Housing Economy

Contributing Factors to the Increasing Home Prices in California

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Abstract

This paper discusses the contributing factors to the gradual increase of home prices in California. First, the paper provides a brief history of housing in California. It is found that Californian housing economy has been rapidly growing since the 1940's. Second, this paper will explore 1970-80 where there was a salient boom of prices in the housing economy. Third, this paper will explain the suspected cause of rise in home prices in California from the demand side, exploring factors such as demographics and monetary policy. Fourth, this paper will explain the suspected cause of fluctuating home prices in California from the supply side, exploring factors such as building cost and land use regulations. Lastly, this paper will explore the factor of economic growth.

Housing Economy: Contributing Factors to the Fluctuating Home Prices in California

People after reaching the age of 20 will usually purchase a house at one point or another. The biggest factor that determines the location and size of the house is their financial status. Most people will live within their means, but some might still hope to live in highly populated states such as California, “the most populous state since the 1970 Census” (Mackun & Wilson, 2011) due to its strategic location for business; Silicon Valley is filled with companies from small startups to big corporations. And, California priorities education; thus, it has many top ranked universities, public and private. California also has the best weather as it is relatively stable and sunny all year long. These factors play a role when families decide where they want to live.

As beautiful and perfect California may be, the home value is not (see Figure 1). This paper will specifically investigate the factors that contribute to the fluctuation of home prices in California. The housing economy is affected by many factors from the demand and supply side, but the main factor that drives the prices of homes is economic growth.

First, this paper will analyze the U.S. housing history, but place focus on California. Second, it will evaluate the salient decades of the boom of the housing economy in California. Third, it will explore the role of demand in home prices. Fourth, it will investigate the role of supply in home prices. Lastly, this paper will explore the factor of economic growth.

Compared to the other states, California has the highest home values. This is shown in Figure 1.

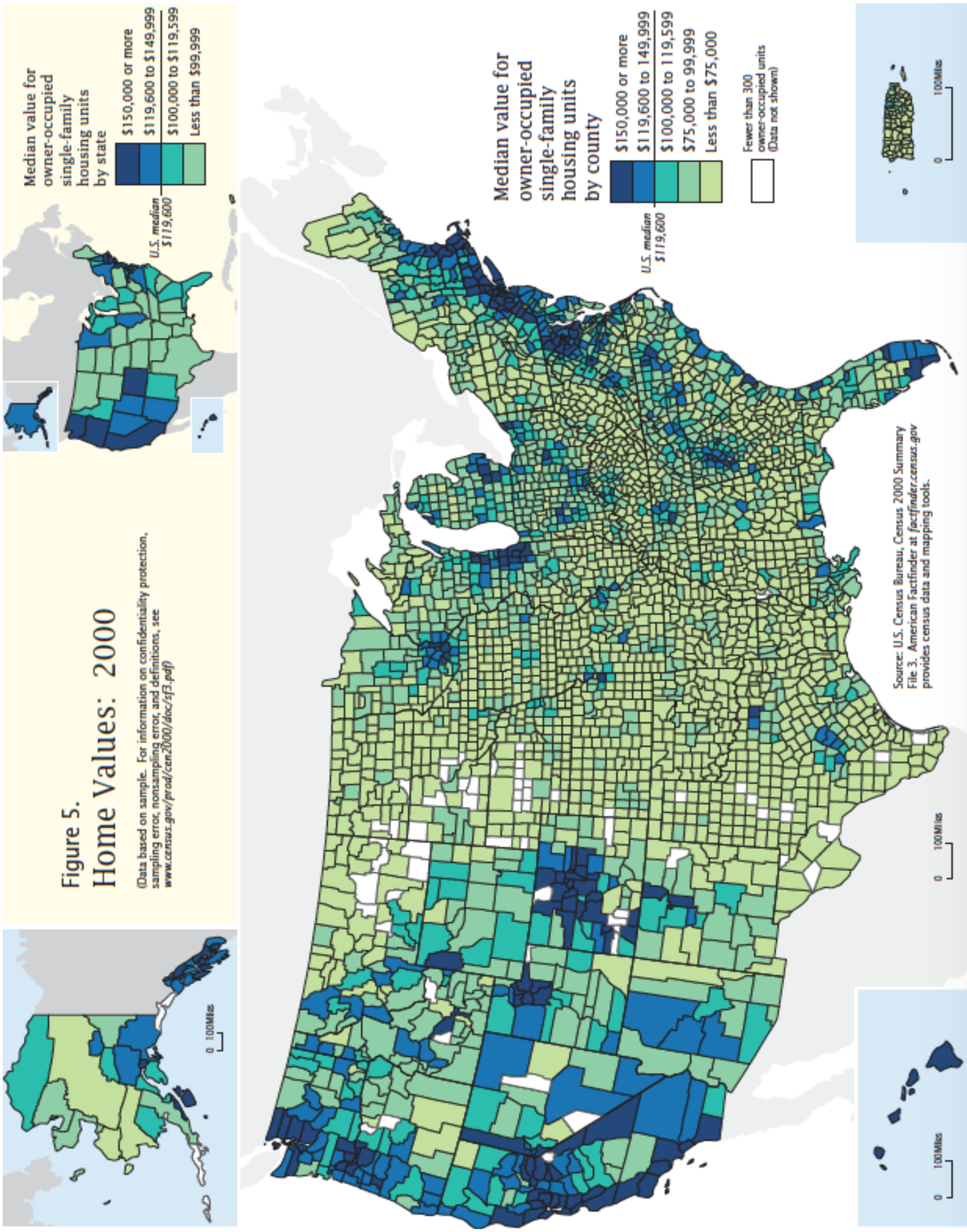

Figure 1. Median Value for Owner-Occupied Single-Family Housing Units by State in 2000.

(Bennefield, 2003, p. 6)

As shown in figure 1, the median value of housing units by state in 2000. Here, it shows that California has the highest home value compared to the other states. This is indicated by the darkness of shading of the state; dark blue indicates the most expensive while light green indicates the least expensive.

Housing History

This section will briefly explain the Californian housing history. In general, the housing economy in the United States rose as time passed. Figure 2 shows the median home value by state after adjusted for inflation.[1] Based on the figure, the rapid growth of the housing economy in the United States is primarily due to the idea that real estate prices are downward sticky. This means home prices are resistant towards downwards movements. It is easier for prices to increase than decrease. As "Modeled Behavior" explains stickiness:

> "(...) it helps to conceptualize the housing market as a matching market. Homes and buyers are highly heterogeneous, and there is no "market price" per se. Rather there is a price for a pair of buyers and sellers. This means that a seller can, *ceteris paribus* [all else being equal], always hold out longer for a buyer with a higher valuation of the house" (2011).

Although the increase of home values occurred throughout the nation, this paper will focus on California because it is the most populated state, yet still considered the first choice for many homeowners.

[1] This graph was cropped to only focus on California.

Median Home Values

	2000	1990	1980	1970	1960	1950	1940
	Adjusted to 2000 dollars						
United States	$119,600	$101,100	$93,400	$65,300	$58,600	$44,600	$30,600
Alabama	$85,100	$68,600	$67,100	$46,900	$42,400	$27,100	$16,800
Alaska	$144,200	$120,600	$151,000	$87,200	$44,800	$21,100	NA
Arizona	$121,300	$102,300	$108,500	$62,600	$54,700	$36,000	$14,600
Arkansas	$72,800	$59,200	$61,600	$40,300	$33,000	$24,800	$11,400
California	$211,500	$249,800	$167,300	$88,700	$74,400	$57,900	$36,700

Note: To adjust for inflation, the 1940 to 1990 median home values were adjusted to 2000 dollars using the appropriate CPI-U-RS adjustment factor.

Figure 2. Median Home Values by State: Adjusted for Inflation 1940-2000.

(United States Census Bureau, 2012)

Boom in Prices

Based on Figure 2, there was a significant increase in prices between 1970-80. This section will briefly review the housing history in detail of 1970-80. Home buyers and builders had problems with tight money, double-digit inflation, sky-high interest rates, the energy crunch, and a drastic building depression in 1973-75 that bankrupted 1500 building firms (Mason, 1982, p. 136). These had a tremendous contribution to the salient increase of home prices.

Builders were also blocked by “new obstacles from environmental and no-growth activist, building codes, and exclusionary zoning” (Mason, 1982, p. 136) which made building harder. This block might have been due to the people’s increase of consciousness towards the environment. Nevertheless, this did not stop the development of housing as the decade was “housing’s greatest decade: a remarkable era when 17.8 million housing units were built [in America] - the largest number in U.S. history” (Mason, 1982, p. 136). The epitome of the American dream, to own a single-family home, became a reality during this decade as many dwellings were built to cater to those needs.

Despite the housing depression, home owners fared extremely well in this decade as their homes increased faster than inflation, and the average home nearly tripled by 1979 (Mason, 1982, p. 136). Older home owners had made a profit by luck. The soaring equity values of older homes became a powerful aid to new home buying in the seventies as owners would “trade up” to better, more expensive homes by selling at the new inflationary price (Mason, 1982, p. 136). With the profit they made from selling of their old homes, they would buy new and bigger houses; thus, increasing their standard of living. However, higher prices mean the increase of difficulty for potential homeowners to purchase their first home.

Therefore, we can conclude that there were winners and losers to the boom of prices in 1970-80.

The trend of increasing home values is the most common in California; it is unusual for prices to decrease. Based on Figure 2, there was a significant decrease in prices between 1990-2000. However, this decade was the only exception to the ever increasing rise in prices of home value.

Demand

There is no denying that as humans, we tend to have different opinions. The main factor that drives the housing economy has been the topic of debate among many economists. Some say it is due to demand, while some say it is due to supply. This section will explore the role of demand such as demographic and monetary policy.

High Demand

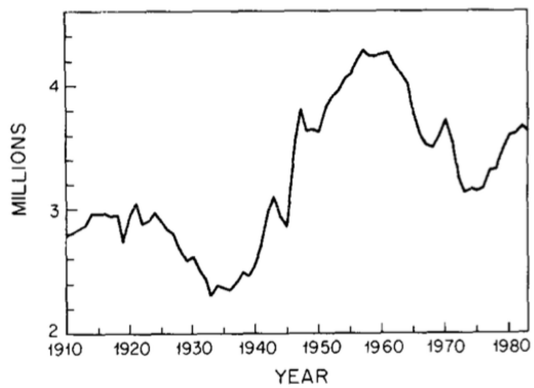

Figure 4. Live Births in the United States 1910-1983.

(Mankiw & Weil, 1984, p. 237)

Demographic. Some economists agree that there is a correlation between the demographic and the prices of homes. As the population of California increases, the demand for houses also increases, resulting in the bidding of home prices. Figure 4 is a graph of the number of births over time, showing the Baby Boom very clearly. This occurred right after World War II, a global war that lasted from 1939 to 1945. As Mankiw and Weil suggest: "The low level of fertility during the Great Depression and the boom in births that lasted from 1946 to 1964 combine to produce a sharp step in the population structure. As the *baby boomers* aged, it had effects on the educational system, the labor market, the housing market, and the social security system" (1984). Thus, the sharp increase in population forced the nation to adjust, for the better or worse.

According to Mankiw and Weil (1984), there is a strong and highly significant correlation between housing demand and the real price of housing. As the baby boomers enter adulthood, they are inclined to move out of their parent's homes, venture out, and find a house of their own. Thus, there is an increase of demand in the housing market which increases the real price of housing. This is illustrated in Figure 5, graph of demand and prices (Mankiw & Weil, 1984).

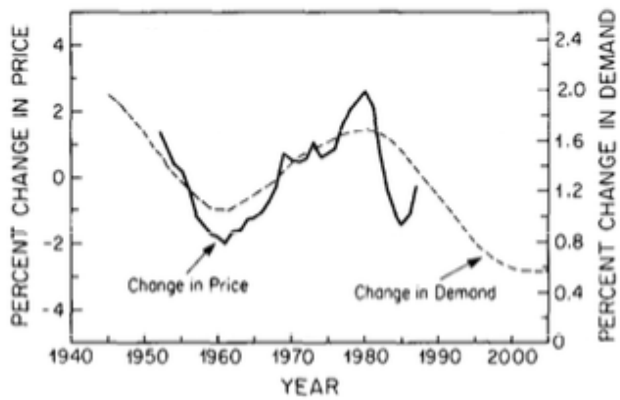

Figure 5. Rates of Growth: Demand and Prices.

(Mankiw & Weil, 1984, p. 247)

However, this graph is only accurate up until 1980 as the rest are merely projections. They are predictions of the decrease of population after the baby boom, and decrease in the demand for houses; thus, lowering the price of houses (Mankiw & Weil 1984). Hence, their explanation on the boom of prices are only true from the time period of 1970-80. It is said that there is a correlation between the demand (population) and prices of homes. However, demographics and the baby boom might not be the sole factor of the boom of prices. They might have been the stepping stone that promoted and led to further increase in house prices.

Monetary Policy

A recession is a significant, widespread decline in real income and employment. In the recession of 2001, economists believe that Federal Reserve (Fed) policy in 2001-2004 may have contributed to the housing boom, and eventual bust that led to the financial crisis in 2007-2008 (Cowen & Tabarrok, 2011, p. 349). As Cowen and Tabarrok explains, the Feds, through monetary policy, “pushed down the Federal Funds rate, short-term interest rate and the overnight lending rate from one major bank to another, from about 6.5% in 2000 to 2% at the of 2001, when the recession ended… [and further continued to] 1% [in 2004], an incredibly low rate" (2011, p. 354). This was the Fed's initiative to increase the growth of real Gross Domestic Product, and decrease unemployment. Nonetheless, the low Federal Funds rate made credit cheap throughout the economy which made it relatively easier to borrow (Cowen & Tabarrok, 2011, p. 354). Thus, the inexpensive credit encouraged people to take up loans and mortgages which bidded up the prices of homes.

Supply

As Glaeser suggests, we ought to focus on the role of supply rather than demand when determining the root of house price levels. He points out:

> "Over the past five years (1998-2003), despite low inflation and the baby bust, real housing prices increased by 25 percent, according to the Freddie Mac Repeat Sales Index. During the 1975 to 1980 period, when inflation was soaring and baby boom children were moving out of their parents' homes, the same index showed real housing price increases of less than 20 percent" (2004).

In other words, even though there were low levels of inflation and a decrease of newborns, real housing prices increased higher in 1998-2003 than in 1975-1980, the period of time when it was said that the baby boom was what drove the house prices. This shows that there is another factor at play here, and the role of demand might be smaller than the role of supply. Thus, aspects of supply such as building cost and land use regulations should be investigated.

Low Supply

Building Cost. California is a desirable place to live. However, the high building cost contributes to the sky-high levels of home prices. Besides the cost of land, cost to build houses depend on labor, materials, and government/development fees - charges levied on builders as a condition of development (LAO, 2015). As LAO explains, these factors are more expensive in California than in the rest of the country (2015). Thus, this results in the obvious difference of prices compared to other states.

As LAO states, “Construction labor is about 20 percent more expensive in California metros than in the rest of the country, [and] California’s building codes and standards also are considered more comprehensive and prescriptive, often requiring more expensive materials and labor” (2015). For example, the state requires builders to use higher quality building materials to achieve certain energy efficiency goals because California is a green state, very sensitive and conscious to the environment.

Nevertheless, these stringent requirements alone do not explain the continuous increase of price levels on home (as shown in Figure 2). Figure 6 illustrates that there has been fluctuations of home prices, but a relatively stable cost of building in California since 1985 to 2013. Thus, the inconsistency of home prices and building cost suggest that building cost is not the main factor that drives the housing economy, but it does play a small role.

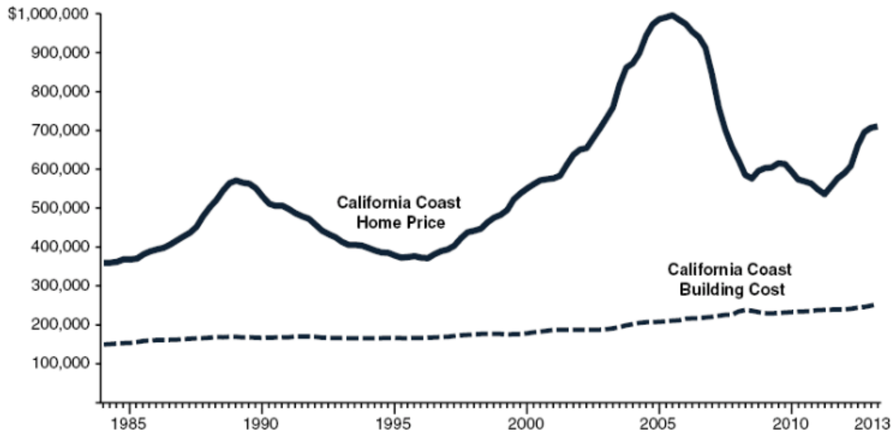

Figure 6. Home Prices on California Coast Have Risen Much Faster Than Construction Cost.

(LAO, 2015)

Land Use Regulations. As mentioned in the previous section, if the physical cost of construction materials does not affect the prices of homes, then what does? As Glaeser explains: "high housing prices are the result of land use regulations, which deters new construction, not the absence of land. This suggests that cross-space and cross-time variation in housing prices are best understood as the result of increasingly tough regulation of developers" (2015). These regulations have increased the difficulty for developers to meet the ever growing demand. This in turn results in the lack of houses, and a bidding war; thus, driving high housing costs.

The goal of land use regulations is "orderly growth with balanced land uses, preservation of open space and natural features, protection of residential amenities and the provision of high levels of services to residents, and lastly, benefits to the community of a broad tax base and efficient use of public funds" (Dowall, 1984, p. 70). Notwithstanding, these rules have become more of a growth constraint, rather than to shape the land. Fremont and Concord are examples of land under these regulations.

Although there are many factors that may contribute to the increase of home prices in California such as demographics, monetary policy, building cost, and land use regulations, one stands out. I believe economic growth is the main contributor.

Economic Growth

As Neumark and Muz state, in the past 20 years, California's economic output has grown faster in California than in the rest of the United States. (2013, p. 1). This might be due to the recent boom in Silicon Valley (with major tech companies such as Apple and Google) which drives up the cost of land. High housing costs could reflect a more productive economy (Neumark & Muz, 2013, p. 3). Even though these companies are based in California, they have been making their way into the international market. They have dominated the tech world with their innovations. "A more productive economy enables employers to pay more, and a large number of highly paid employees can drive up house prices" (Neumark & Muz, 2013, p. 3). High-wage jobs from the success of these companies enables their workers to afford houses. They will then get into a bidding war with each other which then drives the prices up.

Conclusion and Further Discussion

The ever fluctuating prices of the housing economy is a part of nature; thus, cannot be stopped. However, what we can do is understand it. We may not be able to determine the core cause of it, but we can come to the conclusion that factors such as demographic, monetary policy, building cost, and land use regulations do play a role. Most importantly, I believe that the true cause of the ever increasing home prices is mainly because of economic growth.

Now that we know the housing economy is downward sticky, we need to ask ourselves, how are the consumers affected? What is their average income? As Case points out, "Income growth in the 1970s, particularly family income, dropped sharply while house prices rose more rapidly” (1994, p. 31). How does the median household income affect the buyers? As Case points out, “Rising house prices, of course, make homeowners better off, as their equity grows. On the other hand, when house prices outpace income, housing becomes less affordable to those who do not own” (1994, p. 31). There are winners, but there are twice as many losers when it comes to the housing market. Thus, we have to ask, what can be done to stabilize the housing market?

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