher and will continue to do so in the short and long term. It has led to development of new suburban housing communities to feed this demand. • In the long term with the depreciation of Consumer Affordability Index and improval of Consumer Confidence Index in the short term, there are going to be more buyers in the residential homes market. In the very short term (6 months - 1 year) there will be an uptick in prices due to strong seller pessimism. • In the long term there will be a large uptick in the demand for affordable residential properties caused by generational factors leading to an increase in prices.	• In the long term, the stabilization of mortgage rates at higher values and closure of the supply demand gap due to freeing up of capital flow will lead to a fall in prices. • In the very short term due to poor consumer affordability and slightly pessimistic consumers, there is going to be no net change or a slight decrease in the demand of residential homes. • There will also be an influx of modest suburban housing which may be out of the price range of the consumers causing a dip in prices of expensive residential properties.
SOCIOECONOMIC	
• In the long term and short term there will be a large uptick in the demand for residential properties due to policy changes geared towards inclusion	