INDUSTRY PERSPECTIVES

America's Housing Finance System in the Pandemic

The Causes and Policy Implications of Credit Tightening

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Introduction

"Mortgage Loans Get Harder To Come By As Lenders Tighten Standards." Forbes, April 12, 2020

"Mortgage Lenders Tighten Screws on U.S. Credit in Echo of 2008"
Bloomberg, May 8, 2020.

"Mortgage Credit Tightens, Creating Drag on Any Economic Recovery."
Wall Street Journal, May 25, 2020

As the economic impact of the pandemic continues, one of the biggest issues to emerge in housing finance is the availability of mortgages. Media reporting and policy discussions often imply that mortgage credit tightening – which has undeniably occurred – is a major problem, maybe even on par with what happened in the financial crisis just over a decade ago. Additionally, especially in the housing finance policy community, the implication seems to be that somehow much or even all of that tightening is illegitimate, a failure of government policy; that it should be largely if not totally avoidable with the right government actions; and that those actions should *not* require the kind of subsidies we are seeing for small business or specific industries, like the airlines.

Is this view legitimate? Or is it all-too-common Washington wishful thinking? Or perhaps something in between?

This paper will answer these questions by examining how mortgages get made in 21st-century America, who sets the credit standards, why those standards are not – and should not be – fully immune to economic conditions, and to what extent government policies other than overt subsidies can help mortgage credit resist unnecessary tightening.

The conclusions reached are: (1) that the mortgage credit tightening that we are seeing is much less of an issue than encountered in the prior financial crisis; (2) that it is reasonable and appropriate that there should be tightening to a modest degree, even with the best possible government policy, as risks have gone up in the current economic environment; and (3) that the tightening we are seeing is overwhelmingly a byproduct of the private sector, as it performs its major role in housing finance, behaving as one would expect in an economic downturn – and it would be even worse if government played a lesser role than it currently does.

However, also exacerbating that tightening, and probably in a very significant way, is a flaw in the generous mortgage forbearance program established by the CARES Act in late March. This is because it applies not only to then-outstanding government-supported mortgage loans, for which the

forbearance program was originally designed, but also to newly-made ones as well. This is explored in some depth below, and is the cause of significant friction between the mortgage industry and the government mortgage agencies of Freddie Mac, Fannie Mae, and the Federal Housing Administration.

The paper also notes that the public perception of the causes and possible cures for credit tightening is too much driven by a combination of mortgage industry lobbying narratives and the media's viewing the issue excessively through the lens of the prior financial crisis.

How Mortgages in 21st-Century America Get Originated

Prior to the beginning of the Great Depression, mortgages were very restrictive in comparison to today: for example, terms were usually a 5- to 10-year balloon versus today's 30-year self-amortizing maturity. Furthermore, the amount of a mortgage was most often limited to 50% to 60% of a house's value, versus today's 80% and higher. Mortgages came primarily from savings banks and other types of non-bank financial institutions, as commercial banks at that time did not emphasize consumer business. Then, in the early days of the Great Depression, those mortgage lending institutions came under tremendous liquidity stress, as deposits and other funding sources were withdrawn and they had no method of replacing them to continue making mortgage loans. This loss of liquidity exacerbated the economic collapse, as house prices fell and new home construction came almost to a halt.

It was this searing experience of losing liquidity that drove the objective of the government-led restructuring of housing finance during the next sixty years, when the last major change occurred. During those sixty years, housing finance changed dramatically, and more than once. Older adults, for example, will remember the post-World War II era when the mortgage system was dominated by thrifts which held fixed-rate mortgages in their loan portfolios. That route, broadened to include all types of banks[1] rather than just thrifts, still exists today, but it accounts for a minority of the mortgages originated today. Instead, and for the last quarter-century, housing finance is based mainly upon borrowers going to mortgage intermediaries that in turn access, through various routes, government-supported mortgage investors that finance themselves mostly through securitization.

This is an extremely complex system, and it is very efficient and effective when economic and market conditions are stable. However, like most complex systems, it is prone to significant distortions and instability when they are not.

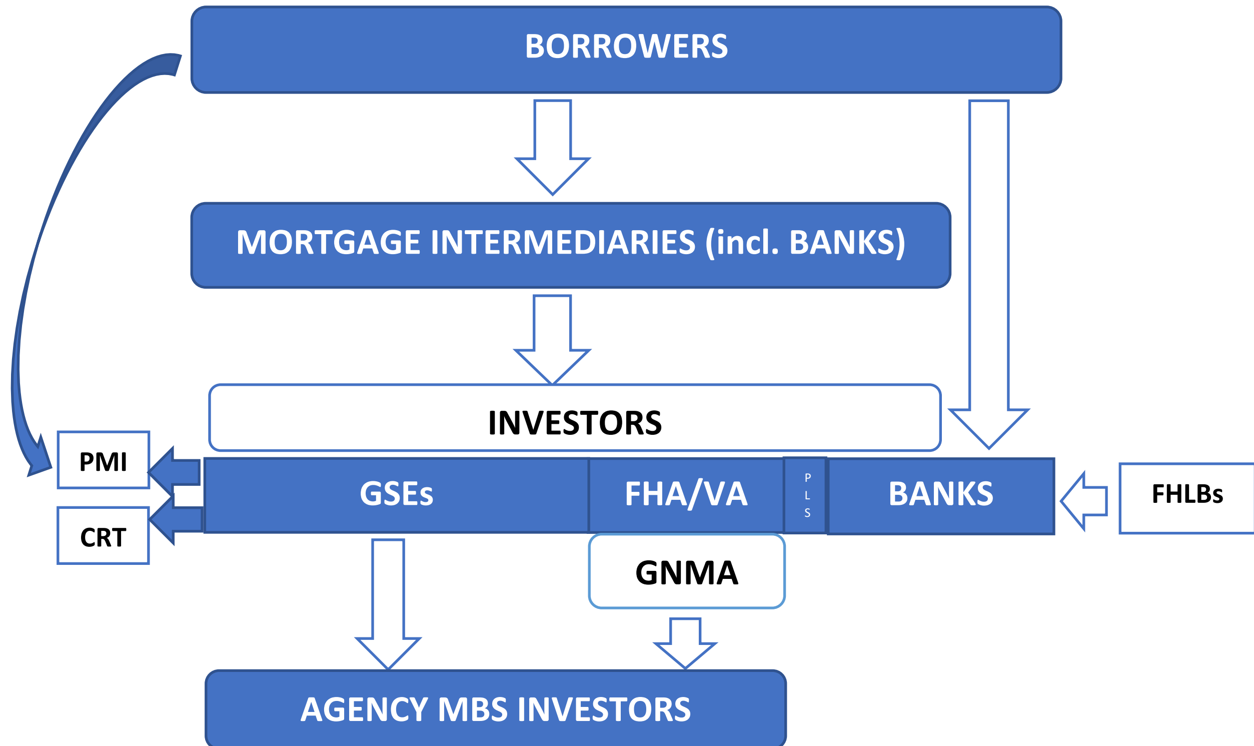
[1] In this article, "banks" refers to all types of depository institutions, such as commercial banks, savings & loans, mutual savings banks, credit unions, etc.

The schematic below shows today's flow of mortgages, in simplified form. The key takeaways from the schematic are as follows:

1. The traditional notion of getting a mortgage from a bank, which is then held in its loan portfolio, is represented by the arrow on the right side. It is comparatively simple and clean, but clearly accounts for a minority of loan originations.
2. The majority of originated loans instead go through the hands of one of many mortgage intermediaries. These companies help originate a mortgage loan but do not keep it long term (if at all); instead, they pass it along via one of several mechanisms to a final "investor" (as they are called in the industry). These intermediaries include non-bank mortgage companies (the largest and best-known being Quicken), mortgage brokers and even securities firms. A loan can pass through multiple intermediaries before reaching its final investor.
3. Mortgage investors, shown in rough proportion to their recent share of the market, include: (1) the two government-sponsored enterprises (GSEs) Freddie Mac and Fannie Mae, for roughly 45% of the market; (2) the Federal Housing Administration (FHA) and Department of Veterans Affairs (VA), for about another 20%; they in turn utilize a third government agency, Ginnie Mae (also known as GNMA), to do their securitization; (3) banks, for almost another 25% of the market (which includes their own directly originated loans); and lastly (4) the private label securitization (PLS) market,[2] for about another 5%.[3]
4. Banks play multiple roles in this complex system. They sometimes hold in their own portfolio loans originated from their customers, but they also act as intermediaries and can send customer loans on to one of the mortgage investors (e.g., the GSEs). Banks themselves also sometimes act as investors, buying mortgage loans from other intermediaries to hold in their own portfolios.
5. The government-supported investors, the two GSEs and FHA/VA, fund their mortgages through selling mortgage-backed securities (MBS) to "agency MBS investors" (where "agency" refers to the four organizations of the two GSEs, FHA and VA).[4]

[2] The PLS market has no government support, in contrast to the FHA/VA, which are actual government agencies, and the GSEs, which have government support through specific legal agreements.
[3] The remaining market share of about 5% is composed of many miscellaneous categories – e.g., seller financing, borrowing from family members, etc.
[4] Referring to the stockholder-owned companies of Freddie Mac and Fannie Mae as "agencies" reflects their history before they were privatized.

Schematic Diagram of Simplified Mortgage Origination Flows



6. The small PLS market also funds itself by securitizing mortgages and selling them to investors (for simplicity, such investors are not shown on the diagram).
7. The two GSEs operate with a business model in which they purchase their mortgages from intermediaries, and then securitize them to agency MBS investors, in turn guaranteeing those investors against losses due to credit risk.[5] As required by their charters, the GSEs also lay off some of that credit risk – specifically, risk above a loan-to-value ratio of 80% – to Private Mortgage Insurers (PMIs), who deal directly with borrowers (as shown by the curved arrow on the left).[6] Since 2013, the GSEs have also laid off risk to credit risk transfer (CRT) investors. (These transactions are both shown as solid blue arrows, to reflect that they are just risk transfer contracts; the hollow blue arrows elsewhere reflect actual transfers of mortgage loans or cash.)

[5] The GSE guarantees are backed up, since 2008, by a Preferred Stock Purchase Agreement (PSPA) through which each GSE is supported by the US Treasury; the market accepts that support as making them almost, but not quite, as strong as the US government itself.

[6] The GSEs' charters specify three approaches to laying off credit risk, related to over-80% LTV loans, but two have gone near-defunct over the years, so PMI is almost exclusively the method used today.

8. FHA/VA operate with a business model in which a mortgage intermediary creates a pool of mortgages that is securitized through Ginnie Mae, with FHA and VA then insuring the investors in the resulting agency MBS (backed up by a full guarantee by the US government) against losses due to credit risk.
9. The Federal Home Loan Banks (FHLBs) were established in 1932 as regional cooperative banks; today they advance money to many lending institutions to fund ownership of their mortgage loan portfolios. They enjoy the implied guarantee of the US government (as the GSEs did prior to 2008) and so have premier access to capital markets to borrow funds, ideally even in the most severe downturn.

The Three Key Policy Impacts Related to Mortgage Credit Tightening

There have been three key policy impacts from the creation of this complex structure that are directly related to the causes of today's mortgage credit tightening, and thus must be taken into account by any response meant to reduce unnecessary tightening. Only one of these impacts was clearly originally intended by policymakers.

#1 - Stressed market liquidity is very strong, but only due to government support

The original intent of heavy government intervention in mortgage financing was to ensure liquidity in stressed markets, in reaction to its loss back in the Great Depression. This has been accomplished via two mechanisms, both of which require government support directly or indirectly, as it is a fundamental truth that in highly stressed markets only the government itself (as the owner of the "printing press for money") has assured access to markets.

First, the FHLBs utilize the implied government guarantee of its borrowings to access markets to fund mortgage assets at banks. They went into the pandemic with about $1 trillion outstanding of such borrowings (used to finance only a fraction of bank-owned mortgages in the non-stressed markets of that time), and are there to expand dramatically if needed in a stressed environment.[7]

[7] The pandemic is a great example of this expansion. The "advances" (as they are called) to banks by the FHLBs collectively increased by 26% (not per annum, but in just one quarter) in the first quarter of 2020, reflecting a stress-environment-based expansion being utilized when needed.

Second, the GSEs and FHA/VA both utilize government support so that the agency MBSs which fund their mortgages trade as near-Treasury quality debt, with an ability to access markets second only to that of actual US Treasuries.[8]

It is this ability to always access the markets – based upon government support – that ensures liquidity will presumably always be available to primary-market lenders (meaning those dealing directly with borrowers), even in stressed markets. If the agency MBSs were not considered equal or near-equal to direct Treasury securities, this would not be the case.[9]

#2 - The four government agencies unintentionally become arbiters of acceptable credit

The standard description of what the GSEs do usually goes something like this: "the GSEs buy mortgages from lenders so that those lenders can redeploy the funds to making new mortgages." This description might be taken to imply what is today called a "bulk sale": a lender, after putting mortgages it originates in its own loan portfolio, once in a while needs to sell off some of those mortgages to the GSEs to free up room on its balance sheet to make more. Thus, the role of secondary-market lenders (the GSEs and FHA/VA) is all about providing liquidity to institutions that normally hold mortgage loans on their balance sheets.[10]

In reality, however, today the vast majority of mortgage loans sold to the GSEs or insured by FHA/VA are not done on this bulk basis. They are done on a "flow" basis, with loans originated specifically for sale to the GSEs or to be insured through the FHA/VA. In fact, this practice enabled the growth of the non-bank mortgage lender industry, whose business model is "originate to sell." Consequently, such firms evolved to where each has a balance sheet that is *not* capable of holding loans for more than the short period needed to facilitate their sale to a secondary-market investor.

This evolution of the housing finance industry changed the government-supported investors, the GSEs and FHA/VA, from being providers of stressed-market liquidity into additionally being arbiters of

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[8] For FHA/VA, this government support takes the form of the US Government full-faith-and-credit guarantee of their MBSs, which makes them have no credit risk (i.e., they are just like Treasuries). In GSEs' case, their PSPA-based support agreement with Treasury is regarded as just slightly less strong; their agency MBS issued is therefore regarded as having nil-but-not-zero credit risk, almost as good as Treasuries. Corporate bonds, by comparison, have much less liquidity and so are much more subject to market stresses.

[9] In the 2008 Financial Crisis, market stresses were so bad the government had to intervene to get this complex mechanism of providing liquidity to primary lenders to work as intended. The most extreme case of this intervention was putting the GSEs into conservatorship.

[10] "Secondary-market" is a term to refer to those institutions which acquire mortgages from primary-market lenders that in turn deal directly with the borrower. The GSEs, FHA and VA are exclusively secondary-market operations.

what are acceptable credit terms for the majority of mortgages in America: what the GSEs and FHA/VA will accept is what primary lenders will in turn offer to borrowers. *This point cannot be emphasized enough.*

The government-supported investors' role as credit arbiters, then, is an unintended consequence of how the housing finance system evolved in response to the availability of government-quality stress liquidity. A regrettable side-effect of this additional role for the GSEs and the FHA/VA is that they are right at the center of the never-ending political debate about mortgage credit risk tightness or looseness. My seven years at the heart of the housing finance system impressed upon me how left-leaning groups believe, at all times, that the "credit box" (as the acceptable credit terms to invest in a mortgage loan are called) of the government investors is too tight and too expensive, and how right-leaning groups believe, at all times, the exact opposite – that it is too loose and too inexpensive. Both, as is the way of such things in Washington, claim to be data-driven.

As discussed below, the agencies' role as credit arbiters also makes the availability of mortgage credit substantially into a matter of government policy; it is no longer just the result a dispassionate working of many competitive firms in the private sector. The current debate is thus largely focused on the government.[11]

#3 - Mortgage intermediaries have become a major force, including as a special interest

As shown in the schematic above, most loans emerge from a borrower dealing with a mortgage intermediary – i.e., a firm that intends to quickly move the loan to a permanent investor, mainly the government supported GSEs and FHA/VA. This system began to dominate housing finance in the very late 1980s and early 1990s, and was naturally accompanied by the rise of the mortgage intermediary as a major force in housing finance. In fact, these days when one talks about the "mortgage industry," one is mostly talking about such intermediaries rather than portfolio lenders (banks, of course, have a foot in both camps).

As a consequence of the government agencies' comprising almost all of the secondary market both as a source of liquidity and an arbiter of acceptable credit terms, naturally the mortgage intermediaries invest heavily in creating industry associations, inevitably headquartered in Washington, to influence how those government agencies operate. Among those industry associations are the

[11] Prior to the 1980s and the Thrift Crisis of 1989, when most mortgages were made by thousands of thrifts, the criteria for acceptable credit were decided on in a decentralized fashion by each of those thrifts. Now, this decision is heavily concentrated in Washington via the GSEs, FHA and VA.

Mortgage Bankers Association, the Community Home Lenders Association, and the Housing Policy Council. These are complemented by less specialized associations like the American Bankers Association, the Credit Union National Association, and the Securities Industry & Financial Markets Association, which also weigh in on mortgage issues, as well as adjacent industry associations, such as the National Association of Home Builders and the National Association of Realtors.

Thus, collectively acting as a giant middleman between borrowers and the eventual permanent investor, these intermediaries sit astride the mortgage industry, with their own views and economic interests. They are therefore always advocating, as commercial interests will do, for government policies that maximize their bottom lines: lower interest rates on mortgages, looser credit terms by the government mortgage investors, and so on. Some are more long-term and broad-minded in doing this, others more short-term and narrowly focused. When the GSEs and FHA/VA change some policy designed to benefit borrowers, I have heard senior government officials question how much of that benefit will actually make its way to the borrower rather than being absorbed by the many intermediaries.

Today, on the issue of mortgage credit tightening, some of these industry associations are very vocal in claiming that government-induced difficulties (including the unintended consequences of the generous forbearance program, discussed further below) are the cause of that tightness, and thus that the government should somehow reverse or offset those difficulties, especially those that cause losses to them, as a matter of fairness.

This is only a partially accurate picture, however, in my view.

The Three Major Factors in the Mortgage Credit Risk Cycle Causing Tightening

There are three major factors which determine how tight or loose mortgage credit risk will be at any point in time, given the structure of how the American system of housing finance works in the 21st century. These are: (1) the state of the economy, especially housing markets; (2) the many requirements and constraints that drive how different types of investors in mortgage credit risk act through the economic cycle, including how private-sector investors must act procyclically to at least some degree; and (3) how the structure and economics of being an intermediary between borrowers and mortgage investors can translate into "overlays" that tighten credit – i.e., can add more onerous terms to what the mortgage investors (primarily the GSEs and FHA/VA) will accept when dealing with potential borrowers.

Below, I review each of these three factors, indicating how things are playing out in the current cycle. Immediately following this review, I also highlight two special topics for further discussion: (1)

whether FHA/VA should operate countercyclically, and (2) the impact on overlays of the forbearance program's availability to new (and not just existing) loans.

#1 - State of the economy: causing tightening, but only selectively

The economic reality is that, everything else being equal, mortgage credit risk goes up and down during the economic cycle. A loan to a borrower with the same credit rating, with the same loan-to-value ratio on the underlying home, and the same everything else, has lower risk when home prices are rising 5% a year versus higher risk when home prices are going down. Similarly, credit risk is lower when unemployment is 3%, when an individual losing a job can more readily find a new one, and higher when unemployment is at 8%, making finding a new job more difficult. So, at least to some degree, mortgage credit tightening at the current time is not a failure of government policy, but rather an economic reality of how risk increases and decreases in response to the economy.

The current tightening also may seem worse than it is, as the cycle has just changed incredibly fast. Mortgage credit going into 2020 was generally regarded in the industry as somewhat loose, based upon very low unemployment, strong wage growth, and nicely rising house price (on average about 5% annually since 2013).

Obviously, this all turned on a dime in the pandemic, with unemployment so far peaking at 14.7% (April 2020). Surprisingly, house prices – which are a key determinant of mortgage credit quality – have not softened, and are still rising at about the 5% rate.[12] So, based just on the economy, mortgage credit terms should perhaps be a bit tight, but not overly so, for mainstream borrowers. However, given the history of just over a decade ago, when house prices declined so precipitously, one can understand mortgage investors having a bias towards greater tightening, in particular in terms of reduced credit access for more marginal credits, based on an expectation that house prices will soon begin to soften or even decline.

Also relevant in an economic downturn is the condition of the financial system, as it is the actual provider of mortgage credit. In 2008, the financial system was itself in massive distress, and its capacity to extend credit for mortgages dramatically declined.[13] However, in 2020, the financial system is absolutely not in severe distress: banks are healthy, the agency MBS markets (with the help of the

[12] This unexpected outcome is generally believed to reflect that declining demand for house purchases due to loss of household income has been equally and even more offset by sellers removing houses from being for sale, along with some pandemic-related new home construction disruption. It is totally unclear how long this will last.

[13] In the first two years of the financial crisis, fully 50% of the capacity to originate mortgages quickly disappeared. See below for more discussion on this.

Federal Reserve re-establishing trading liquidity) are absorbing record new issue volumes, and even PMI firms are continuing to operate relatively routinely.[14] The sole exception is the PLS market, which has mostly evaporated (with a few new deals just emerging at this time).

So, between the economic downturn – mostly in employment, rather than (so far) house prices – and the relative health of the banking and financial system, mortgage credit tightening is taking the form of a targeted withdrawal from riskier credits and riskier products. That tightening is far more narrowly focused, and ultimately smaller and less generally damaging to the economy, than the mass credit tightening in 2008. The two eras should not be confused.

#2 - How different types of mortgage investors need to be more or less procyclical

As shown in the schematic above, there are four categories of mortgage investors. Each has structural requirements that make them either more or less or not at all procyclical.[15] Note the difference between private-sector investors versus government-supported ones: the former are clearly procyclical, the latter not.

Banks, almost 25% of the market

In reaction to the pandemic downturn, JPMorgan Chase and Wells Fargo both suspended making home equity lines of credit (HELOCs), which are of course a second mortgage and thus a higher-risk product. I start with that observation because HELOCs are strictly originated by banks for their own loan portfolios – there is no GSE or FHA/VA involvement, no CARES Act mandated forbearance, or any such complicating factor. *They took this action because, in the face of increasing credit risk as the economy heads south, they – as shareholder-owned companies – need to act as good stewards of their stockholders' capital by engaging in quality risk management and making risk-versus-reward decisions properly.* That means cutting back on higher-risk and marginal credits during a downturn, as these actions did. Their individual viewpoints may appear overzealous or premature given how house prices have not yet declined, but thousands of banks, each making its own independent decision, will take more and less severe steps and, in aggregate, drive the market.

[14] It looked for a short time like the trading markets might seize up, in a giant and extreme global rush to the safety of US Treasuries. Quick Federal Reserve action turned that situation around.

[15] I previously wrote on this topic. See "The GSEs and the Economic Cycle: Realistic Expectations," Joint Center for Housing Studies, February 12, 2020.

So, as a broad generalization, the thousands of banks in the US, as the vast majority are shareholder owned, should be expected to reduce risk in this type of downturn by in turn reducing exposure to riskier products and riskier borrowers. This seems to be exactly what is happening, but probably with banks being somewhat less harsh on credit extended to their own clients, as opposed to when purchasing mortgage loans from others.

I also wish to note that their banking regulators, at the local supervision level, will absolutely expect banks to tighten up on all types of credit, again reflecting the increased risk that comes with the economic downturn.

PLS, about 5% of the market

Though they make up a very small segment of the mortgage finance system, the loans financed by the PLS market are very visible.[16] They concentrate in either non-QM mortgages, which are really higher-risk products usually going to higher-risk borrowers, or sometimes "jumbo" loans (i.e., larger than can be sold to the GSEs and FHA/VA).[17] Because there is no obvious balance sheet to act as a shock absorber when the investors in PLS securitizations flee – as they most assuredly have – this is the most procyclical portion of the mortgage market. PLS has undergone an extreme case of "credit tightening." I note that some press articles, recounting how one or more specific individuals looking to obtain a mortgage sourced from the PLS market are now shut out, can leave the impression this market is representative of the entire mortgage market rather than related to a very small and high-risk portion of it.

FHA/VA, about 20% of the market

Because there are no shareholders or expectation of FHA and VA operating as for-profit companies, as they are government agencies, they have been used in the past by the government to achieve policy objectives. In 2008 through 2011, when banks and the PLS market were highly constrained in making available mortgage financing, these two government departments dramatically increased their market share, going from being under their historic 5% to 10% range to over 20%.[18] This increase was an

[16] The media seem to pay undue attention to firms doing PLS-based business. It may relate to how such firms often concentrate on unconventional mortgage products, which can have more newsworthiness than standard ones. It is reminiscent of how the media also paid undue attention to sub-prime lenders prior to 2008.
[17] QM means a "qualified mortgage," as defined by the Consumer Financial Protection Bureau (CFPB). QM loans are those regarded as appropriate and conventional, and so deserving of certain legal protections. Non-QM loans are regarded as inherently riskier (e.g., teaser rate loans).
[18] In 2005 and 2006, FHA/VA were under their usual market share, i.e. under 5%. This low share is a reflection of how extreme the mortgage bubble was at that time.

excellent example of their acting countercyclically to achieve the policy objective of helping to fill the hole left by the 50% reduction in mortgage origination capacity which occurred from 2006 to 2008. So, perhaps we should then look to them today for an "instant replay" of that countercyclical role?

In fact, as of today, the FHA and VA have not loosened their credit box, nor have they tightened it. It has, as far as one can determine from public sources, just remained constant. The issues related to whether they should loosen up their credit box to act countercyclically are discussed further below as one of two identified special topics.

Freddie Mac and Fannie Mae, the two GSEs, about 45% of the market

To clear up any misunderstanding: the two GSEs Freddie Mac and Fannie Mae are legally set up to be shareholder-owned companies, with all the infrastructure to lead them to act as such, despite being temporarily (even if it is a very long "temporary") under government control via conservatorship. Their charters, which drive their operations to a strong degree, were designed to ensure they provided liquidity to primary lenders, which they are absolutely doing; it does not say they should broadly underprice risk or take on inordinately risky mortgages.[19]

Nevertheless, the two companies were created by Congress and in some ways are really hybrids between a for-profit company and a government agency, from time to time being used for policy purposes. So, it's a real conundrum: how to behave simultaneously like a stockholder-owned company and also like a policy-driven government agency? One obviously can't always do both at the same time.

Like the FHA/VA, they have during the pandemic neither tightened their credit box (like a private-sector, shareholder-owned company would) nor loosened it (as a government agency might). They have stood pat. This is consistent with their historic behavior: despite their stockholder structure, they can use their giant monoline balance sheets and quasi-utility status to be more resistant than banks to pressures to tighten and loosen mortgage credit as the economic cycle goes up and down.[20]

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[19] Their charters do require certain targeted exceptions to this in the area of affordable housing and "duty to serve" special markets. Today, the size of those exceptions is not unduly large, and thus not overly impacting the financial performance of the two companies. Obviously, a broad mandate to underprice risk or take on large volumes of inordinately risky mortgages would be fundamentally inconsistent with being shareholder-owned.

[20] The GSEs, because of their government-advantaged massive market share of the secondary mortgage market, have the confidence, like regulated utilities, that their future volumes and market share will not materially decline. That confidence allows them to manage returns based upon averages over their $5 trillion loan book, rather than being driven as much as banks by short-term marginal economic considerations. This is a subtle but important point that distinguishes a GSE from a bank in terms of cyclical behavior.

However, as shown above in the left side of the schematic flow of mortgage credit, the GSEs are not fully stand-alone companies when it comes to credit risk. The PMI and CRT markets also impact them.

Private Mortgage Insurance. There can essentially be no high-LTV lending without PMI firms first accepting such loans as within their credit risk appetite. Industry participants have already reported that the PMIs (very much as expected, as they also are shareholder-owned firms) have already tightened up their credit criteria and raised pricing – not to extremes, but noticeably. This means, with respect to high-LTV lending, the GSEs have effectively had their credit risk criteria tightened up for them, whether they like it or not, making them appear procyclical to a modest degree for borrowers with higher risk.[21] PMI is required on, generally, 20% of mortgage loans sold to the GSEs.

Credit Risk Transfer. CRT markets, based upon recent (i.e. late May/early June) secondary trading, are pricing the current flow of GSE mortgages to equate to a guarantee-fee (G-fee) that is ballpark 20 to 30 basis points higher than before the pandemic.[22] However, the GSEs are set up to be "shock absorber" companies in the housing finance system, with giant balance sheets to absorb risk, so they are *not* pricing new loans based upon marginal CRT costs. Instead, their modus operandi has so far been to absorb the ups and downs of CRT costs and reflect the resulting average cost versus the average G-fee generated by their entire mortgage portfolio. This business model allows the GSEs to avoid being significantly procyclical, in contrast to banks and PMI firms.

#3 - Mortgage intermediaries and their overlays

When the bulk of mortgage financing moved, over decades, from being made directly by banks to their customers and instead to being financed by securitization markets, all the many mortgage intermediaries also grew and thrived. They sit astride the 70% of mortgages that go from primary market lenders to MBS markets.

When economic conditions are settled, intermediaries pass through unaltered the credit box of the GSEs and FHA/VA to potential borrowers. However, in unsettled times, these intermediaries add what are called "overlays" to show tougher credit terms to their potential borrowers than they themselves are shown by the GSEs and FHA/VA. These overlays naturally flow from the fact that, at each

[21] I have not seen any press reporting on this aspect of credit tightening.
[22] CRT investors do not easily have a direct mechanism to attempt to micromanage acceptable credit terms (whereas PMI firms do). Instead, the interest rate they demand, and what volume they will purchase at that price, primarily reflects their views about the credit risk of what is being sold to them.

step of the mortgage origination process where a loan passes through the hands of a particular intermediary, there are potential risks and costs to the intermediary.

The best-known such situation occurred in the aftermath of the financial crisis. In the years 2009 through approximately 2014, the mortgage intermediaries added significant overlays to account for "representation and warranty risk," – i.e., the risk that the loans they sold to the GSEs and FHA/VA did not have all the characteristics required for such a sale to be valid. When a loan was determined, after the fact, not to have met all required representations and warranties, it was returned to the intermediaries, which in turn had to fund owning the loans (using some of the scarce liquidity capacity) and absorb any credit losses that occurred. In the case of the two GSEs, it took years of work to eliminate this source of overlays, restructuring the operational processes between intermediaries and the companies to reduce this "rep & warrant risk." The difficulty of that restructuring was a great demonstration of how large the costs and risks associated with each step of a loan going through one or more intermediaries could be.

Today, it is widely reported that such overlays are being applied. These overlays make the GSEs and FHA/VA appear to be more procyclical to borrowers than they actually, themselves, directly are. Much commentary in the press and the housing finance policy community therefore focuses on these overlays to see if they can be reduced in some reasonable manner, without overt or even covert cost to the taxpayer, to minimize credit tightening.

Today's reported overlays can have many sources. As a general matter, mortgage originating intermediaries are already processing record volumes to accommodate all the refinancings going on with record-low interest rates. [23] As well, those mortgage originating firms that are also servicers are under some liquidity pressure stemming from various well-reported reasons. These two factors already lead to some bias towards overlays being instituted.

However, there is one very big, very controversial and very specific source of overlays that the mortgage industry is very agitated about: loans that have gone into forbearance after closing but before being sent on to the GSEs or FHA/VA.[24] See below for a special topic focus on this issue.

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[23] In 2020 Q1, the Urban Institute's *Housing Finance At A Glance: A Monthly Chartbook* (May 2020) indicated originations volume at $670B, almost double the $355B of the prior year's Q1. Refinancings are the main cause of this growth, increasing to a cyclically high share of new mortgages of over 60% starting in late 2019 and continuing ever since.

[24] For lenders that focus on PLS-supported products (i.e., non-QM and jumbo loans), the nearly total evaporation of that market has resulted in either just withdrawal from the market, or sometimes overlays. PLS accounts for such a small share of the market, despite undue press coverage, that I am not focusing on it in this paper.

Special Topic: Should FHA/VA Expand Countercyclically?

At the height of the mortgage bubble in 2006, the PLS market was providing about 40% of all mortgages – almost four times the share it had in the early 2000s. Within the next two years, as the bubble collapsed, it virtually evaporated, going down to near zero volume in 2008.[25] At the same time, banks went from providing about 25% of all mortgages to about half that level, a decline of 12% or so. (This decline reflected that the crisis was centered in the banks, which went into severe distress in terms of having adequate liquidity and capital, thereby requiring them to severely cut back on all types of lending until market confidence was reacquired.) Together, these contractions added up to a 50% shrinkage of mortgage lending capacity in just two years – an amazing collapse.

As a result, the government had the FHA and VA increase their market share. Their combined share went from under 5% (its historic level had been in the 5% to 10% range) to about 20%, where it stands today. So, if the government wished today to somehow utilize the FHA and VA to help counter mortgage credit tightening, it would be starting from an already cyclically high market share, which never came down despite the wonderfully vibrant mortgage markets of the last six years. It would also be starting with a potentially very risky portfolio: one independent measure of mortgage default risk has it at 8.75%, almost five times the estimated 1.82% for GSE loans.[26] Thus, the decision to grow market share, which would mean having some combination of reduced pricing and loose credit terms, would not be so easy to make given where they are today versus where they were in 2006.[27]

In addition, one has to ask whether expanding their market share would solve the problem we have in 2020, versus the one we had in 2008. The answer, in my view, is that it would not. Mortgage lending capacity has not collapsed – not even close. Banks are healthy and the GSEs are working fine; only the PLS market has disappeared, but it started with only about a 5% market share, a far cry from the 40% of 2006. Instead, we have a natural and proper reaction to cut exposures to riskier credits and riskier products, and a major FHA/VA expansion would not obviously address that reaction in any targeted manner.

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[25] This extreme growth and then shrinkage reflected the degree to which PLS was the source of mortgage finance most concentrated in the riskiest credits (e.g., sub-prime) and the riskiest products (e.g., option arms).
[26] This comes from the Milliman Mortgage Default Index (MMDI), defined as the expected percentage of loans that will go at least 180 days into default over the lifetime of the loans. For loans made in the 2019 Q4 (the latest data available, when both the economy and housing market were quite strong), the MMDI for the GSEs was 1.82%, but for loans securitized through Ginnie Mae it was 8.75%, almost 5 times higher! Note that FHA loans are higher-risk than VA loans, but they are combined together in this document and most reporting on the issue.
[27] I think of this as the "dry powder" problem. FHA/VA have little dry powder at this time – they never returned to their normal cyclically low market share and the credit risk of their portfolio is already very high, likely to already generate large losses in the current downturn.

Special Topic: Can the Overlay Impact of Forbearance on New Loans Be Reduced?

The GSEs and the FHFA developed today's forbearance policy after three hurricanes hit, respectively, Texas, Florida and Puerto Rico in 2017. It was designed to be another alternative to automatically heading to foreclosure, complementing several modification programs developed since 2008; its design reflected the temporary nature of the dislocation caused by a natural disaster. One can argue about whether the specifics of the forbearance program – two six-month periods, no documentation of hardship required – were exactly right or not, but it was motivated by a desire to minimize credit losses on *existing* mortgages in disaster-impacted areas during a limited period of time.

This program was then expanded in the early days of the pandemic to apply, by policy, to GSE and FHA/VA loans. It seemed a reasonable fit, especially as at that time the pandemic disruption was believed by most to be rather short-term in nature. The CARES Act turned it into law. In the haste to speed aid to people and businesses, however, the government didn't get much of a chance to think things fully through. And this was the case with allowing the forbearance program to apply to new loans as well as existing ones.

Simply put, a loan in forbearance is not worth 100 cents on the dollar – the loss of revenue during the forbearance period (hopefully repaid at some later date) and the heightened likelihood of eventual credit losses, when the forbearance period ends, are just too great. Thus, on a going-forward basis, a loan that has quickly gone into forbearance (or looks like it might) is like the proverbial hot potato that no one wants to hold. This has created two problems.

First, loans already closed and in the hands of intermediaries when forbearance was announced as an available option – which I dub "in-transit" loans – immediately dropped in value when forbearance was shortly thereafter requested.[28] This drop caused a loss to those intermediaries and also puts more stress on their already stressed liquidity, as the GSEs and FHA/VA will not normally buy such loans (as forbearance is just a form of default). Such in-transit loans are therefore a source of dispute between the intermediaries and the government investors, as discussed further below.

Second, newly made loans that go into forbearance between closing and sale to the GSEs or becoming insured by the FHA/VA present the same problem: they drop in value and, if they are stuck on

[28] Exactly defining in-transit loans is not easy. Are they loans closed by the dates the FHFA and FHA/VA announced forbearance as being available? Or by the date it was made law with the CARES Act? And what about commitments to borrowers issued by those dates – do those count?

the balance sheet of the intermediary, use up an unaffordable amount of liquidity. I call these "quick-forbearance" loans.

In both cases, to repeat, the loans in question are the hot potato that no one - not the intermediaries and not the four mortgage agencies - wants to get stuck with. The result in terms of newly made loans has been another source of overlays – and probably the largest and most concrete one – throughout the mortgage industry, which is focused on avoiding in particular riskier credits that have some discernible likelihood of becoming quick-forbearance loans.[29]

The FHFA, as conservator of Freddie Mac and Fannie Mae, and FHA, in response to industry complaints about forbearance on new mortgages and to hopefully reduce overlays, have separately "solved" the problem by (1) temporarily waiving their prohibition on taking loans in forbearance so that lenders can have liquidity, and thus not adding to the already-stressed liquidity of non-bank intermediaries; but (2) pushing the loss in value fully back onto the intermediary.[30] This solution is very unsatisfactory to the mortgage intermediaries, of course, because they would like to be relieved of both the liquidity and earnings burdens, rather than just the liquidity one.

The industry, in response, is lobbying Congress to force the government mortgage agencies to take both the liquidity and earnings burdens off their hands (and thus to place those burdens on the taxpayer). It is currently unclear whether this proposal applies only to in-transit loans or also to quick-forbearance loans. If it applied only to the former, it would not create any incentive impact relative to new loans, and thus would not be relevant to overlays; if it applied to the latter, it could create an incentive for people to game the system. The industry's position is completely self-serving, of course, but that doesn't mean it is wrong. It is also being made at a time when the mortgage intermediaries are processing record volumes, and when originating loans (versus servicing them) seems to be at record high levels of profitability based upon industry reporting.

[29] For someone to close on a mortgage and then, within a few weeks or a month or two, go into forbearance is an unusual situation. It was understandable in the earliest days of the pandemic, when unemployment certainly happened to borrowers with no notice or warning; however, now – months later – it is harder to see such a situation occurring. It thus seems possible that in the case of some quick-forbearance loans, people are gaming the system. It is just impossible to know when gaming has occurred, but it certainly is not a good idea to encourage or incent such behavior.

[30] The GSEs and the FHA push back this loss in very different ways. The two GSEs do so via a discount to the purchase price. The FHA does so by requiring a 20% indemnification for credit losses. Both have other features inconsistent between them, including when the policies revert back to a prohibition on accepting loans in forbearance once again.

This is the classic situation where a proper policy response can reduce the resulting overlays to the minimum possible, without requiring an undue overt or covert subsidy from the taxpayer. My directional recommendation of how to do that is as follows:

For in-transit loans in forbearance:

1. In-transit dates defined. Define the in-transit period in some reasonable way, and use the same definition for all four agencies.
2. Liquidity affirmation. Affirm that the GSEs and FHA/VA will purchase the loans to provide liquidity to mortgage intermediaries, as the core function of the agencies.
3. Sharing of loss of value. When it comes to the loss of market value, this is an example where everyone can accurately say "it is not my fault, someone else should pay," which always ends in never-ending finger-pointing. I would split the loss, having the mortgage intermediaries and the four mortgage agencies each absorb about half. This policy would require the FHFA to cut in half its pricing discount, and the FHA to turn its 20% indemnification into a 50-50 loss-sharing (i.e., not a first loss) vehicle.

For quick-forbearance loans:

1. Liquidity affirmation. Affirm that the GSEs and FHA/VA will purchase the loans to provide liquidity to mortgage intermediaries, as their policy core function.
2. Consistent end dates. Both the FHFA and FHA have different and arbitrary end-dates to their willingness to purchase loans in forbearance. Instead, have them both tie the end-date to termination of the current declared state of national emergency, rather than making it arbitrarily sooner or leaving it to constant uncertainty-creating extensions.
3. Loss of value criteria. When it comes to the loss of value, the industry proposal for it to be absorbed 100% by the mortgage agencies is not reasonable, as it will allow abusive actors to exploit the situation and literally transfer wealth from the taxpayer to the private sector.[31] Absent legislation that corrects the CARES Act (see below), there is no way out of this conundrum: how to help in the (likely rare) circumstance when the quick forbearance is legitimate while not encouraging potentially massive

[31] At an extreme, a mortgage intermediary could market forbearance as a benefit ("Make no payments for the first 12 months!") that would result in the taxpayer absorbing a loss while the intermediary continued to collect origination fees. This should absolutely not be incented, which is what the industry proposal would do.

gaming. This tough call has to be made at a time when most originations stem from existing mortgage holders refinancing to gain a modest reduction in interest costs (or even also do cashouts) and when the industry is having booming profits.

My recommendation would therefore be to leave the economic loss with the mortgage intermediary for all refinancings (with or without cashouts), since the social benefit of the borrower's getting the new mortgage is quite small compared to the benefit of enabling a homeowner to purchase a new property. For purchase mortgages, I would have the four mortgage agencies reduce their pushing of the economic loss fully back onto the mortgage intermediary by two-thirds to three-quarters, so that purchase money mortgage overlays are substantially reduced. This proposal targets the reduction in overlays where it gets the most policy and economic bang for the buck, but also leaves the intermediaries with the necessary incentive to not intentionally originate quick-forbearance loans.

4. Legislative fix. If legislation is going to open up the CARES Act, the whole problem would go away if forbearance on newly made loans applied only to mortgages that, after closing, were current in their monthly payments for at least three or four months. That period is long enough that all such mortgages should have left the hands of the intermediaries for their permanent home with one of the four mortgage agencies. This change should eliminate virtually all overlays.

Conclusion

First, the issue of mortgage credit tightening is a real one, but is actually more targeted and less impactful than indicated by some of the industry lobbying and more sensationalist reporting on the issue. It also has very little resemblance to a replay of 2008 to 2011, as there is no collapse of mortgage capacity, which remains robust. Instead, the challenge this time around seems to be more related to the ability to refinance at modestly lower rates, and possibly taking cash out of built-up equity, to improve household finances and spendable income. The evidence is that this refinancing is already occurring on a large scale, as the industry is processing record volumes of new mortgages, with rates so incredibly low, and apparently enjoying record origination profits. So, mortgage credit tightening has not stopped this from occurring for the clear majority of mortgage holders – it is just the homeowners with the most marginal credit who have been impacted. Again, this issue is clearly a targeted one, with little resemblance to the 2008 to 2011 era.

Second, the private sector has tightened up on credit in a rational and expected manner, reacting to the economic reality that risk is higher than before. This reality has led to banks making loans for their own portfolios, including assets like HELOCs that have no connection to the CARES Act forbearance requirement or what the government agencies will or will not purchase on what terms. It has led to the PLS market, as expected, mostly evaporating, impacting in particular riskier loan products (although it is a very small percentage of the market). And it has led to the PMIs raising prices and toughening credit terms, modestly, on the high-LTV loans they support for the GSEs. The net result of all these actions is that more marginal credits are becoming unacceptable, while the vast majority of those seeking to refinance, for example, seem to still be able to be approved. This is not a situation in which the government should attempt to somehow undo this natural and reasonable private-sector tightening.

Third, the four government mortgage agencies – Freddie Mac, Fannie Mae, the FHA and the VA – have *not* tightened up their credit boxes, as far as can be determined. This is a major statement, and it means they are already doing a lot to support the economy at this time. FHA and VA, as pure government departments, could potentially be deployed to be countercyclical, but that deployment has not happened as the nature of the problem (mostly marginal credits not being able to refinance) would not be addressed by it. The fact that the GSEs, as profit-making companies, have not tightened credit as the banks have is a significant policy benefit to the homeowning public.

Fourth, the core issue of credit overlays by intermediaries has many causes, including the industry already processing record volumes, before one gets to what is possibly the biggest source: how the forbearance program, designed for existing loans, is applied to in-transit and newly made mortgages. In this case, the four government mortgage agencies could do a better and more coordinated job than they have by (1) purchasing in-transit loans with less pushback of the loss to mortgage originators; and (2) purchasing (at least through the end of the national emergency) newly made quick-forbearance loans to provide liquidity to the intermediaries, while putting the economic loss back onto the mortgage intermediaries for refinancings but only very partially for purchase mortgages. This policy should reduce overlays where such a reduction has the most policy impact, and also avoid a potential open spigot of abusive gaming of the mortgage system that will come at the expense of taxpayers.