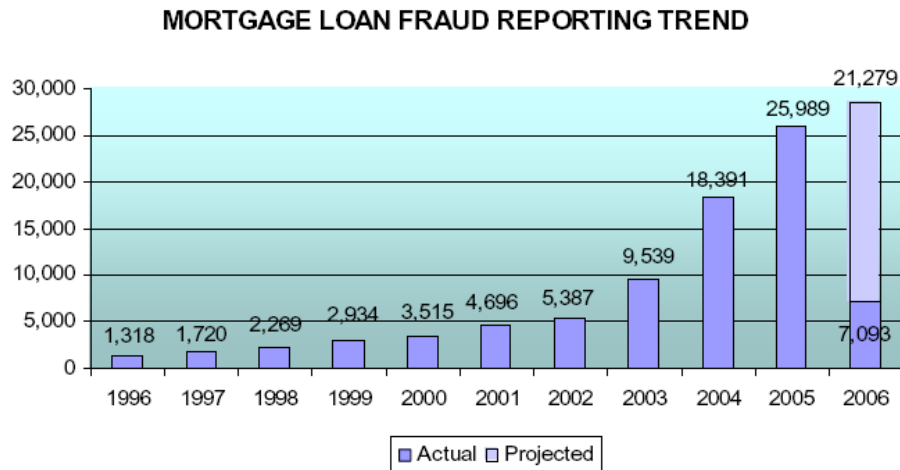


US HOUSING
MARKET
(2001-2020)

1. US House Market (2001-2020)

- **2001-2006**

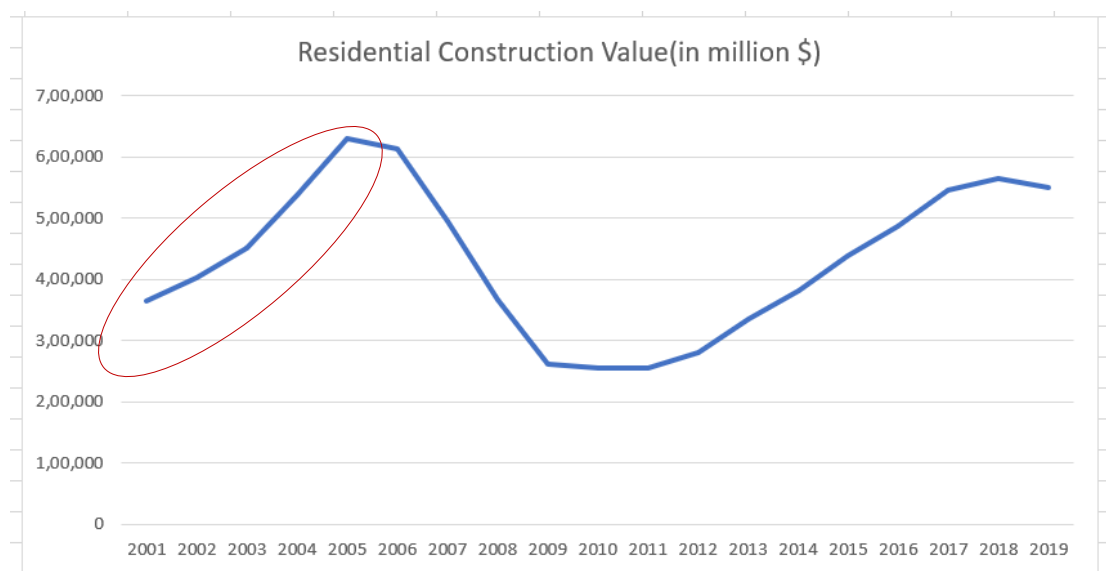
It was time of **late 1990's and early 2000's** when **mortgage frauds started to increase rapidly**.



([image source](#))

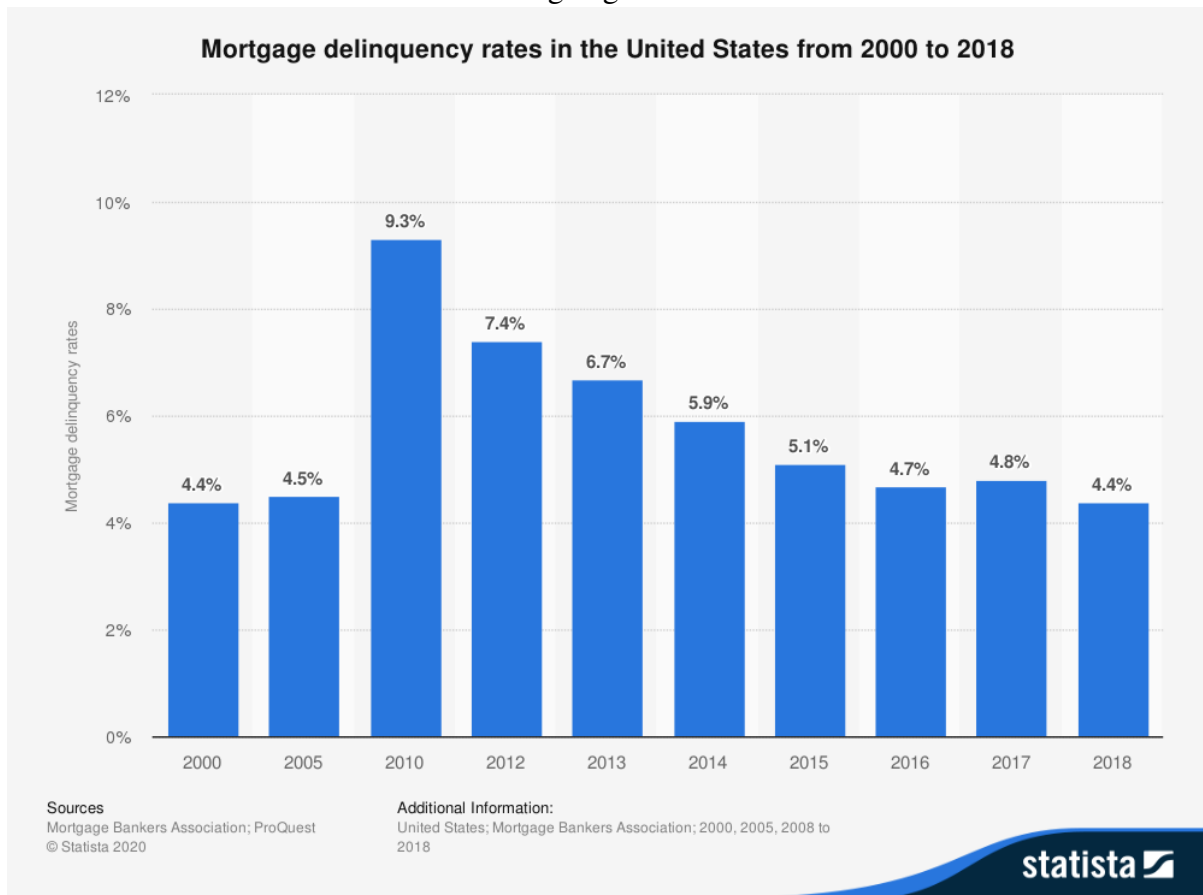
Mortgage-Backed Securities (MBS) and **Credit Default Swaps (CDS)** emerged to be a whole **new market for financial institution**. Therefore, Banks were giving **easy loans and so sub-prime mortgages increased**. Ultimately this **increased the demand** of houses.

Developers saw this **demand** as an **opportunity**, and they began to increase their business. Below is the data/chart showing the residential construction rise from 2001-2005.



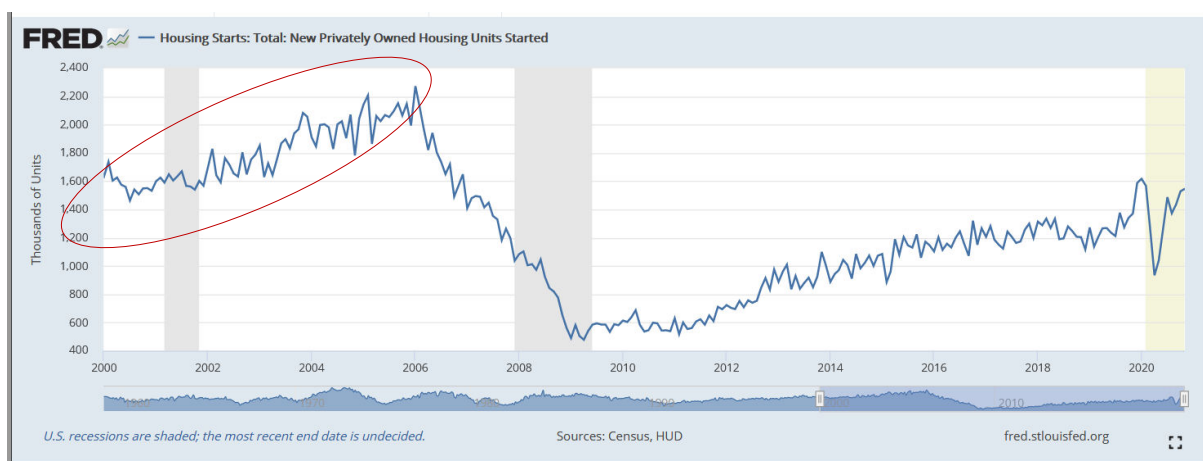
([data source](#))

As neither the homeowners sold their house expecting even better price for their house nor defaulters started defaulting at great extent till 2005.

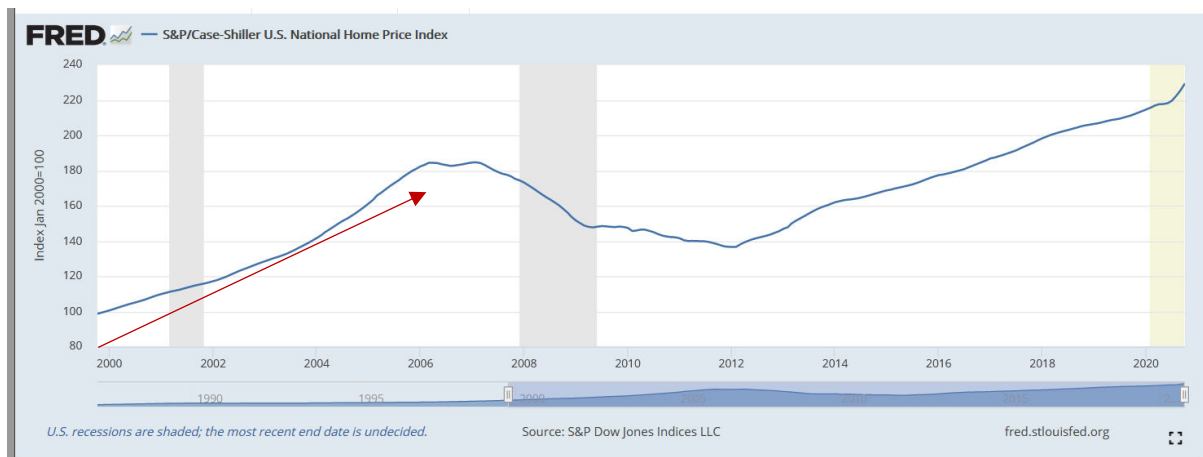


([image source](#))

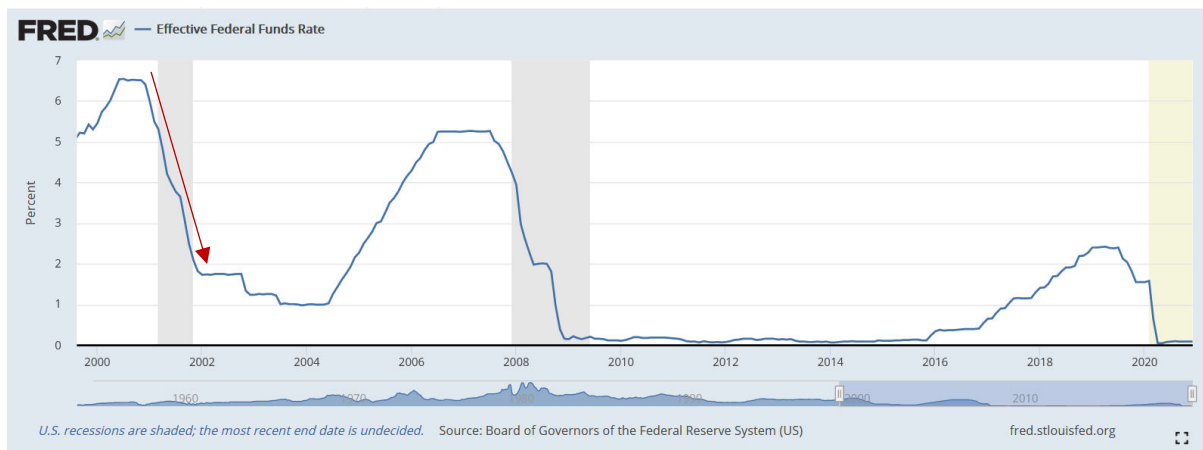
So, there was a **need of building new houses**. New house **construction** also **started to increase to meet with this increasing demand**.



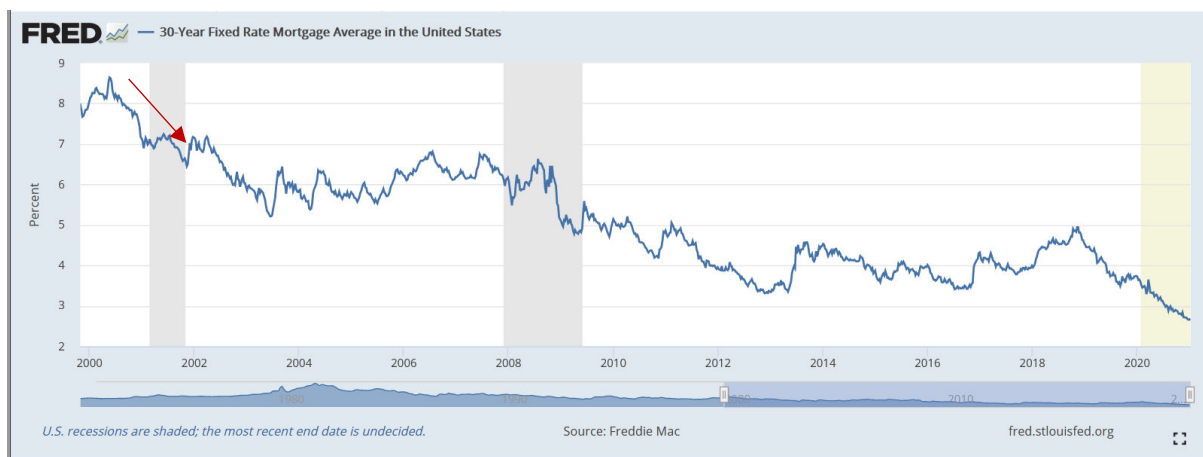
Due to this increasing demand, we can see home price index increasing till 2006.



In 2001, US federal reserve lowers the **Federal Fund Rate** from **6.5%** to **1.5%**. Whenever **FED** fund rate has decreased, mortgage rate has decreased as well. So low mortgage rate, easy loan increased the house demand and so house prices were increasing.



[\(image source\)](#)

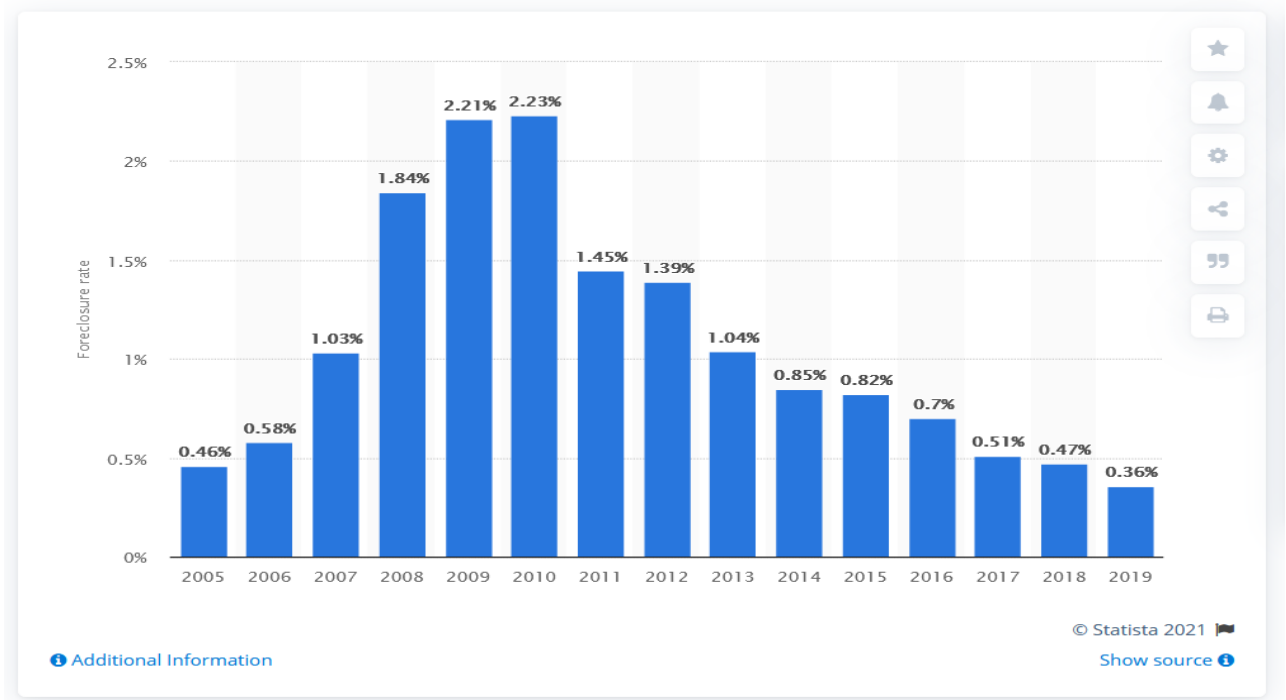


[\(image source\)](#)

In **2004**, US **home ownership rate** peaked with all time high of **69.2%**. During **2004-2006** federal reserve **increased** fund rate from **1% to 6.25%**. This move was to **control inflation** and to **cool housing market bubble** but it back fired and **higher rates caused more mortgage defaults**.

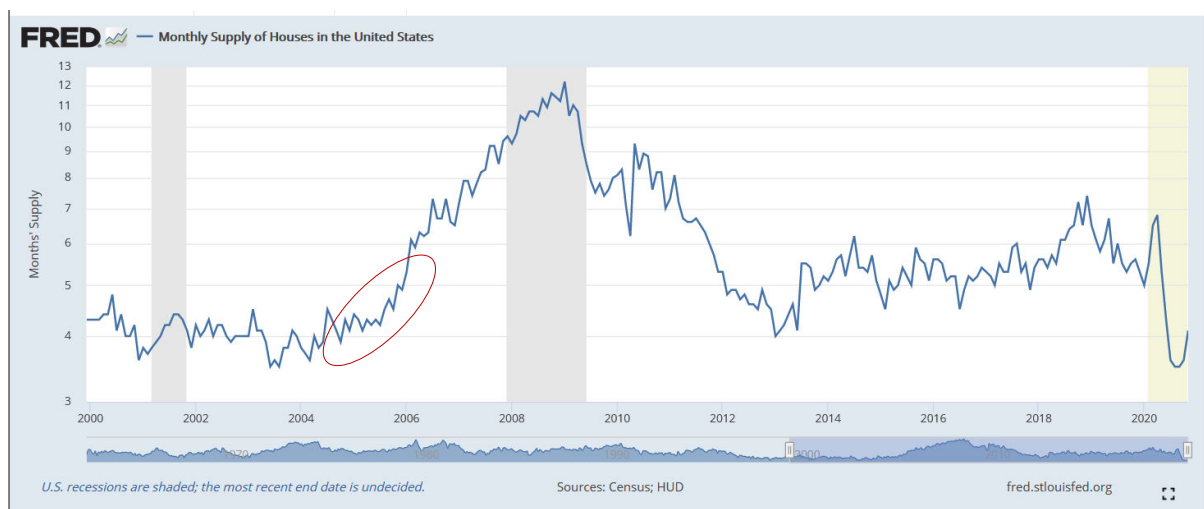
So, it was year of **2005** from which **foreclosure rate started to pick up the pace**.

Foreclosure rate in the United States from 2005 to 2019



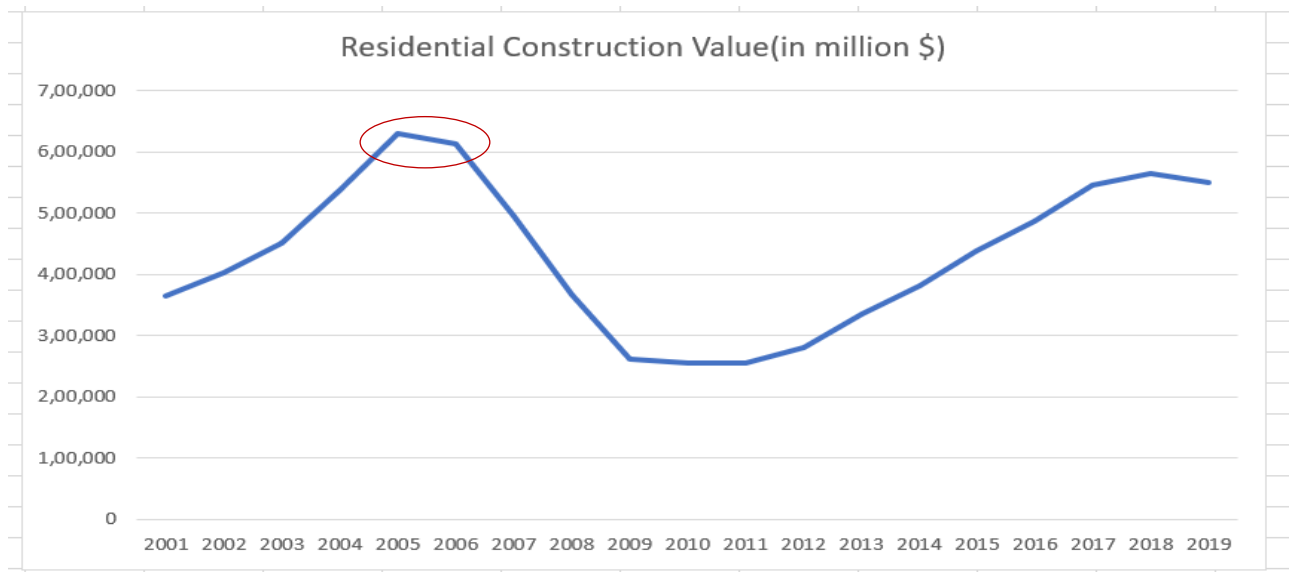
[\(image source\)](#)

So, **Supply** of houses (**house inventory**) in the market started to **increase**, but as fund rates were increasing **demand did not rise** in the same manner **rather it decreased**.



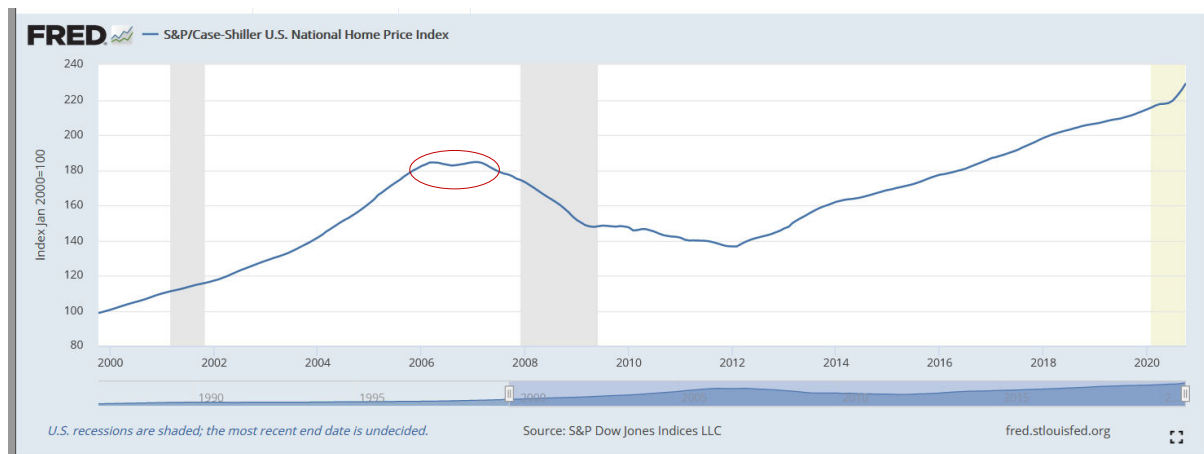
[\(image source\)](#)

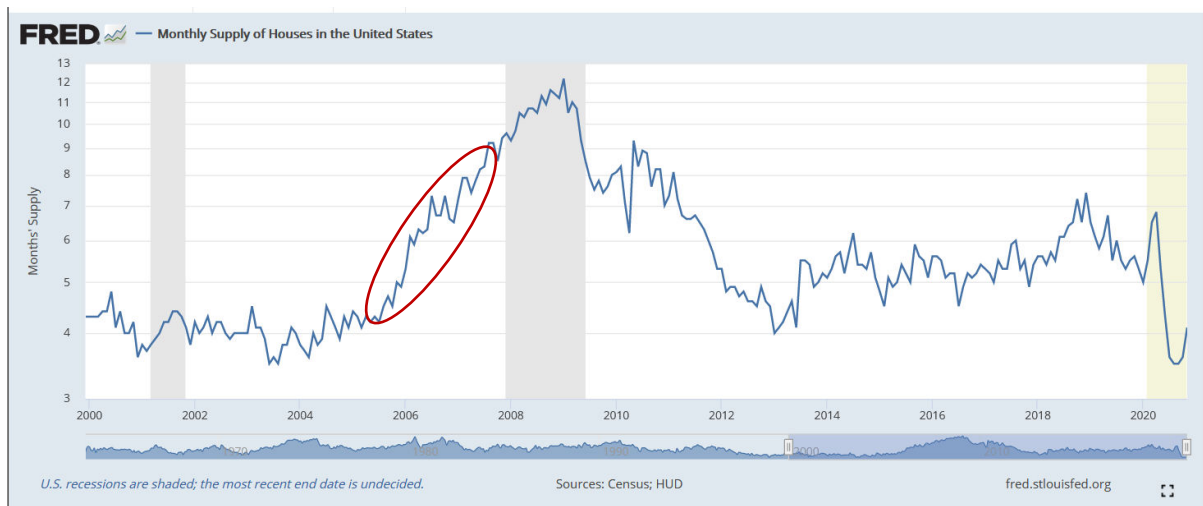
This can be overserved as a **decline in residential construction value** from 2005-2006.



- **2006-2008**

From **2006 prices went flat**, can be seen in picture below, it was a thing to worry because experts had started doubting house market's rise (whether it is a bubble?) in addition to this **bank stopped giving easy loans, rise in foreclosure and it resulted into inventory build-up.**



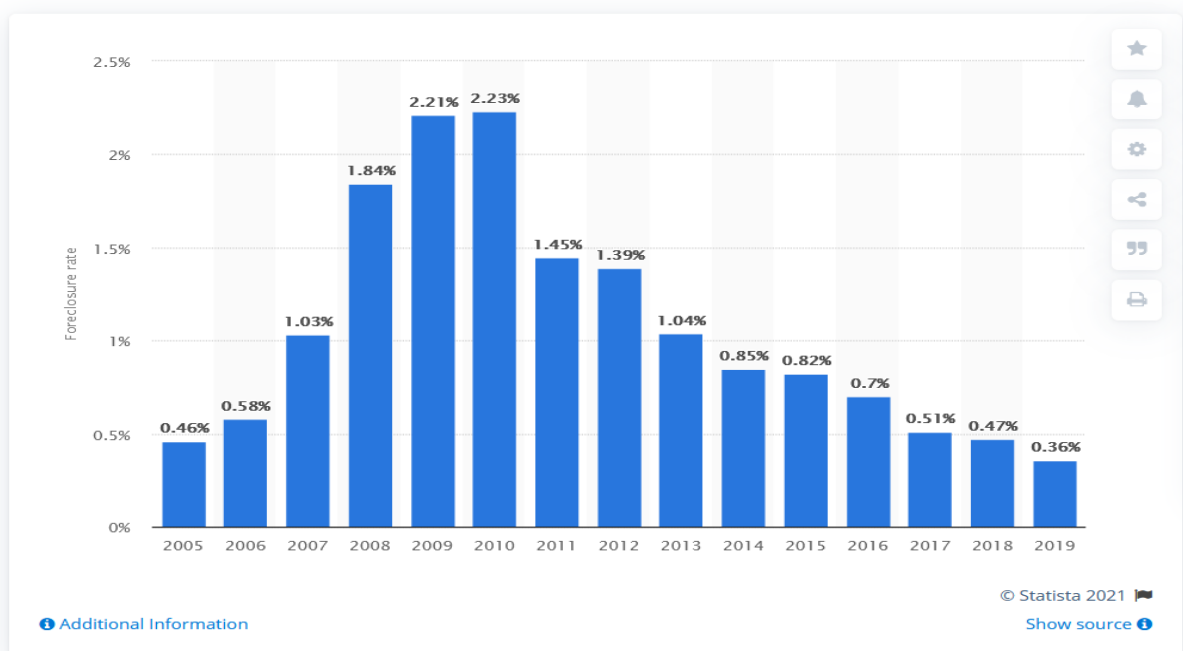


In 2007 home sales and home prices fell, foreclosures continued to increase, house inventory continued to increase which all resulted into **high supply and low demand**. Bank owned houses acquired after foreclosures had **no buyer in the market**. **Sub-prime lenders started going bankrupt**. Bank stopped lending each other money in fear of not getting it back.

In the same year, according to **Standard & Poor's/Case-Shiller index**, home prices started making **new low every new month**. **Foreclosure rate has given a sharp rise** from 2006.

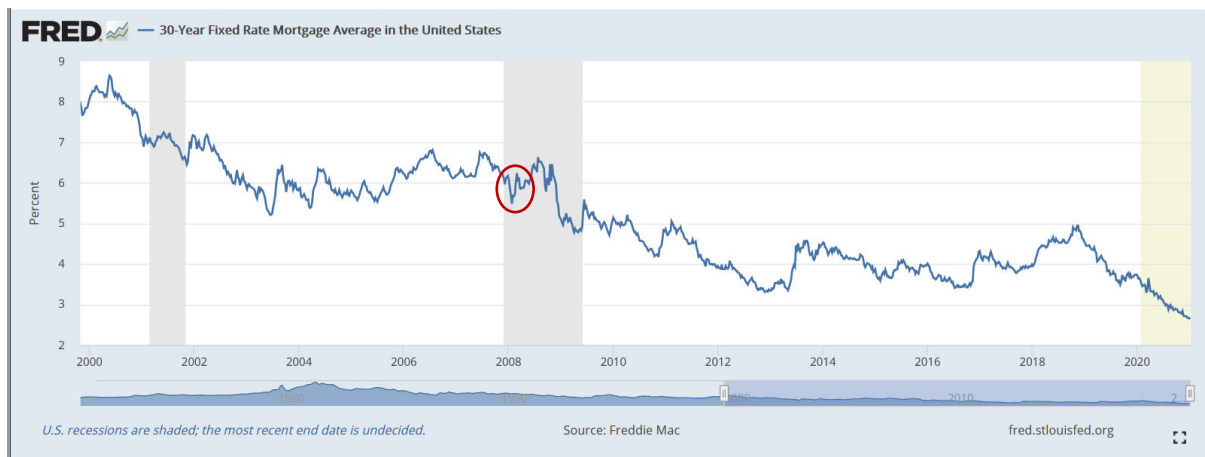
In 2008 finally this **bubble burst** as stock market fell abruptly. By 2009 **house inventory** went above 12(refer to the above house inventory chart) making a **all-time high**.

Foreclosure rate in the United States from 2005 to 2019



Foreclosure rate was also at **all-time high**, it **increased supply** of houses in the market and **decreased house prices**.

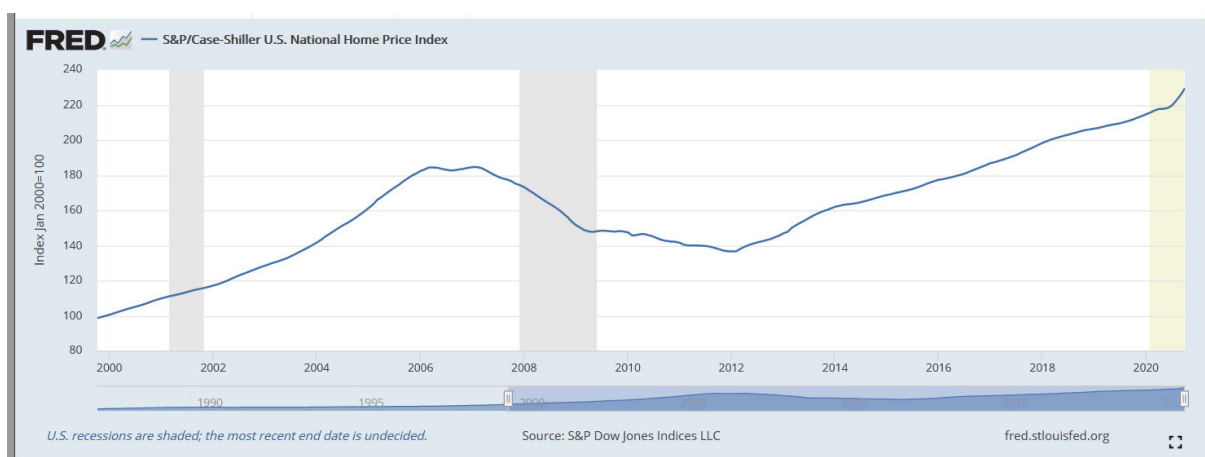
Banks again **reduced mortgage rate sharply** to meet with this **increasing supply** and to cover their due mortgage payment.



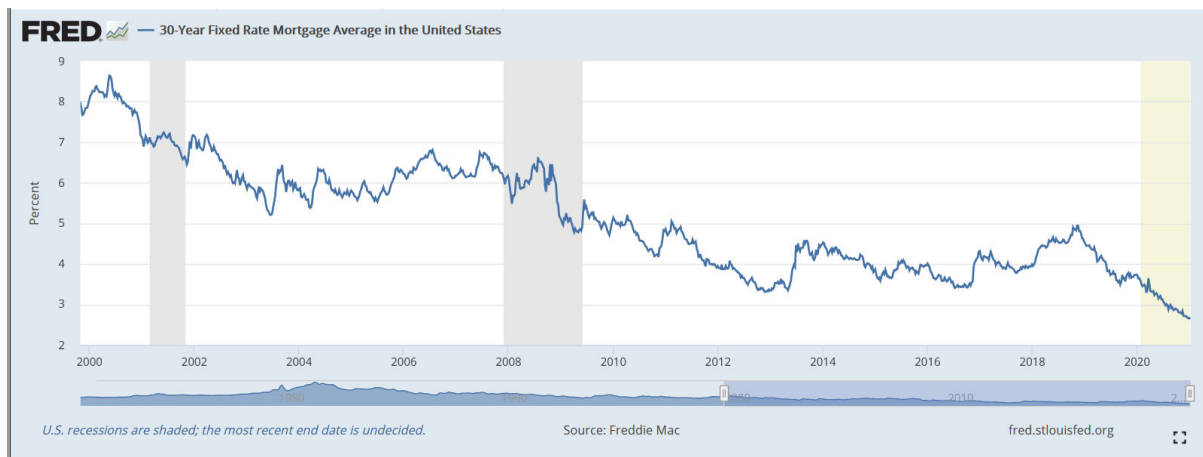
But it seems that people had **no confidence, money/jobs** to grab this opportunity and buy a house with low mortgage rate and at low price.

- **2009-2013**

In 2009, to help people to pay their mortgage payment, Federal Housing Finance Agency launched **Home Affordable Refinance Program (HARP)**. But it was limited to **Freddie Mac** and **Fannie Mae** loans. To qualify for this scheme, it had several other conditions too. This **scheme did play little role in recovery from 2008** crisis therefore we could see the **slope of S&P index decreased from 2009**. But this scheme was aimed to aid this crisis at greater extent. In the **first quarter of 2014** the number of **mortgages refinanced through HARP was 76,930**. In total, **only 3.1 million mortgages have been refinanced through HARP** — **8 million** less than the potential number of refinances ([link](#)).

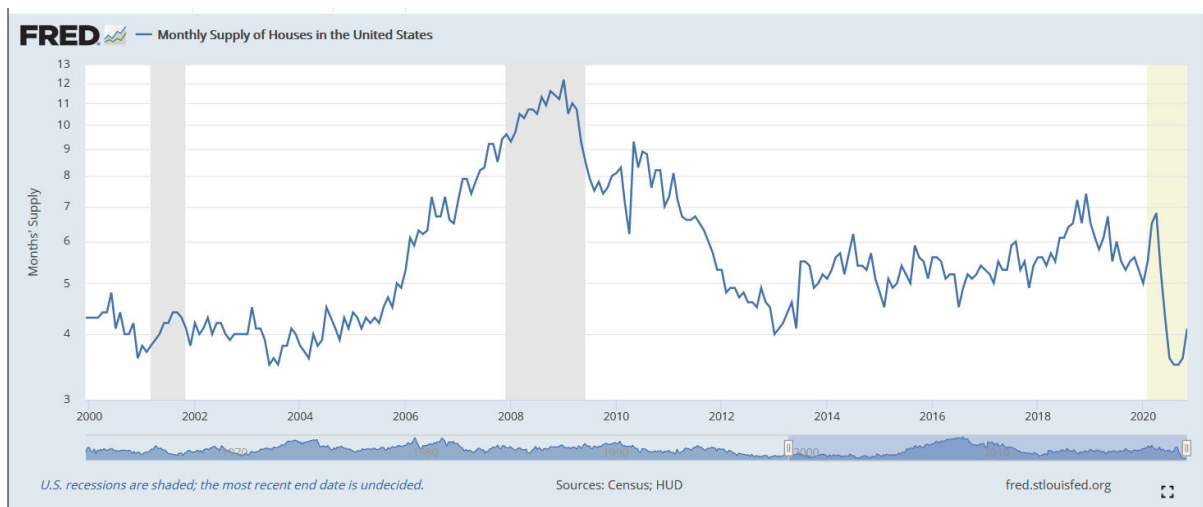


2012 played a major role in the recovery from **2008** crisis. S&P index tells the same story, let us analyse why.

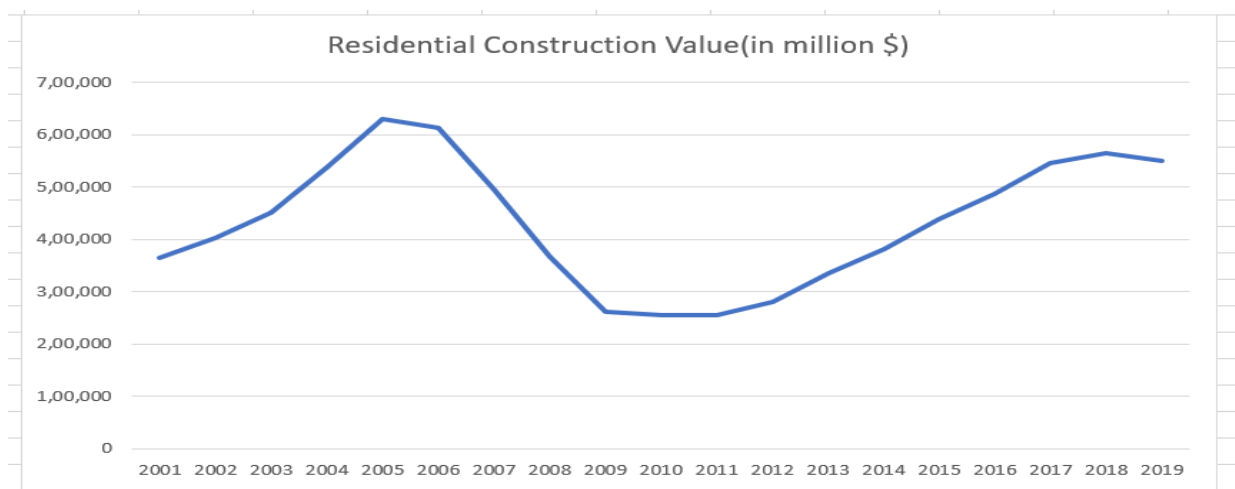


In **2012 mortgage rate were record low**, since 2008 people had not shown interest in buying a new house. People had **preferred renting a house than buying a new one** so **demand for rental house had increased** so **does the rents**. So, people shifted towards buying new house and started grabbing opportunity of record low mortgage rates.

Therefore, US experienced a **sharp decline in house inventory from 2011-2013**. So, **2012** was the year from which **house prices started showing appreciations**.

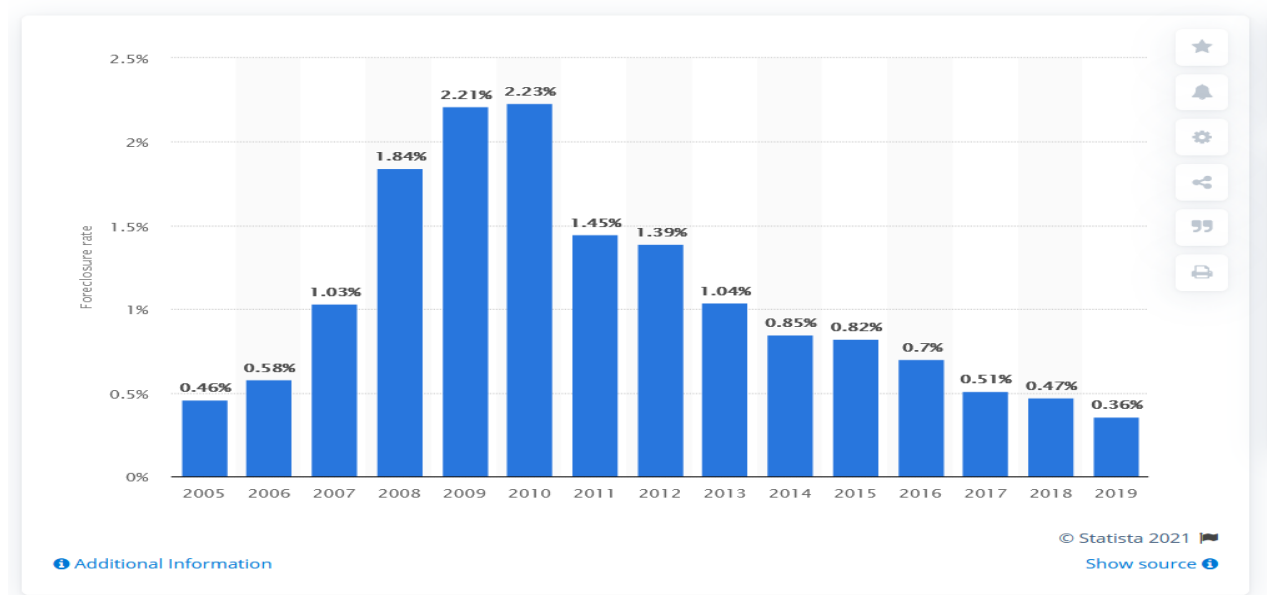


As positive news about housing started rolling out in public, **house inventory below 5** and **house price appreciation first time after almost 6 years(since 2006)** residential construction value started showing **rise**.



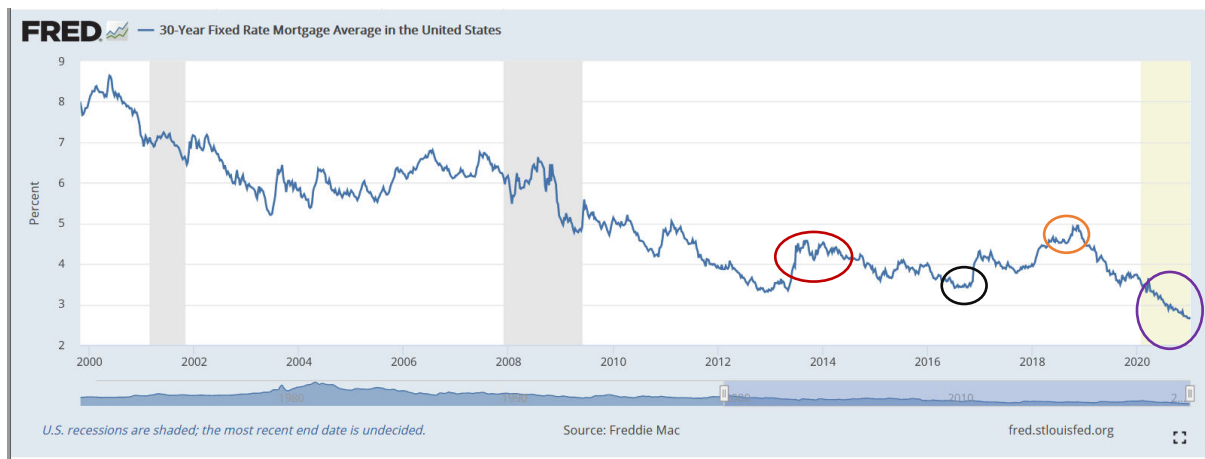
2013 recorded **sharp decline in foreclosures** from **1.39% to 1.04%**. And there after never rose as compared to respective last year.

Foreclosure rate in the United States from 2005 to 2019

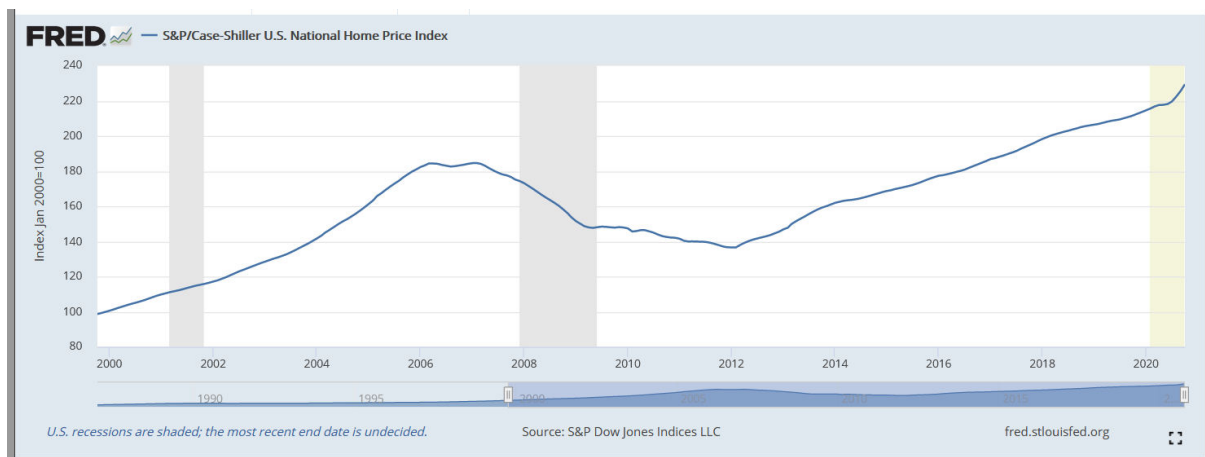


- **2014-2020**

After 2014 it can be seen that **mortgage rate** and **house inventory** has been **positively correlated** till today's date.



From the graph above, **FED did try to increase mortgage rate in late 2018** but which resulted in **house inventory to go above 7** (which it was once at in late 2006) so to avoid same crisis again FED sharply reduced the mortgage rate thereafter. **With low and low mortgage rate, S&P index shows along uptrend since 2012.**



As of now, **mortgage rate is at all time low** and **house inventory close to 4**, which creates **high demand and low supply scenario** so house prices are continuously increasing. **Is it creating a new housing bubble?** Well, it has been already discussed in my last report '**Factors that will influence US residential house prices over the next 10 years.**'