Great Financial Crisis (2008) vs. COVID-19 Pandemic (2020)

Examination of the economic environment and housing situation during the Great Financial Crisis (GFC, 2008) relative to COVID-19 Pandemic (2020).

	Great Financial Crisis 2008	COVID-19 Pandemic 2020
Existing Home Sales (EHS)	▪ Distressed portion of existing home sales ("EHS") amounted to ~30% between 2009 and 2012.	▪ EHS have just approached 6.5mm units on an annualized basis and reached a 14-year high. ▪ Currently, distressed sales (primarily made up of legacy origination) represent less than 1% of EHS.
Foreclosure Moratorium	▪ Federal Housing Agency ("FHFA") did not initiate a foreclosure moratorium until 2010, three years after foreclosures began by Servicers	▪ Foreclosure moratorium was immediately initiated under CARES Act on March 27, 2020 and offered protections for borrowers facing financial hardships caused by the Pandemic.
Available for Sale Inventory	▪ Inventory available for sale approached 11 months nationally and more than 20 months in parts of Florida and Nevada.	▪ Current level of inventory available for sale dropped to 2.7 months nationally and is less than 2 months in some CBSAs.
Modification Programs	▪ Home Affordable Refinance Program ("HARP") and Home Affordable Modification Program ("HAMP") were initiated in 2009 in order to help homeowners during the economic slowdown and to prevent foreclosures. ▪ At its inception, the program was not well defined and ultimately failed to stem the initial wave of liquidations. Operational issues, lack of consistency among servicers, poorly designed processes, as well as unmotivated borrowers with little or no equity in their homes all contributed to the rise in mortgage defaults.	▪ Immediately implemented Forbearance program allowed millions of borrowers the ability to apply for instant payment relief without any negative effects of their credit scores. ▪ Payment deferral program approved by the FHFA allows borrowers to simply re-start making their scheduled monthly payments without having to repay the past-due arrears. This option lets borrowers pay off the missed payment amount at the time their homes are sold, refinanced, or at maturity.
Layered Risk and Underwriting	▪ ~25% of 2005, 2006, and 2007 vintages have some degree of layered risk and substantial origination volume included alternative documentation, partial employment and income verification, silent second liens, and appraisal fraud.	▪ Current origination requires 100% full documentation. ~ 7% of 2017 to 2019 GSE originations have layered risk. ▪ Post 2011 defaults and losses are well below normal housing market experience of 2000 to 2002.
Loan-To-Value Ratios & Home Prices	▪ Home price declines that begun due to excess inventory and demand-supply imbalances left ~33% of all U.S. mortgages with negative equity.	▪ Lack of inventory and strong affordability due to historically low interest rates have resulted in home price appreciation since the pandemic began. ▪ Dealers have revised their home price projections for 2020 an 2021 with most projecting low single-digit appreciation.

FALCON BRIDGE Capital

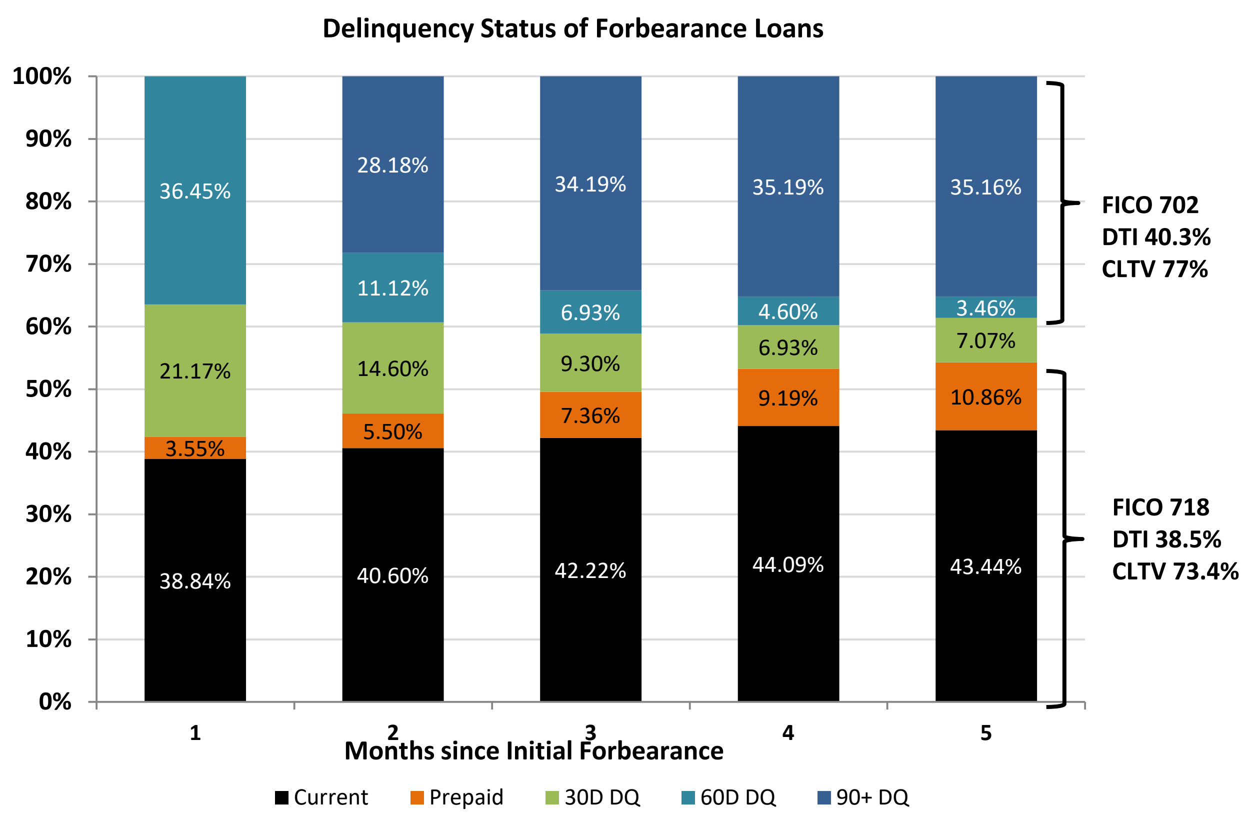
Strictly Confidential

Mortgage Forbearance Performance

- The mortgage assistance options and protections offered as part of the CARES Act provide great relief to borrowers struggling during the pandemic.
- The vast majority of borrowers are determined to stay in their homes given their sizable home equity amounts and limited rental options at affordable price points.

The strongest performance is evidenced by high cure rates among loans that took advantage of the offered payment assistance options.

- **Approximately 43.4% of borrowers who requested forbearance have since been able to self-cure, while over 10.8% paid off their loans in full since the beginning of the Pandemic.**
- The share of GSE loans in forbearance has been on a decline since June and currently stands at 3.77%.
- Borrowers that have not been able to self-cure **do not have** significantly different loan characteristics indicating they will avoid foreclosure.

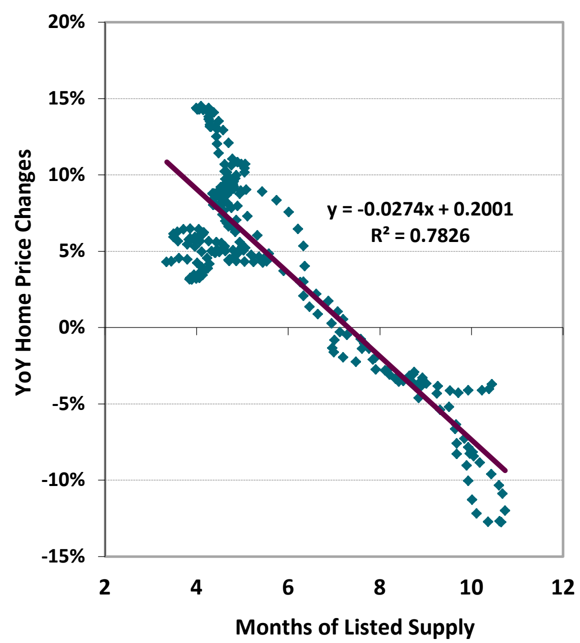


Sources: 1010 data, Freddie Mac, FBC

Estimated Housing Supply from COVID-19 Pandemic if Modifications are Unsuccessful

- As a result of the pandemic, total delinquencies in outstanding U.S. mortgages increased to 8.9%[1] in Q2 2020 compared to 4.55% at the end of Q4 2019. Based on this delinquency statistic, we attempt to estimate the number of housing units that could enter the market as distressed sales with the potential negative impact to home prices.
- We estimate that 1.5mm properties could be added to the housing supply (see chart below) based on the assumptions developed in the table below.
- This assumption is impractical as it would take multiple years for Servicers to foreclose and ultimately list properties for sale. Nevertheless, the resulting increase in months of supply to 6 months vs. the current level of 3 months would possibly result in no home price appreciation until the supply is absorbed.

Estimated Housing Supply from COVID-19 Pandemic if modifications are unsuccessful		
(a)	Total Mortgage Debt Outstanding[2]	$11.3 trillion
(b)	Average Balance	$230,000
(c) = (a)/(b)	# of Single-Family Units	49,130,435
(d)	Total Mortgage 30, 60, 90 Day Delinquencies	8.2%
(e)	Total Foreclosure %	0.7%
(f)	30, 60, 90 Day Delinquency Pull-through[3]	30%
= [(c)*(d)*(f)] + [(c)*(e)]	Total Estimated Supply from Pandemic	1,545,643
	Estimated Months of Supply[4]	**6**



**Months of Supply is 6m average moved forward 6m*

[1] *Mortgage Bankers Association ("MBA") reported 30, 60, 90 day delinquent seasonally-adjusted % plus Foreclosure %*
[2] *Urban Institute – Housing Finance At A Glance: A Monthly Chart book September 2020*
[3] *Assumes 30% of 30, 60, 90 day delinquencies will eventually be listed in the market - similar to the GFC crisis.*
[4] *Months of Supply estimate assumes existing home sales are 5.53 million units (December 2019 level) and current property listings of 1.5 million units (https://www.realtor.com/research/data/)*

Impact to Credit Risk Transfer ("CRT")

- The previous section discusses the impact to the total housing stock. The GSEs account for ~80% of the entire mortgage universe. Although total delinquencies are 8.9%, CRT delinquencies are estimated to be 6.4%. Under our stress scenarios, we estimate that 10% to 30% of the current delinquent mortgages would fail a modification program and eventually be liquidated. As a result, we estimate ~252k to 755k could be liquidated over the next 3 to 4 years.

	GSE Sector	# of Units
(a)	Total Mortgaged Units	49,130,435
(b)	GSE Mortgaged Units (80% of Total)	39,304,348
(c)	GSE Delinquent Loans (6.4%)	2,515,478

Scenario	# of Units	% of Total GSE Units
10% eventually default over next 3-4 years = 10% * (c)/(b)	251,548	0.64%
30% eventually default over next 3-4 years = 30% * (c)/(b)	754,643	1.92%

With the continued deleveraging (due to prepayments) in the deals, CRT B2 bonds remain well-protected and are not expected to experience any write-downs assuming a 20% severity in the 30% default scenario. (Defaults @ 1.92% * 20% Severity equates to ~38 bps of losses).

Sample B2 Bonds	Projected Credit Enhancement 3-4 years
STACR 2019-DNA3 B2 (62,720 loans; 0.20% Current CE)	**0.50% ***
STACR 2019-HQA2 B2 (48,697 loans; 0.20% Current CE)	**0.53%****

** 10% collateral clean-up expected in month 43*
*** 10% collateral clean-up expected in month 41*

The information contained herein is submitted to you on a strictly and permanently confidential basis.

- BY ACCEPTING A COPY OF THIS CONFIDENTIAL PRESENTATION, THE RECIPIENT AGREES THAT NEITHER IT NOR ANY OF ITS EMPLOYEES OR ADVISORS SHALL USE THE INFORMATION FOR ANY PURPOSE OTHER THAN EVALUATING THE SPECIFIC TRANSACTION DESCRIBED HEREIN OR DIVULGE TO ANY OTHER PARTY SUCH INFORMATION. THIS CONFIDENTIAL PRESENTATION SHALL NOT BE PHOTOCOPIED, REPRODUCED OR DISTRIBUTED TO OTHERS WITHOUT THE PRIOR WRITTEN CONSENT OF THE PRINCIPALS.
- NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, THE RECIPIENT (AND EACH EMPLOYEE, REPRESENTATIVE, OR OTHER AGENT OF THE RECIPIENT) MAY DISCLOSE TO ANY AND ALL PERSONS, WITHOUT LIMITATION OF ANY KIND, THE TAX TREATMENT AND TAX STRUCTURE OF THE TRANSACTIONS DESCRIBED HEREIN) AND ALL MATERIALS OF ANY KIND THAT ARE PROVIDED TO THE PROSPECTIVE INVESTOR RELATING TO SUCH TAX TREATMENT AND TAX STRUCTURE (AS SUCH TERMS ARE DEFINED IN TREASURY REGULATION SECTION 1.6011-4). THIS AUTHORIZATION OF TAX DISCLOSURE IS RETROACTIVELY EFFECTIVE TO THE COMMENCEMENT OF DISCUSSIONS WITH PROSPECTIVE INVESTORS REGARDING THE TRANSACTIONS CONTEMPLATED HEREIN.
- THE FINANCIAL PROJECTIONS INCLUDED HEREIN HAVE BEEN PREPARED ON THE BASIS OF ASSUMPTIONS STATED THEREIN. FUTURE OPERATING RESULTS ARE IMPOSSIBLE TO PREDICT AND NO REPRESENTATION OF ANY KIND IS MADE RESPECTING THE FUTURE ACCURACY OR COMPLETENESS OF THESE FORECASTS.
- THIS DOCUMENT AND THE RELATED ORAL PRESENTATION IS NOT AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY SECURITIES.
- THE INFORMATION INCLUDED HEREIN IS PRELIMINARY, AND WILL BE SUPERSEDED BY A DEFINITIVE PRIVATE PLACEMENT MEMORANDUM.
- WE WILL NOT ACCEPT ANY OFFER BY YOU TO PURCHASE SECURITIES AND YOU WILL NOT HAVE ANY CONTRACTUAL COMMITMENT TO PURCHASE SECURITIES UNTIL AFTER YOU HAVE RECEIVED THE DEFINITIVE PRIVATE PLACEMENT MEMORANDUM.
- DISCUSSIONS OF FEDERAL TAX ISSUES IN THIS PRESENTATION ARE NOT INTENDED TO BE RELIED UPON BY INDIVIDUAL INVESTORS. EACH INVESTOR SHOULD SEEK ADVICE BASED ON THEIR PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.
- THERE CAN BE NO ASSURANCE THAT PROJECTED RETURNS WILL BE ACHIEVED OR THAT THE FUND WILL BE ABLE TO IMPLEMENT ITS INVESTMENT STRATEGY OR ACHIEVE ITS INVESTMENT OBJECTIVES.
- GROSS IRRs DO NOT REFLECT MANAGEMENT FEES, CARRIED INTEREST, TAXES, TRANSACTION COSTS AND OTHER EXPENSES TO BE BORNE BY INVESTORS IN THE FUNDS, WHICH WILL REDUCE RETURNS.

10.2020