Title: 1-Year later... The EVERYTHING Short - Mortgage Edition
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Linked Post Content:
Hello Apes,

It's been a little over a year since I posted [The EVERYTHING Short - Mortgage Edition](https://www.reddit.com/r/Superstonk/comments/ml39bx/the_everything_short_mortgage_edition/)...

Since posting I have been quietly lurking on the sub (because of my current employer). However, in my free time this week, I felt that it would be important to do check in, see how accurate (or inaccurate) my stance of the Mortgage market was.

As always, I'm not an expert, this is not financial advice.

Reminders:

TA/DR of my previous thesis: Housing market = bubble / Rocket Mortgage = \[Chuckles\] "I'm in danger."

TL/DR of my previous thesis: Mortgage lenders were over extending themselves, due to the increased demand of the COVID crisis, Rocket Mortgage's balance sheet displays that they are the tip of the iceberg (chose to investigate them since they were #1 of new loan originators in 2020), and Treasury Yields will ultimately cause the collapse of MBS market / crippling the liquidity of the Repo Market.

Summary:

1. **Background / Current Status**
2. **Part I - Foreclosures / Default Rates**
3. **Part II - Rocket Mortgage 1-year later**
4. **Part III - Bringing it all together**

Background / Current Status:

Mortgage Process (Simplified)

[Dumbed down version of the Mortgage Process](https://preview.redd.it/a6zb4gd4w4v81.png?width=2432&format;=png&auto;=webp&s;=a40c8c4db260fb73088bd39939a424756e5e0c22)

First, let's remind ourselves how the mortgage market works (Note - this is not meant to be an all encompassing summary, but at a high level providing a diagram of the flow of operations).

To begin, homes can be bought with cash or are financed through three types of mortgages; Conventional (largest piece of the pie), FHA (Federal Housing Administration), and VA Loans (Veterans Affairs). If you are buying a home with a mortgage, borrowers will need to go to a Loan Originator to get their mortgage (e.g. Rocket Mortgages, Wells Fargo, Chase, etc.). The mortgages are then packaged into MBS's via a Bond Underwriter and sold on the secondary market to investors, utilizing ratings produced by agencies (e.g. Moody's, Standard & Poor's, etc.) to denote the amount of risk (AAA - highest rating).

Financing Breakdown (New Homes Q4 2020 vs Q4 2021)

Now, let's compare the 2020 financing type vs 2021. For new homes purchased in Q4 2021 (Depicted in the pie chart below), conventional has grown from approx. 70% to 78% (fun fact - the last time Conventional loans comprised this large of a percentage of the market was... you guessed it... 2008 Q1). This growth as driven by a shift from FHA loans, which declined from approx. 16% to a paltry 9%. VA loans also shrunk from 8% to 6%. Cash also rose from 6% to 7%.

[New Home Sales by Financing \(US Census Bureau\)](https://preview.redd.it/uwt6azk015v81.png?width=702&format;=png&auto;=webp&s;=8a48a0f82f71ad947f118f1ce8f5fecb40dafbd2)

Mortgage Rates - Current

So, if you have been paying attention, [Mortgage Rates Reach 12-year Highs](https://www.cnn.com/2022/04/21/homes/us-mortgage-rates-april-21/index.html)... at 5.2% for an average 30-year fixed.

Why is this important? A Reminder from my previous DD...

"if mortgage rates rise (due to high treasury yields), demand will decrease. If demand decreases, and at the same time supply increases, value will sharply decline."

"Therefore, when overall housing prices go down, those who are overextended by buying investment properties or 2nd homes, will also sell to cut their losses. Expediting the home value decreases in the area. As the value of the homes continue to decrease, the default risks rise (even on what would be considered "safe"). As risk levels rise, investors who buy the MBS tranches will slow (It's important to callout that the government has been buying up MBS's, but they aren't the whole pie).

When you see a lack of investors, the middle man will have difficulty selling the mortgages they wrote. Therefore, there's a 'kink' in the process. If the middle man can't get the risk off their books, they can't issue new mortgages, and if they begin to see their "asset" values (aka mortgages to sell) fall below their liabilities, then they are in significant risk for bankruptcy.

Also, remember, if mortgage rates rise (due to high treasury yields), demand will decrease. If demand decreases, and at the same time supply increases, value will sharply decline."

TA/DR: Mortgage Rates up, Demand down.

Speaking of demand...

Demand - Current

[Demand is dropping to below pre-Pandemic levels](https://preview.redd.it/uxl6qlay45v81.png?width=768&format;=png&auto;=webp&s;=6cad12c23eacc267c50768d36a372851a4c67020)

Demand is falling rapidly, as buyer's expectations of housing availability worsen (due to lack of supply) and mortgage rates rapidly climbing. Only 20% of all buyers can afford 50% of the housing availability ([sauce](https://eyeonhousing.org/2022/04/buyers-feeling-grim-about-housing-affordability/)). Additionally, only 17% of buyers perceive their housing search will get easier in the months ahead ([which hasn't been seen since 2018](https://eyeonhousing.org/2022/04/buyers-perceptions-of-housing-availability-fall-back-to-2018-levels/)).

[Median Household Income - Source US Bureau of Economic Analysis \/ Labor Stats.](https://preview.redd.it/gs6wrgui16v81.png?width=910&format;=png&auto;=webp&s;=2bb6dd87f9479c26e184d6f0adbadfc0faba2eab)

Also, demand is being hampered by the rising inflation, which is eating into the average American's share of wallet since Median household income has only increased by $6K since 2000 (adjusting for inflation), whereas housing prices...

Prices - Current

[Avg. Sales Price - Source US Census Bureau](https://preview.redd.it/zafvbzn075v81.png?width=1000&format;=png&auto;=webp&s;=4f613f058a0f8fe291c6a7fd5bb6fb82598862b1)

The average sales price continues to **rise**, even into 2022 with March 2022 seeing the 121st consecutive month of year-over-year increases (up 15% from a year ago). The **MEDIAN** (Note - chart above is average not median... [sauce for apes who don't know the difference](https://www.dictionary.com/e/average-vs-mean-vs-median-vs-mode/)), is **$375,300!!!** (up from $322,000 in 2021).

So if demand is declining rapidly, why are prices up?

Answer... Supply

Supply - Current

[Source Altos Research via the New York Times](https://preview.redd.it/5rfaws4q85v81.png?width=1010&format;=png&auto;=webp&s;=23192071889d3ae986b963aeecb4050443554aab)

The amount of homes dramatically fell in 2021, especially because of pandemic-related labor shortages, weather constraints, and supply chain issues for raw materials. However, housing starts have hit a 16-Year high (not seen since June 2006) with [1.793 million](https://tradingeconomics.com/united-states/housing-starts#:~:text=US%20Housing%20Starts%20at%2016,market%20forecasts%20of%201.69%20million). But, with the rising cost of labor (up 6% YoY) and raw materials (up 31% YoY), the cost to build these homes will dramatically rise. Making it imperative for the price of home not drop, in order to ensure contribution profit (less fixed-costs) remains intact for the builders to remain profitable.

[Housing Starts - US Census Bureau \(25Y history\)](https://preview.redd.it/o6ml9sp2g5v81.png?width=734&format;=png&auto;=webp&s;=3a515f4fa21c5d69841fcb128eee8eaeee1e7b4b)

[Source: NAR](https://preview.redd.it/gtk1r1ovj5v81.png?width=540&format;=png&auto;=webp&s;=57be5e1266e6033773de28c314577d505e128907)

Even though months of supply hit a 20-year low in January, the supply has been increasing back to back months in February and March. With the number of housing sales slowing (due to mortgage rates / lack of demand) and the supply increasing with new construction, we should see more homes available on the market in the later portions of 2022, and cool off the prices.

However, what else can cause supply to increase rapidly beyond new home sales?

Part I - Foreclosures / Default Rates

[Mortgage Delinquency Rates - Source MBA](https://preview.redd.it/plqtvnlgc5v81.png?width=697&format;=png&auto;=webp&s;=86d4142486a50613e101f675ba7aab67fcd0afc8)

Using the chart above, mortgage delinquency rates continue to fall from their peak pandemic rate of 8.22% to 4.65% at the end of 2021, but remain on par with 2007 levels. It's imperative to highlight loans with 90+ days of delinquency (approaching foreclosure) still remain as the largest portion of mortgage delinquencies, albeit decreasing from 2.8% to 2.4% from Q3 2021 to Q4 2021. However, 30/60 Day delinquencies rose from slightly over the same time frame.

Sounds like a rosy picture...but... let's dive a little deeper, and where we need to look is FHA (since these are the most likely mortgage type to default). Especially considering HUD officials in their annual report to Congress, warned that an elevated number of delinquent borrowers will not cause them to lower insurance premiums **AND** that foreclosures could cause home prices to drop...

HUD reports that FHA serious delinquencies are down 33% from October 2021 to January 2022, falling from 632K to 422K ([Sauce](https://www.housingwire.com/articles/hud-says-fha-delinquencies-positive-sign-as-it-weighs-premium-pricing/)). That's good right? Well...depends... did foreclosures rise? Yes. Significantly.

Mainly driven by the foreclosure moratorium ending (July 2021), foreclosures rates are now exceeding pre-pandemic levels with a total of 130,000 FHA homes being in foreclosure. FHA loans are not the only ones being driven into foreclosure, but the market are seeing foreclosures increase as a whole. For example, Q1 2022 vs Q1 2021, foreclosure filings rose 132%, with March being up 35% from the previous month and seeing the 11th consecutive month with a year-over-year increase in US foreclosure activity. It's imperative to denote that the 50K properties starting foreclosure processes in Q1 2022, remains only 57% of what Q1 2020 was (pre-pandemic). However, the sustained growth in foreclosures is worrying.

So, once a house moves into foreclosure, how quickly does it hit the market? Well, that depends (state-by-state basis) but it can be as quick to 2-3 months until the auction date. Therefore, it's safe to assume additional supply will begin to hit the market in Q3/Q4 2022 and into 2023 (especially if forbearance rates continue to rise).

Part I - TL/DR: Even though overall mortgage delinquencies are down, they are still hovering at 2007 levels, and we need to monitor 30/60 day delinquencies since they are rising. Foreclosures are rapidly rising, but still are below pre-pandemic levels, however this will impact the housing market in later 2022 as these properties will hit the market and increase supply.

Part II - Rocket Mortgages:

Well...I remembered getting a lot of hate because of my bleak outlook on Rocket Mortgages. So before I update you on the current situation, here's an "I told you so moment" ([Oh and Jimmy Chill](https://www.youtube.com/watch?v=FAEQW0qsPsg), another data point for the inversing his stock picks).

[Jimmy Chill loves their \\"Management and business fundamentals\\" - March 2021](https://preview.redd.it/th9ix390p5v81.png?width=729&format;=png&auto;=webp&s;=cd8b239afea1a227b7207d05ee6f5fb6c7084422)

Alright, alright, nobody likes a gloater so let's delve into the details of their [10K](https://s25.q4cdn.com/509921419/files/doc_financials/2021/q4/RKT-10K-2021-Filed-with-Exhibits.pdf) in March 2022.

So right off the bat, they have 41 pages of Risk Factors (GameStop 10K... 9 pages), doesn't prove anything but was an interesting factoid as I scrolled through a lot text.

However, let's focus our analysis on the elephant in the room I spoke earlier about, Mortgage Rates. Here's what they had to say (prior to this dramatic rise in rates) as what would happen to their business.

"As interest rates rise, refinancing generally becomes a smaller portion of the market as fewer consumers are interested in refinancing their mortgages. Higher interest rates may also reduce demand for purchase mortgages as home ownership becomes more expensive. This could adversely affect our revenues or require us to increase marketing expenditures to increase or maintain our volume of mortgages." (Page 26)

"Borrowings under our financing facilities are at variable rates of interest, which also expose us to interest rate risk. If interest rates increase, our debt service obligations on certain of our variable-rate indebtedness will also increase." (Page 27)

Furthermore, they are watching the Fed's quantitative tightening closely, because the Fed was propping up the MBS market by buying MBS's issued by Fannie Mae, Freddie Mac, and Ginnie Mae. Shrinking the

Fed's balance sheet naturally will result in less MBS purchasing, aka slowing the secondary market (Creating a bottleneck in the balance sheet).

Condensed Balance Sheet

[Rocket Condensed Balance Sheet - 10K 2021](https://preview.redd.it/a54w41sds5v81.png?width=681&format;=png&auto;=webp&s;=be02e21bcd9737fbf4819e2fe041e90967d645ab)

Let's focus on "Mortgage loans held for sale". This is what Rocket is considering fair value of mortgages that they own and are expected to be sold into the secondary MBS market.

Why it's important: With the Fed's quantitative tightening slowing down the secondary market, the 19B in mortgage loans held for sale, will remain on their books for longer. They need to sell their loans in order to drive their income, which took a hit btw in 2021, with their EBITDA decreasing 44.9% or 5B from 2020 (Page 59). This dive in EBITDA was driven by their sales margin being cut, causing their gain on loan sales to drop $4.6B or 30.5% from 2020.

Also, important to note, the "fair value" can dramatically change. Home prices are still increasing yes, but as mentioned prior:

1. Supply is due to increase - new home starts are at levels not seen since 2006 / foreclosure rates are on the rise
2. Demand is decreasing - due to poor consumer sentiment and inflation making less people able to afford a home

Part II - TL/DR: With the rising interest rates slowing down home sales there will be fewer loans (originations and refinancing) due to higher interest rates, Rocket must spend marketing $'s to gain market-share or lower their loan standards to receive the volume of loans required to remain profitable. The secondary market will start to slow with the Fed's quantitative tightening, which will cause the price of the MBS to drop and rates to continue to climb (seeing as investors will require compensation for taking additional risk). Therefore, the United States largest mortgage lender is staring down the barrel of two headwinds, and continues to have a highly leveraged balance sheet (where if fair value for home prices drop, due to an increase in supply / decrease in demand), will be a recipe for disaster.

Part III - Bringing it all together:

1. Rising Mortgage rates spell trouble for the US Housing Market
2. Inflation is dramatically impacting both consumer spending and the cost to produce homes
3. Demand is sharply decreasing for homes
4. Supply is low currently, but will be increasing due to New Homes (housing starts are largest since June 2006...) and Foreclosures hitting the market (we are at 4.6% delinquency - which was same levels around the beginning of 2007, with 30/60 delinquencies slightly rising quarter over quarter)
5. The United States largest Mortgage lender (Rocket Mortgages), saw their EBITDA decrease YoY, even though they wrote significantly more loans (both new and refinances) in 2021 with the historically low interest rates
6. With interest rates spiking, loan originations will slow (won't appear in the statistics for 1-2 months since those purchasing homes potentially will have locked in lower rates from before) and mortgage originators will need to spend even more marketing $'s to capture market share or lower their standards.
7. The Secondary MBS market will slow with the Fed's quantitative tightening, and thus create an issue where MBS security prices will plummet and rates will spike since investors will need to be compensated for the additional risk they will be taking on

TA/DR: Housing market still = bubble / Rocket Mortgage still = \[Chuckles\] "I'm in danger."

TL/DR: Nothing is a "straight line" (as many of you know with the volatility of $GME), however, I believe my thesis is still valid and the warning signs are there that the housing market will have some serious volatility in the coming months / years. With mortgage rates spiking and the Fed's quantitative tightening beginning, the outlook for the United States largest mortgage lender looks bleak, spelling bad news for the overall housing market. Essentially, tick...tock on round 2 for a housing crisis.

Appendix:

"Rocket Mortgages is a highly leveraged company, who's own 10-K filing suggests that they are a ticking time bomb to destruction, if there are issues getting loans off their books, and is being pushed by MSM as a "BUY" by CRYMER. Which should give you complete confidence that any "anti" Cramer play around that time (cough $GME), is the right call."

Note:

I try to respond and incorporate feedback / commentary as nobody is perfect. Please let me know if there are holes / parts of my argument to improve, as I want to ensure that this is an iterative DD.

Edits:

1. Typo and wrote Quantitative Easing vs Tightening