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Mastering the Hard Part

Creating Positive Forbearance Outcomes From COVID-19

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01. Executive Summary
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In prior white papers, we quantified the magnitude of the COVID-19 forbearance challenge[1] and identified opportunities to leverage digital borrower engagement platforms to manage that challenge.[2]

With nearly 6 months of data and experience under our belts, we evaluate current trends and assess a likely range of outcomes using a novel approach based on forward-looking market segmentation. At the end of this document we outline how servicers can leverage technology to address these segments. We offer a new baseline trajectory given updated assumptions on the progress of efforts against the disease and the level of government unemployment support. We draw several conclusions based on the latest information available:

1. 75% of the borrowers who remain in forbearance are likely to need interventions to assist in repaying missed payments.

2. In the absence of a rapid restart of the economy due to an unexpected vaccine breakthrough and/or continued unprecedented fiscal support, we are likely to see a continued flattening of the forbearance curve.

3. Borrowers in forbearance will continue to follow different paths based on circumstances, with reduced opportunity for traditional Modifications to make an impact due to a narrow DTI (debt-to-income) range in which Modifications are both feasible and advantageous. If

1 https://www.aspengrovesolutions.com/forbearance-in-the-cares-act/

2 https://www.aspengrovesolutions.com/digital-engagement-vs-death-by-a-thousand-cuts-managing-the-post-covid-surge-in-default-servicing/

6 weeks

Time to replicate same non-payment rate which took 42 months in the Housing Crisis

https://www.aspengrovesolutions.com/digital-borrower-engagement-white-paper/

borrowers are unable to leave forbearance by immediate repayment, using a Deferral program (that requires resuming their normal monthly payment) and/or refinance (which can modestly lower monthly payments), then they are at high risk of needing a resolution option that involves losing their home.

02. This Time is Different: Fewer Strategic Defaults

Positive Forbearance Outcomes

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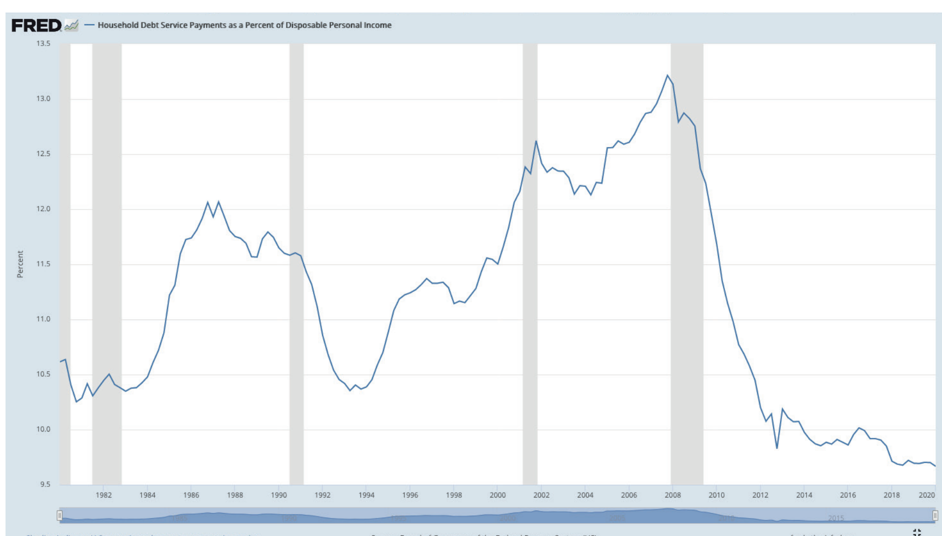
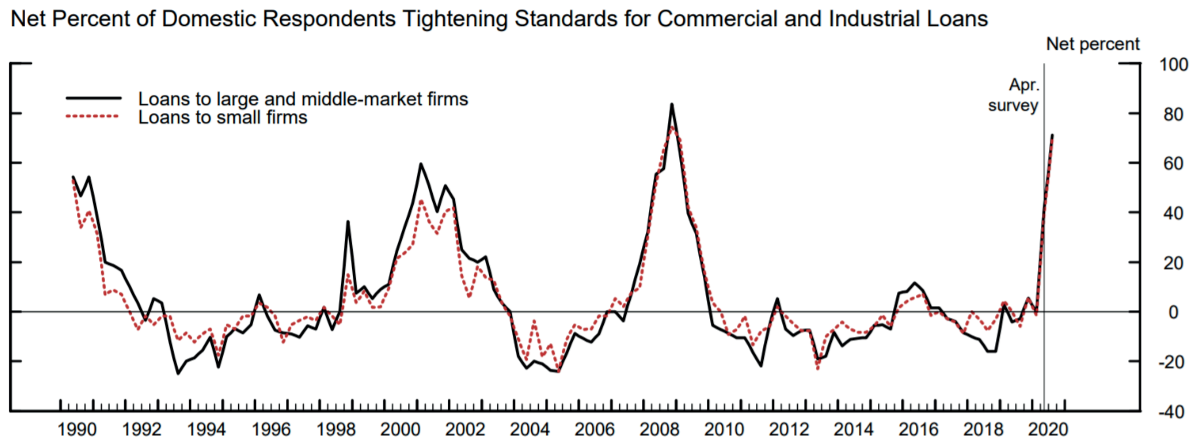
Unlike in 2008, strategic defaults have not emerged as a serious problem and seems unlikely to emerge given stronger expectations for property price increases[3], a record low inventory of homes[4], and stable residential underwriting standards leading up to the crisis which has reduced the number of owners who are underwater.

Likewise, overall debt service costs are historically low as a percentage of income, suggesting a relatively high ability to pay in the aggregate that will preclude a national liquidity-driven housing implosion.[5] Even in the commercial (multifamily) market, which saw a modest loosening of standards in 2018[6], the supply of multifamily housing remains in balance with demand. Moreover, the increased construction in 2019 was already shifting to the suburbs prior to the COVID crisis as developers followed Millennials who were forming households and starting families.[7] Rather than mothballing projects (as we saw in 2009), developers are rushing to complete construction and increasing expenditures.[8]

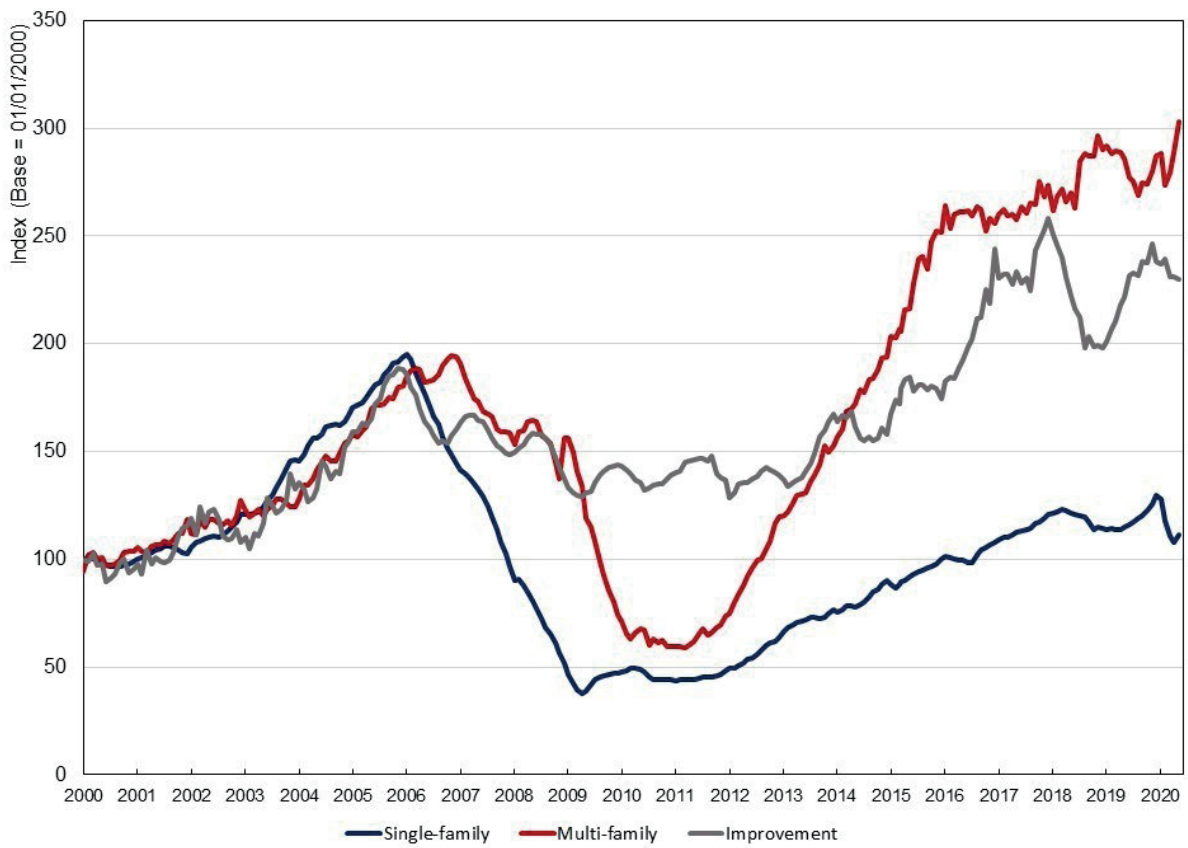


fred.stlouisfed.org - Household Debt Service Payments as a Percent of Disposable Personal Income

3 https://www.noradarealestate.com/blog/housing-market-predictions/
4 https://www.housingwire.com/articles/inventory-of-homes-for-sale-reaches-record-low/
5 https://fred.stlouisfed.org/series/TDSP
6 https://www.federalreserve.gov/data/sloos.htm
7 https://www.cbre.us/research-and-reports/2020-US-Real-Estate-Market-Outlook-Multifamily
8 http://www.mortgagenewsdaily.com/09012020_construction_spending.asp



Senior Loan Officer Opinion Survey on Bank Lending Practices (source: Federal Reserve)



Private Residential Construction Spending Index (source: NAHB, Mortgage Daily News)

All of this suggests that most homeowners will try their best to retain their homes and that the limiting factor will be capability rather than intention.

03. Unemployment and the Flattening Forbearance Curve
Positive Forbearance Outcomes

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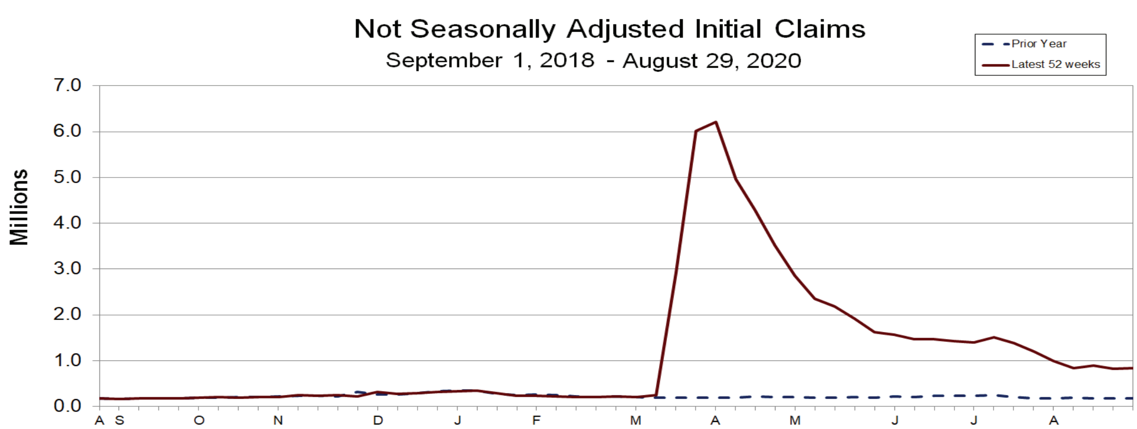
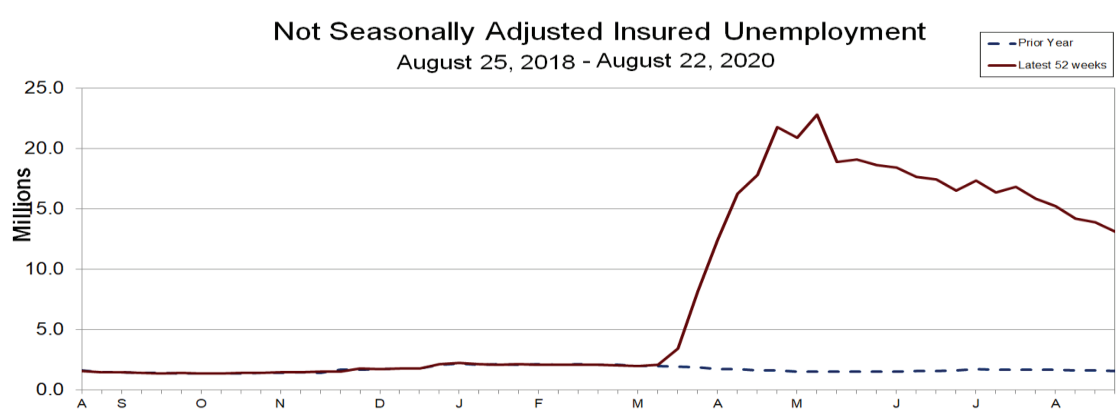
In the current crisis, unemployment and lost income (including self-employment income) is the overwhelming driver behind forbearance rates & resolution paths.

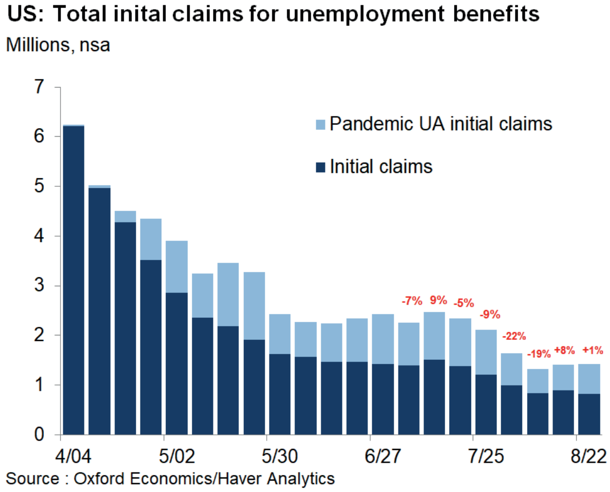
As we observed previously, unemployment trends have followed an exceptional path.[9]

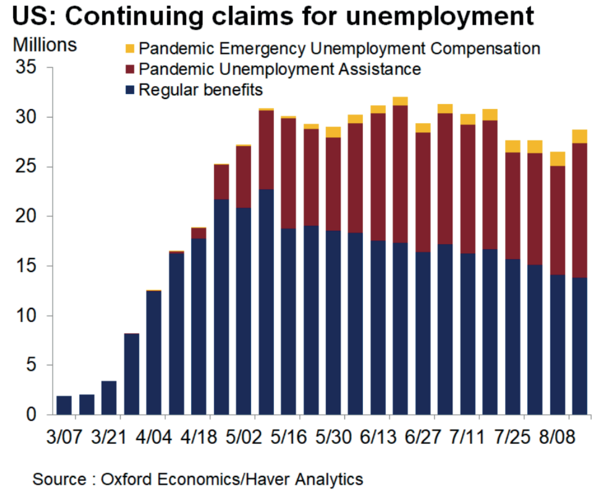
The historical relationship between unemployment and mortgage delinquency suggested an eventual forbearance peaking at around 12%, however the actual forbearance rate peaked at 8.5% due to the $3 trillion dollar spending provisions in the CARES Act and re-employment (or declining unemployment).





9 https://www.dol.gov/ui/data.pdf



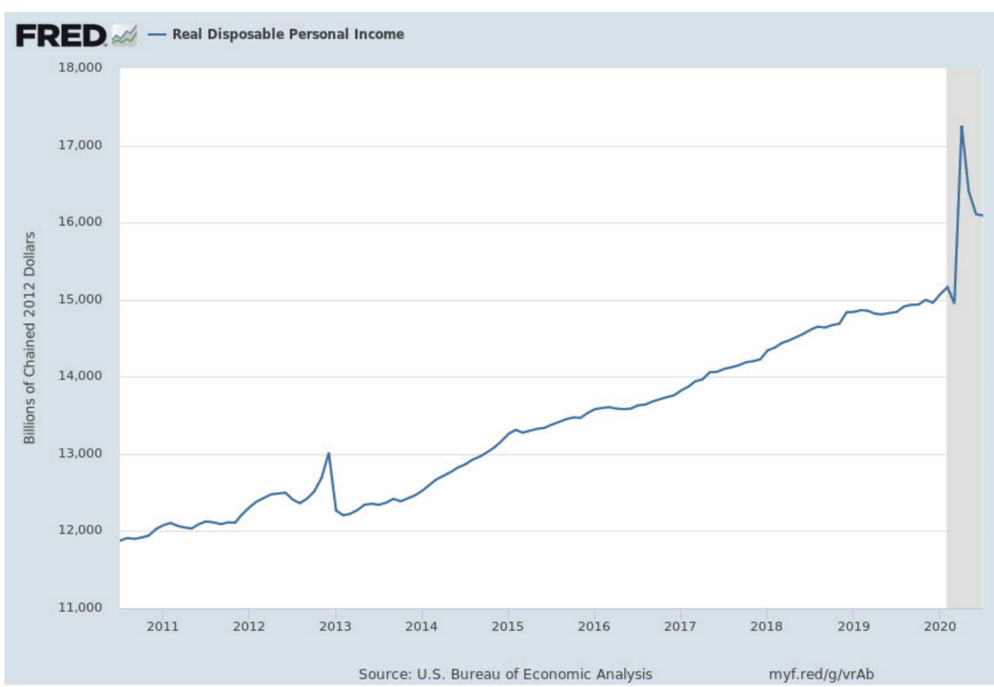


$2.31 Trillion

The month-over-month increase (15%) in real disposable income in April 2020.

https://fred.stlouisfed.org/series/DSPIC96

Such was the magnitude of spending in the CARES Act that many unemployed workers received more money from benefits than from their jobs,[10] leading to an unprecedented spike in real disposable personal income in the middle of a recession.[11] This spending mostly ended in August, although various provisions in pending legislation suggest that at least a portion of it will continue through the end of the year. Under normal circumstances, the relationship between aggregate personal discretionary income and mortgage delinquency is muted at best, with historical data suggesting that the CARES Act spending only reduced forbearance rates by about 75 basis points.[12] However,



fred.stlouisfed.org - Real Disposable Personal Income

10 https://www.npr.org/2020/07/01/882957793/when-essential-workers-earn-less-than-the-jobless-we-put-the-country-on-our-back

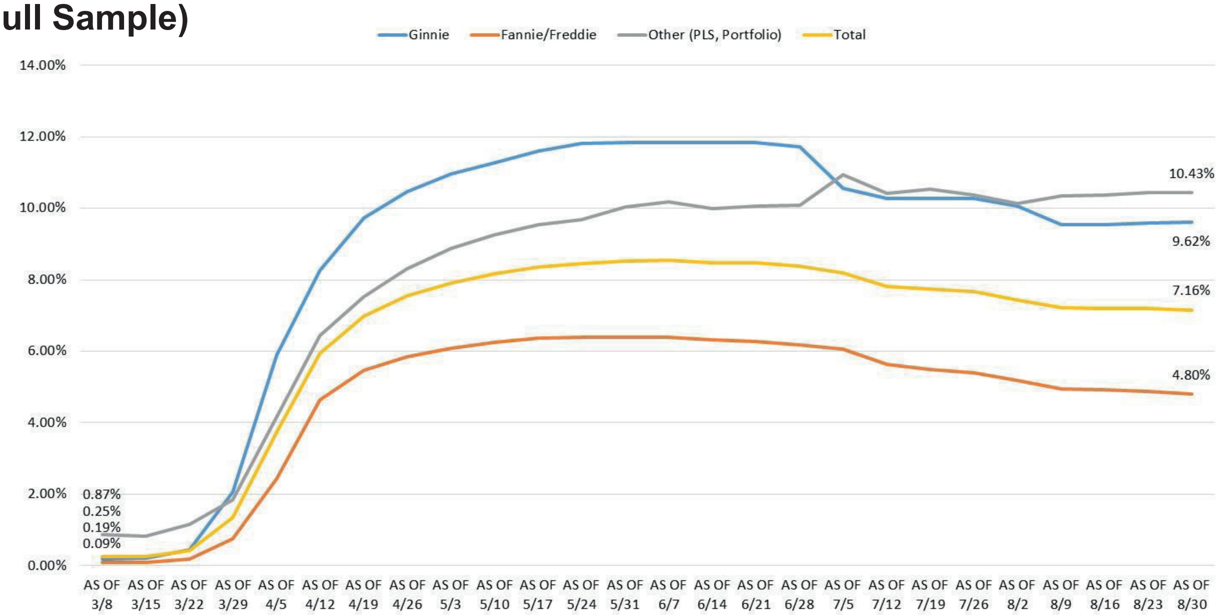
11 https://fred.stlouisfed.org/series/DSPIC96

12 https://www.stlouisfed.org/on-the-economy/2020/august/effects-extra-unemployment-benefits-household-delinquencies

this relationship assumes that the personal income impact is diffused across the economy. The targeted nature of the CARES Act has certainly created a much stronger impact. The relationship between unemployment, federal support, and forbearance rates and outcomes is immediately visible in the trend data.[13] Forbearance rates initially declined rapidly after states began reopening in June and many borrowers who had applied for forbearance out of an abundance of caution chose to exit. In the most recent weekly data, however, the share of borrowers entering forbearance (0.10%) is close to in balance with those exiting forbearance (0.13%).

Much noise has been made of the fact that 25% of those borrowers still in forbearance are continuing to make payments[14], with this data implying that there are many borrowers who have the means to repay and are simply using forbearance as an insurance or cash management tool. On the other hand, other data sources indicate that a large portion of unemployed Americans have been using Federal unemployment benefits to stay current on rent and mortgage payments.[15] On balance, it seems risky to assume that more than 25% of borrowers in forbearance will be able to leave forbearance without either selling their homes or using a repayment program of some sort.

% of Servicing Portfolio Volume in Forbearance by Investor Type over Time (Full Sample)



MBA Forbearance and Call Volume Survey Results

13 MBA Forbearance and Call Volume Survey Results

14 https://dsnews.com/daily-dose/08-19-2020/urban-institute-outlines-six-things-to-know-about-mortgage-forbearance

15 https://www.cbpp.org/research/poverty-and-inequality/tracking-the-covid-19-recessions-effects-on-food-housing-and

04. Location, Location, Location: Differences Across States and Cities
Positive Forbearance Outcomes

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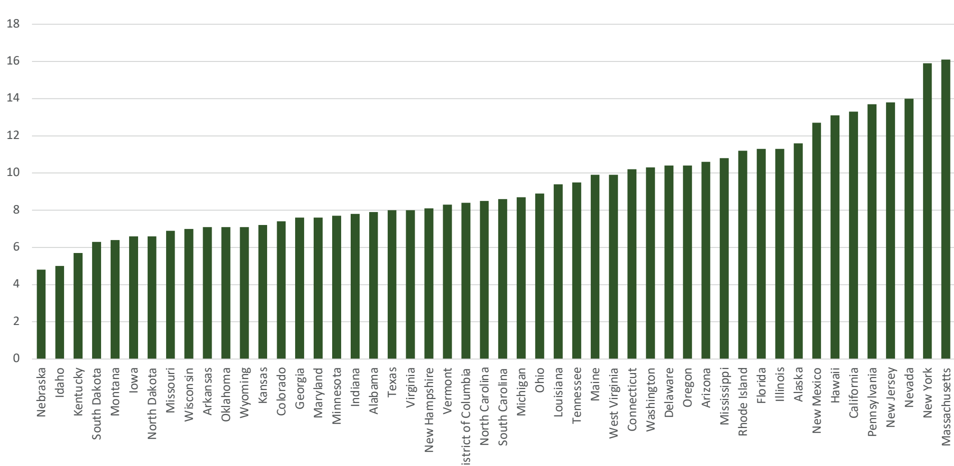
Expectations for housing dislocation and speed of recovery vary substantially across markets.

Much of this is driven by local economic factors. Even the state-wide unemployment rates vary by a factor of 300% across states, from just under 5% in Nebraska to 16% in Massachusetts and New York.[16]



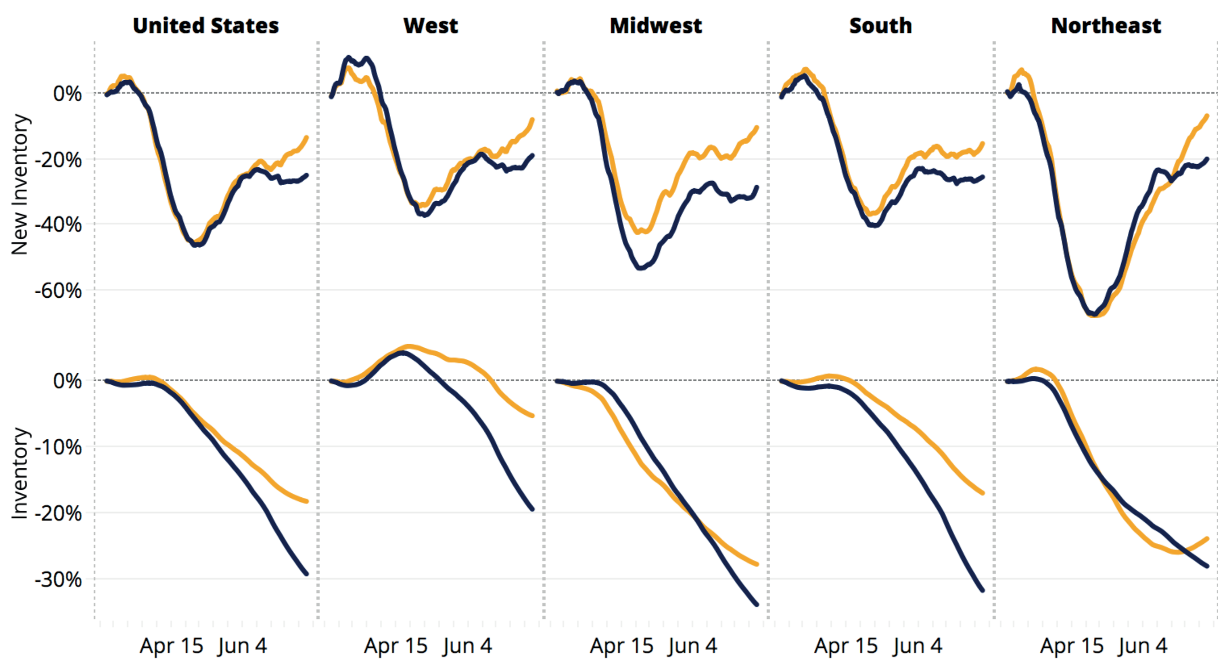
State Unemployment Rates August 2020 (source: Federal Reserve)

16 https://fred.stlouisfed.org/series/UNRATE

Likewise, the overall health of the national property markets masks a striking divergence across states and even zip codes. A 2019 analysis[17] reporting on "equity-rich" homeowners nonetheless identified that all 10 states with the highest mortgages that are seriously underwater were all in the Midwest and South, led by Louisiana (16.8 percent), Mississippi (16.0 percent), West Virginia (13.9 percent), Iowa (13.5 percent) and Arkansas (12.9 percent).[17] This analysis further identified 149 zip codes with over 25% of properties that were seriously underwater. Given sales transaction and moving costs, however, even modestly underwater or at-the-money mortgages face more limited options in exiting forbearance.

The 2019 differences in mortgage equity will be further impacted by divergent trends in 2020. General expectations of a shift to suburbs have already started showing up in property market data, where inventory has been rising substantially faster in urban zip codes.[18] This is even more dramatic in individual cities like New York and San Francisco.[19] In general, poorer households in more expensive areas are being hit harder, as will poorer households in areas that have been suffering longstanding distress and outmigration. This is clearly reflected in the FHA forbearance rates, which are over double the forbearance rates for GSE loans, and have not been declining as rapidly.

Change in YoY Inventory and YoY New Inventory from February 2020, by **urban** and **suburban** ZIP codes

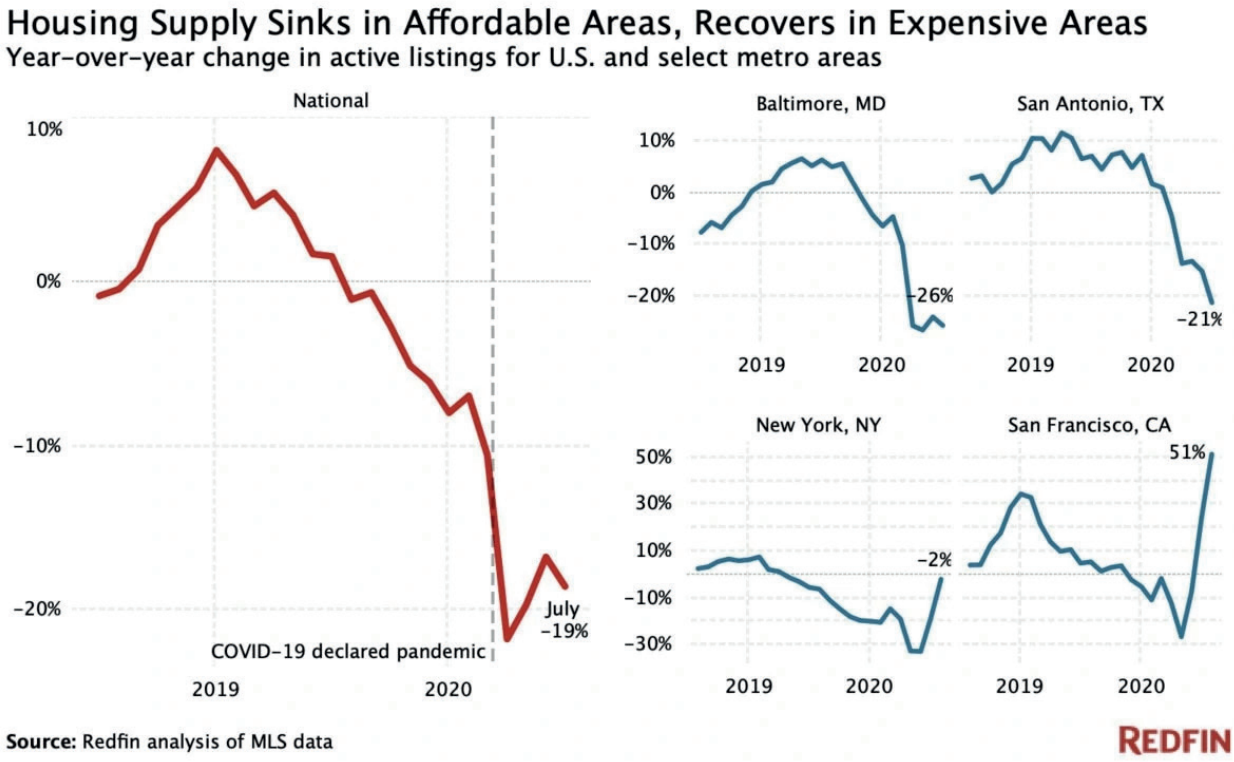


Source: Zillow

17 https://www.prnewswire.com/news-releases/us-homeowners-four-times-as-likely-to-be-equity-rich-than-seriously-underwater-300999975.html

18 https://www.zillow.com/research/2020-urb-suburb-market-report-27712/

19 https://www.redfin.com/blog/coronavirus-real-estate-housing-shortage/



Source: Redfin

"We think that the economy's going to need low interest rates, which support economic activity, for an extended period of time," he said. "**It will be measured in years**."

Jerome Powell

Chair of the Federal Reserve

05. Forbearance Exits to Date: A Review
Positive Forbearance Outcomes

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MBA publishes weekly reason codes for forbearance exits which provides some limited guidance about what we might expect going forward.[20]

Unfortunately, this data summarizes the "easy cases", and thus we need to exercise caution in projecting recent history into the future.

Aside from a spike in forbearance exits that occurred in June (and then diminished rapidly), the most notable feature of the data is the distribution of exit reasons and the change in that distribution. During the first three months, most people who left forbearance – 60% to 80% - immediately paid back their missed payments. During the most recent three months, this share dropped to about 50%, even as the total number of people exiting forbearance also decreased. The longer that people remain in forbearance (and build up missed payments), the less feasible reinstatement will become as an exit option.

The largest single month of exits was in July, roughly 3 months after the peak in entries. During that period, we also saw an increase in Modifications, Deferrals, and exits into Delinquency. During the largest week of exits, Modifications exceeded 18% of the total and Deferrals exceeded 43%. Throughout the period, loan payoffs (presumable sales and/or refinances) have varied between 5% and 10% of the total exits. Repayment plans, however, have remained a tiny fraction of the number of exits (as we might expect given the obvious benefits of the Deferral programs).

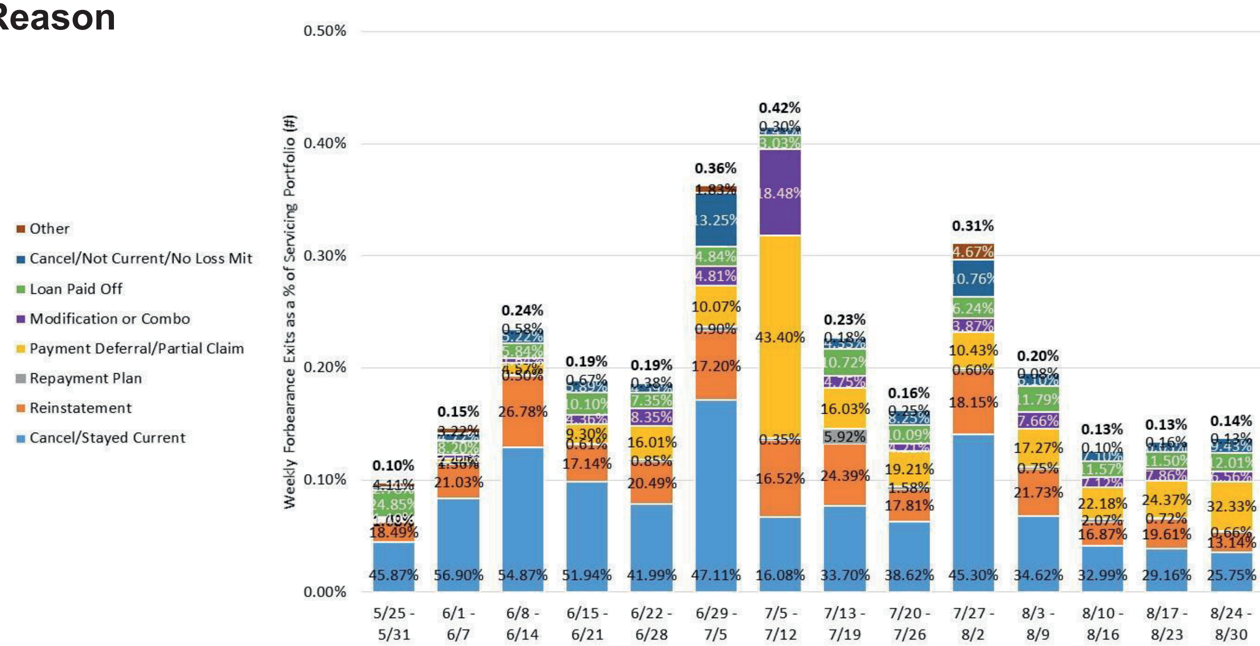
20 MBA Forbearance and Call Volume Survey Results

-0.03%

Net change of borrowers in forbearance in the last week of August 2020 (0.14% exits, 0.11% entrants)

As we continue to advance, we anticipate seeing reinstatements continue to decline and an initial shift towards Deferrals and some Modifications. The most desperate households will likely remain in forbearance for the full 12 month period (assuming it is not extended), at which point we anticipate seeing an increasing number of workouts shifting toward non-retention loss mitigation options. Simultaneously, we anticipate seeing refinances and/or payoffs increase slightly from the current 11-12% as borrowers and banks become more familiar with this option and the benefits it brings for many borrowers. In fact, the numbers likely understand the actual incidence of refinances, since refinancing for GSE loans requires completing 3 months of successful Deferral payments first (unlike FHA loans which can refinance immediately due to the partial claims process which allows subordination as per a second lien). This data, in combination with unemployment and property trends, helps inform a framework for projecting likely outcomes in 2021.

Composition of Forbearance Exits as a % of Servicing Portfolio (#) by Reason



MBA Forbearance and Call Volume Survey Results

06. A Framework for Forecasting Positive Forbearance Outcomes

06

In our prior work, we provided a forecast framework based on historical patterns in disasters, which we represented as a decision tree.

Since then, significant changes in government programs and policies have altered that framework. Specifically, it has never before been possible for borrowers to refinance while owing up to 12 months of missed payments, or for borrowers to defer payments to the end of their mortgage term without a Modification (such as a Cap and Extend Disaster Mod) that would normally impact their credit score significantly.

Given the lack of historical precedence, we revisit the question of how borrowers will exit forbearance using an alternative approach that is borrowed from the marketing science literature: specifically, we represent forbearance exit option as 'products' that are offered to segments of the market. We then examine the segments that are most likely to take up those products, and provide a template for estimating segment size based on the needs of each segment. We present the general list of options, definitions, and segment needs below.

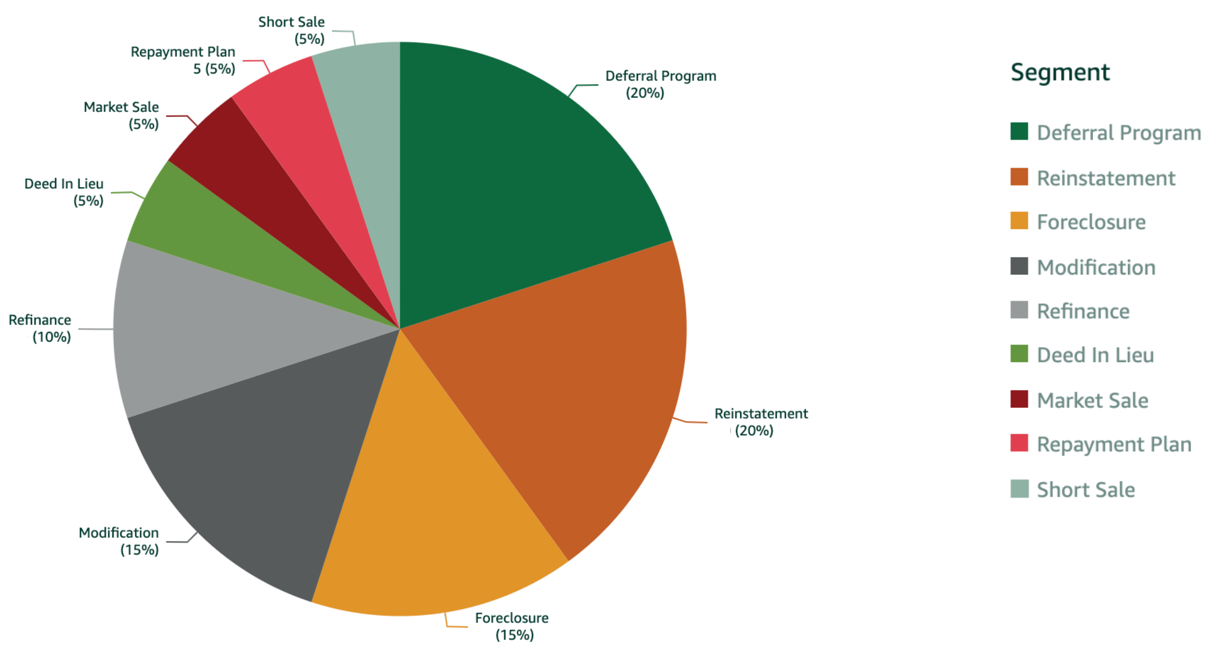
Solution	Definition	Target Segment
Reinstatement	Pay it back immediately	Borrowers who pre-emptively entered forbearance (for cash management or abundance of caution), but have the means to pay and wish to protect their credit scores

Solution	Definition	Target Segment
Refinance	Repay, capitalize forbearance amount	Borrowers who have strong credit, have good or improved equity in their homes, possibly had a higher interest rate on their original loan, have steady employment / no significant wage loss, and income. sufficient to achieve target DTI
Repayment Plan	Pay it back in higher monthly payments	People who cannot reinstate using savings, but have increased monthly income, and do not want to use the Deferral program.
Deferral Program	Shift payments to end of term	Borrowers who lost income temporarily but regained most or all of their income, but are not in a position to refinance due to credit score, home equity, low total loan value relative to closing costs, or simple apathy.
Modification	Flex Mod or other mod	Households that permanently lost 20% to 30% of their income, but not all of their income, and want to remain in their home.
Market Sale	Sell and repay loan in full	Borrowers who have 5% or more equity in their homes who want to sell (and rent) or sell and change houses; rare in a Covid world, where Sale inventory is highly constrained.
Short Sale	Sell and partially repay loan	People who have no material equity in their homes who want to get out of homeownership; less likely than post-2008 since few homes are underwater and rent is often higher than mortgage payments.
Deed in Lieu	Voluntary release of interest in property	People who would otherwise suffer foreclosure, do not want to (or cannot) sell their home, can find affordable rental housing, want to leave their home, and less likely to live in judicial states.
Foreclosure	Formal foreclosure process	Where all other options have been exhausted and/or the borrower has abandoned the property, requiring legal proceeding to recover the property.

Solution	Size	Rationale (and risks)
Reinstatement	25%	Current number of borrowers who are in forbearance making payments. Upside: some borrowers may be holding onto cash but fully able to pay. Downside: Many of the 25% of those making payments may lose the ability if the federal government does not extend increased benefits.
Refinance	10%	The Federal Reserve expects unemployment to drop to 6.5% by mid-2021, a 24% reduction from the level today. A straight-line projection to forbearance rates suggest a similar share of borrowers who will regain jobs and be able to make payments. Those borrowers who have sufficient equity can significantly benefit from lower monthly and total loan costs in the current rate environment, providing a very attractive alternative to a simple Deferral Program. Success rates will depend on income stability and documentation.
Repayment Plan	<5%	There is almost no reason to go on a repayment plan instead of a Deferral plan, unless the investor does not allow such a plan. Investor options will depend on how many follow the federal agency / GSE lead.
Deferral Program	20%	As noted in refinance, workers who recover income can essentially pick up payments where they left off. Upside: Economy recovers faster. Downside: Private investors fail to follow GSE precedent.
Modification	15%	Although many have speculated that Deferrals will completely replace Modifications, there are three drivers that will keep the Modification rate high: 1) Households that recover only 70% to 90% of their income will require Modifications; 2) Households that remain unemployed for longer than the forbearance period (12 months, without further extension) may temporarily become delinquent, and then need a Modification; 3) Private investors may demand Modification instead of payment Deferrals.
Market Sale	5%	Relatively few households anticipate selling their homes, largely because they do not have less expensive alternative housing options. If sales are driven by exogenous factors, they will reflect national sale rates… about 5%. Most will have enough equity to avoid a short sale, though FHA loans will be at much higher risk of requiring a short sale. Historic reason codes for exits support this projection.

Solution	Size	Rationale (and risks)
Short Sale	<5%	We anticipate that borrowers will try to stay in their homes rather than strategically exiting, and most of those that sell will have sufficient equity to avoid a short sale. FHA loans, and possibly privately held loans, may be at higher risk of a short sale due to lack of equity. These loans do have higher forbearance rates (about 10%) compared to GSE loans (about 5%).
DIL	<5%	As noted above, and we anticipate that borrowers will reject DIL payments unless they are substantive, particularly given the protections that homeowners currently have in the COVID crisis (including at the state level).
Foreclosure	10%-15%	Recent zip-code level analysis suggests a baseline number of homes requiring foreclosure of 336,000, possibly up to 500,000. In the absence of further Federal support, we are leaning toward the higher end of this range (close to 15%). This is driven by projections that unemployment remains systematically elevated (at 5.5%) through 2022, and because many of the hardest hit zip codes are in judicial states, some with high rents. This creates strong incentives for borrowers to fight to retain their homes and reject deed-in-lieu payments.

A Model for Potential Market Segmentation of Forbearance Exits



22 https://www.attomdata.com/news/market-trends/figuresfriday/residential-foreclosure-activity-in-u-s-could-easily-double-over-coming-year/

07. Managing Uncertainty: What Servicers Can Do Now
Positive Forbearance Outcomes

07

While part of the process of projecting outcomes simply helps us prepare for the financial consequences, Servicers have considerable latitude to impact outcomes through proactive operational improvements.

As we've identified in prior white papers, Servicers can begin by optimizing their borrower engagement processes and leveraging modern technology platforms. We have previously highlighted several benefits:

- Dramatically cut operational costs (or avoid adding costs through the onboarding large numbers of people to deal with volumes) by digitizing interactions where possible. Up to 80% of borrowers prefer to engage digitally whenever possible, and the non-digital interactions cost 4000% more than digital interactions.
- Improve pull through and success rates for more attractive loss mitigation options by helping borrowers through the complex processes and encouraging them to engage rather than avoid the problem. Shockingly, recent research indicates that 530,000 borrowers became delinquent after COVID began despite being eligible for forbearance.[23] Additionally factors, such as lost mail, uncertainty, anxiety, and missed timelines have caused historical pull-through rates on Modification programs to fail to exceed 30%.
- Improve loan retention rates by proactively preparing borrowers to refinance where eligible. Servicers that

23 https://dsnews.com/daily-dose/08-19-2020/urban-institute-outlines-six-things-to-know-about-mortgage-forbearance

530,000

Borrowers who became delinquent despite being eligible for Covid forbearance.

own a loan origination capability can further benefit by profiting from the gain on loan sale should they then choose to sell that loan, helping to offset increased servicing costs elsewhere in their operations.

- Reduced cost of regulatory compliance and risk of fines. Systems that can automatically document communications, help Servicers and customers avoid missing timelines, and ensure consistency throughout the process have proven themselves invaluable since the 2008 crisis.

- Reduce training time and improve operational flexibility. Systems that allow operations teams and call centers to effectively scale up existing talent pools without rapidly hiring, training, and then laying off large teams help Servicers to reduce cost, improve morale, and avoid risks.

The response to the current challenge continues to vary widely across Servicers, with some investing ahead of the curve and others reacting in the moment. Servicers that plan and invest in modern flexible technologies prior to the mass exodus from forbearance that will begin in March of 2021 will be at a significant competitive advantage in handling whatever the future throws at them.

Please reach out to us to discuss any of the issues raised in this paper.