

Improving the Safety and Soundness of Nonbank Mortgage Servicers Will Require More Than Prudential Regulation

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On October 1, 2020, the Conference of State Bank Supervisors (CSBS), a consortium of state banking regulators, proposed prudential regulatory standards for nonbank mortgage servicers. The proposed standards are broad, covering all aspects of business, such as capital, liquidity, stress testing, risk management, data standards, cybersecurity, and corporate governance. The CSBS intends for the proposed requirements to apply to all types of servicers—that is, firms that own servicing rights and service mortgages, firms that own servicing rights but do not service mortgages (i.e., mortgage servicing rights, or MSR, investors), and firms that service loans without owning (subservicers). The proposed standards would apply to the entire servicing portfolio, regardless of whether the loans are federally backed, securitized into private-label securities (PLS), or held as whole loans privately. Loans backed by Fannie Mae, Freddie Mac, and Ginnie Mae ("agencies") are already subject to minimum net worth, capital, and liquidity requirements imposed by the agencies, but whole loans held privately or securitized into PLS are not subject to those requirements. The vast scope of proposed standards would essentially bring all single-family residential loans serviced by all nonbank servicers under state prudential regulation.

Given that nonbank servicers are already regulated by the Consumer Financial Protection Bureau with respect to consumer protection and their financial and operational condition closely monitored by Fannie Mae, Freddie Mac, and Ginnie Mae, the CSBS proposal raises important questions that we address in this brief. We first explain the significance of getting nonbank regulation right by creating a structure that is both efficient and effective. Then, we discuss how to achieve that while minimizing redundancy, duplication, and inconsistency. The central question is whether nonbank prudential regulation is best handled by multiple state and federal regulators or by a single federal regulator with deep mortgage market expertise. Next, we examine the pros and cons of certain aspects of the CSBS's proposal. Finally, we take a holistic view of nonbank supervision and argue that prudential regulation

alone, while desirable, will not mitigate the unique liquidity risks the sector faces, and unless it is done right, regulation might even cause unintended consequences. We conclude that prudential regulation and a permanent solution to the liquidity risk must go hand in hand.

What Is the Best Way to Structure Nonbank Regulation?

Nonbank regulation should be structured in a manner that not only keeps the system safe and sound but maximizes efficiency by eliminating redundancy and inconsistency. A fragmented regulatory regime that includes the federal government, states, Fannie Mae, Freddie Mac, and Ginnie Mae is not conducive the achieving those outcomes. Additionally, given that the CSBS's proposed capital and liquidity requirements are modeled after Federal Housing Finance Agency (FHFA) requirements, it is unclear how applying the same standards at the state level would improve safety materially. Table 1 summarizes the minimum capital and liquidity requirements for nonbanks under different regimes. Nonbanks are also subject to various operational, quality control, corporate governance, and management controls set by the government-sponsored enterprises (GSEs)¹ and Ginnie Mae.²

TABLE 1
Nonbank Servicer Minimum Net Worth, Capital, and Liquidity Requirements

	The GSEs' current standard	The FHFA's withdrawn proposal	The CSBS baseline proposal	Ginnie Mae's current standard
Minimum net worth	\$2.5 million plus 25 bps of SF servicing UPB	\$2.5 million plus 35 bps of Ginnie Mae UPB plus 25 bps of all other UPB	Higher of (1) \$2.5 million net worth plus 25 basis points of owned SF servicing or (2) the FHFA's eligibility standards from time to time	\$2.5 million plus 35 bps of Ginnie Mae servicing UPB
Minimum capital ratio	Tangible net worth / total assets of ≥6%	Tangible net worth / total assets of ≥ 6%	Higher of (1) tangible net worth / total assets of ≥6% or (2) the FHFA's standards from time to time	Tangible net worth / total assets of ≥6%
Minimum liquidity	3.5 bps of agency servicing UPB plus incremental 200 bps charge for agency NPLs over 6%	4.0 bps of GSE servicing UPB plus 10 bps of Ginnie Mae servicing UPB plus incremental 300 bps charge for agency NPLs over 4%	Higher of (1) 3.5 bps of agency and non-agency servicing or (2) the FHFA's standards applied to agency and nonagency UPB	10 bps of Ginnie Mae servicing

Sources: Federal Housing Finance Agency, Ginnie Mae, and Conference of State Bank Supervisors.

Notes: bps = basis points; CSBS = Conference of State Bank Supervisors; FHFA = Federal Housing Finance Agency; GSE = government-sponsored enterprise; MSR = mortgage servicing rights; NPL = nonperforming loans; SF = single-family; UPB = unpaid principal balance. The FHFA's withdrawn proposal refers to the January 2020 proposed eligibility requirements that were withdrawn but will be reproposed soon.

Although we admire the CSBS's intention to align supervisory approaches as much as possible, state requirements, even when streamlined, can vary depending on state law, its interpretation, and its

application. To the extent the CSBS is concerned about the non-federally backed portion of the servicing market, we note that depositories—which service most non-agency mortgages—are already subject to stringent regulation, supervision, and examination by the Federal Reserve, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation. Loans backed by Fannie Mae, Freddie Mac, and Ginnie Mae or held in bank portfolios compose 96 percent (i.e., \$10.9 trillion of the \$11.3 trillion) in single-family principal balance outstanding. The remaining 4 percent is mostly composed of PLS loans and, to a lesser extent, whole loans held by private investors.

A second consideration is the effectiveness of the proposed regulation. As business counterparties, Fannie Mae, Freddie Mac, and Ginnie Mae have real-time visibility into the financial and operational condition of their servicers. They have a well-developed "pseudo-regulatory" infrastructure to approve and closely monitor their servicers. Most nonbank servicers, and all the large ones, are Fannie Mae, Freddie Mac, and Ginnie Mae counterparties. Servicers are required to report comprehensive loan-level data frequently to the GSEs to track delinquencies, prepayments, forbearances, and other loan activity. In addition, servicers must submit detailed quarterly reports showing minute details about assets, liabilities, capital and cash position, and financial condition (Freddie Mac, n.d.). This close engagement is much more effective than simply setting minimum capital and liquidity standards because it allows the agencies to identify problems early and take corrective action.

We note that Fannie Mae, Freddie Mac, and Ginnie Mae exercise discretion in how they implement and apply minimum eligibility requirements to their servicers. They can impose additional requirements depending on their assessment of each servicer's financial strength. In other cases, they grant waivers from specific requirements. Under the CSBS proposal, servicers with existing GSE or Ginnie Mae waivers would have to seek and obtain those waivers from each state regulator to stay compliant. This would be burdensome at best, even if waivers were granted. At worst, it could be disruptive if denial of a material waiver causes financial distress for a large servicer.

Taking these factors into consideration, it seems obvious that nonbank prudential regulation is best accomplished via a single federal regulator³ that supersedes state regulators. This will be more effective and more efficient. Given that the FHFA already has significant experience overseeing the mortgage market through its regulation of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (FHLBs), it would be the natural regulator for nonbank servicers. The FHFA could easily leverage the monitoring and reporting infrastructure the GSEs have put in place over the years. The FHFA could also leverage Ginnie Mae's monitoring and stress-testing framework and work with stakeholders to create a standard framework that could be applied nationally. Alternatively, the Federal Reserve could regulate nonbank mortgage servicers, as it already regulates depositories with large mortgage origination and servicing footprints.

Bringing nonbank servicers under FHFA or Federal Reserve supervision will also allow for a much more streamlined and effective regulatory regime compared with supervision by individual states. If state regulation of nonbanks is unavoidable for legal or other reasons, a better approach would be for states to defer or delegate supervision to either the FHFA or the Federal Reserve. We recognize that

designating a federal prudential regulator for nonbanks, whether the FHFA or Federal Reserve, will require congressional action.

Pros and Cons of Specific Provisions in the CSBS Proposal

At the highest level, the CSBS proposed that its baseline capital and liquidity requirements will generally mirror the current minimum eligibility requirements the FHFA has put in place for GSE servicers. A major question is the impact of applying the FHFA's standard to all types of loans (i.e., GSE, Ginnie Mae, and non-agency loans). The CSBS also recently announced a new initiative to streamline the examination process and reduce regulatory burden on nationwide servicers through better coordination and information sharing between states.⁴

The CSBS's baseline requirements apply to servicers with whole loans and MSRs totaling less than \$100 billion or less than 2.5 percent market share. Large and complex servicers (i.e., those with whole loans and MSRs in excess of \$100 billion, or over 2.5 percent market share) will be held to enhanced prudential standards, which would need to be developed by each servicer subject to state approval. Although it makes conceptual sense to holder larger firms to enhanced supervision, this would be a departure from the current GSE requirements, which are the same regardless of servicer size. Other aspects of the CSBS's proposal are largely deferential to the FHFA's requirements for GSE servicers. But certain elements of the proposal merit a closer look.

The CSBS has proposed to align its capital and liquidity requirements with *current and future* FHFA requirements. The FHFA had released updated eligibility requirements for GSE servicers in January 2020 but decided in June to repropose those requirements to incorporate lessons learned from the COVID-19 pandemic. The withdrawn proposal was more stringent than the current standards, and it is likely that the reproposed requirements, which are forthcoming, will be even more stringent. A blanket adoption of the FHFA's current and future requirements and their application to the entire market creates the potential for disruption in the servicing of non-GSE loans, toward which the FHFA has no obligation currently.

As an example, the FHFA's current requirement includes an incremental nonperforming loan (NPL) charge of 200 basis points on delinquencies above 6 percent. Although well intentioned, this would be counterproductive because it would require nonbanks to shore up liquidity at precisely the wrong time (namely, after defaults have risen), and raising new capital is more expensive and difficult. This provision is clearly problematic for GSE loans, but it will be even more of an issue for government loans. Because Federal Housing Administration (FHA) and US Department of Veterans Affairs (VA) delinquency rates tend to rise faster and stay more elevated compared with GSE delinquencies, servicers with a larger concentration of these loans would cross the 6 percent threshold sooner.

Over the long run, this could force lenders to reduce FHA lending as they seek ways to keep defaults from exceeding 6 percent. Or they could charge borrowers higher rates up front to price in the incremental NPL charge. There is also the potential for negatively affecting servicing values for FHA loans, which constitute the predominant share of lending to low- and moderate-income families and

racial and ethnic minorities. If the incremental NPL charge were finalized, nonbanks would be less willing to lend to these consumers, as they default at slightly higher rates. Furthermore, the FHFA's withdrawn proposal made this requirement even more onerous by reducing the NPL threshold from 6 percent to 4 percent and increasing the incremental charge from 200 to 300 basis points.

Another issue is the net worth calculation stated in the CSBS's and the FHFA's January 2020 proposal. Both would bar servicers from including the unused portion of committed advance lines of credit in the net worth calculation. This provision is onerous and counterproductive. These advance lines of credit are instrumental to having liquidity during times of high delinquencies. Although there is some risk that lenders will rescind unused lines during market turmoil, this risk primarily applies to uncommitted lines, which can be rescinded at any time. Committed lines, on the other hand, are a legally binding agreement to lend.

Rescinding committed lines without good cause would constitute breach of contract and create significant reputational risk for the lender. Another distinction is that committed lines often come with a commitment fee, generally 50 to 100 basis points. The lender then sets aside balance sheet capacity to make sure funds are made available to the nonbank when needed. As a result, committed lines are rarely withdrawn. Although they come with covenants, committed lines have proved durable during the pandemic. Even when the borrower violates one or more covenants, the lender has a strong incentive to work things out. This can be done via a combination of temporary waivers or additional fees.

Why is it essential to treat committed and uncommitted lines differently for the net worth calculation? Not receiving capital relief for unused committed lines would encourage nonbanks to pledge fewer assets and have fewer lines of credit and, by extension, fewer liquidity sources. Servicers may also be unwilling to pay the commitment fee if committed lines do not count as allowable assets, instead relying increasingly on uncommitted lines. In other words, the exclusion of available financing on committed lines creates a disincentive for nonbanks to arrange access to "as-needed" cash flow. This outcome runs counter to the traditional objective of a safety and soundness regulator. At a minimum, the FHFA and CSBS should do a careful analysis, accounting for key distinctions between committed and uncommitted lines, as well as the adverse consequences of excluding them from net worth.

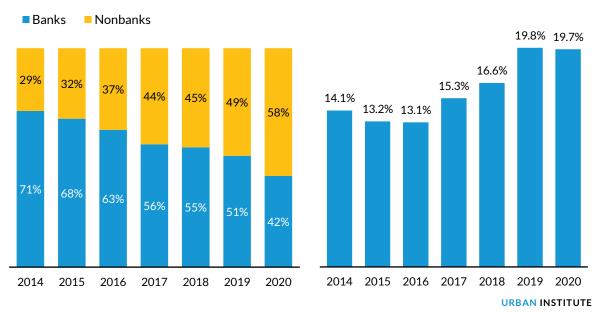
A broader issue with the proposed net worth calculation is that it is based on generally accepted accounting principles (GAAP) equity without appropriate adjustments. Under GAAP, there are several items that can "gross up" the balance sheet, requiring higher capital requirements than GSE standards. For example, home equity conversion mortgage (HECM) loans do not qualify for true sale accounting because issuers of HECM mortgage-backed securities have certain obligations postsecuritization. As a result, these assets are consolidated on the HECM servicer balance sheets. Realizing this lack of true sale treatment, Ginnie Mae exempts issuers that participate in both forward and reverse mortgage servicing from the 6 percent capital requirement, provided issuer failure to do so is attributable to the lack of true sale treatment.⁶

The GSEs grant similar waivers on a case-by-case basis, which is made possible only by their close monitoring of each servicers' financial condition. Other items that can "gross up" balance sheets include

situations where a servicer (1) owns a residual interest in a residential mortgage-backed security and must consolidate the entire security on its balance sheet or (2) sells an MSR but retains a long-term subservicing contract and must still show the MSR as an asset, with an offsetting liability. In these instances, calibrating net worth requirements to GAAP equity may end up being inconsistent with the FHFA's and Ginnie Mae's eligibility requirements, as both grant waivers on a case-by-case basis. The only way to avoid such inconsistency would be for state regulators, the GSEs, and Ginnie Mae to be constantly aligned with respect to waivers.

Another area of improvement is the lack of specificity in the regulatory treatment of complex servicers. The proposal states that large servicers would need to develop a methodology in house for measuring and monitoring their capital and liquidity needs, subject to review and approval by states. Under the CSBS's proposed \$100 billion threshold for servicing UPB owned, eight nonbanks would qualify as complex servicers and be subject to enhanced supervision. But this number is likely to grow as industry consolidation continues. Not only has mortgage servicing become increasingly concentrated among nonbanks over the past several years, it has become more concentrated among the largest nonbanks. According to Inside Mortgage Finance, nonbanks today service over 58 percent of single-family unpaid principal balance outstanding, double their share six years ago (figure 1). The right panel shows the increasing share of UPB that is serviced by the largest five nonbanks.

FIGURE 1
Nonbank Servicer Share of Total Single-Family UPB Outstanding
Nonbanks' share of total UPB
Top 5 nonbanks' share of total UPB



Source: Urban Institute calculations based on Inside Mortgage Finance data. **Notes:** UPB = unpaid principal balance. 2020 data are through the third quarter.

As large nonbanks continue to grow, more firms will cross the proposed \$100 billion threshold. According to Inside Mortgage Finance, several nonbank servicers are on the cusp of this threshold. Nine servicers are above the threshold today, two are above \$90 billion, and another four are above \$75 billion (table 2). Some of these firms will cross the \$100 billion threshold soon, increasing the number of nonbanks subject to enhanced prudential standards.

TABLE 2
Top 15 Nonbank Servicers, by Volume of Servicing Owned

Rank	Nonbank servicer	Servicing UPB owned (billions)
1	New Residential Mortgage	\$462.0
2	PennyMac Loan Services	\$402.0
3	Quicken Loans	\$370.0
4	Lakeview Loan Servicing	\$342.2
5	Mr. Cooper Group	\$286.7
6	Freedom Mortgage Corp.	\$241.6
7	Matrix Financial Services Corp.	\$151.9
8	Caliber Home Loans	\$148.9
9	United Wholesale Financial Services	\$142.8
10	AmeriHome Mortgage	\$96.0
11	Pingora Loan Servicing	\$94.6
12	loanDepot.com	\$78.8
13	Computershare Loan Services	\$78.6
14	Ocwen Financial	\$77.0
15	Home Point Financial	\$75.1

Source: Urban Institute calculations using Inside Mortgage Finance data.

Note: UPB = unpaid principal balance.

This will create substantial burden for the firms that are subject to enhanced standards and for state regulators who would have to keep up with multiple capital and liquidity frameworks in a market that is constantly evolving. We also note that lack of a standard eligibility criteria for complex servicers could create an uneven playing field if some states adopt a more stringent approach than others. It could also open the door to "negotiated regulation" as firms seek ways to minimize the financial impact of enhanced supervision. A better approach for complex servicers is to create a uniform stress-testing methodology applied at the federal level. The satisfaction of stress tests could be taken as an indication of adequate capital and liquidity.

Why Regulation Alone Will Not Improve Nonbank Safety and Soundness

Although we support prudential regulation for nonbanks, we emphasize that the nonbank servicer business model is sensitive to cash flow and liquidity. Nonbanks do not take on much credit risk because they sell nearly all their production to the agencies. The real risk they face is the timing delay between the payment of delinquent principal, interest, taxes, and insurance to relevant parties and the reimbursement of those advances by the GSEs and the FHA. The GSEs reimburse after loans become

four months delinquent, but the FHA does not do so until the loan is resolved through a short sale or foreclosure, a process that can take years. If there is a large increase in delinquencies that forces nonbanks to temporarily advance more cash than they had anticipated, the result can be a liquidity crunch.

In normal times, nonbanks maintain liquidity by borrowing against the value of MSRs. But as MSR values drop and delinquencies rise during downturns, this type of short-term borrowing becomes scarce. A case in point is April 2020, when MSR values plummeted in response to the COVID-19 shock. At the same time, the Coronavirus Aid, Relief, and Economic Security Act mandated forbearance (which Congress did not pay for), which caused fears of a major liquidity crisis in the nonbank sector. This happened despite the FHFA's minimum eligibility requirements being in effect. A full-blown crisis was eventually averted because the sharp decline in mortgage rates pushed refinances through the roof, allowing servicers to earn robust origination incomes and the float from refinance payoffs (Kaul and Tozer 2020).

Additionally, the FHA and GSEs made policy changes to accelerate reimbursements to their servicers to avert a sector-wide liquidity crisis. Ginnie Mae instituted the Pass-Through Assistance Program to lend to in-need servicers. Program use has remained low, but its availability has kept confidence in the sector alive. These changes were the economic equivalent of emergency federal lending, similar to the Federal Reserve's lending programs for banks or to FHLB advances. Although the FHFA's minimum requirements helped servicers maintain a minimum buffer, it was the availability of emergency assistance and accommodation from the FHA and GSEs that kept market confidence in the sector alive.

The most effective way to prevent future liquidity crises in the nonbank servicer sector, therefore, is to recognize the need for emergency federal assistance and make it explicit ex ante. Note that bank depositories have access to the Federal Reserve's lending facilities and to FHLB advances. As of year-end 2019, depositories (i.e., commercial banks, savings institutions, and credit unions) accounted for 80 percent (\$511 billion) of the \$640 billion of FHLB advances outstanding. Their share of FHLB advances increased even more in the first quarter of 2020 as they sought additional liquidity when the pandemic started. On the other hand, nonbanks, despite their dominant role in the mortgage market and strong mission alignment with the FHLBs, are not eligible for FHLB membership or for the Federal Reserve's lending programs. Kaul and Goodman (2020) explained this issue in detail in an earlier paper and noted there is a strong case for expanding FHLB membership to accommodate nonbanks. Paired with prudential regulation at the federal level, FHLB membership would give nonbanks much-needed access to stable federal funds through the cycle and significantly mitigate the perpetual liquidity risks the sector faces.

Why Is It Important to Get Nonbank Servicer Regulation Right?

The nonbank share of originations for Fannie Mae, Freddie Mac, and Ginnie Mae has risen dramatically. The increase has been broad based, spanning both conventional and government channels, and origination and servicing. Today, nonbanks originate 90 percent of FHA and VA lending and over half of Fannie Mae and Freddie Mac lending. Additionally, because of a willingness to take on slightly more credit risk than banks, nonbanks compose a larger share of lending to first-time homebuyers and minorities, who rely disproportionately on FHA and VA lending (State Street and HFPC 2017).

Although efforts to prudentially regulate nonbanks are important, it is equally important to get it right given the stakes. State regulatory requirements that apply the FHFA's topline requirement to the entire market without applying adjustments or exercising discretion or leveraging the monitoring framework will not only be of limited use in making the system safer but will have unintended consequences. The bulk of this impact will fall on minorities, low- and moderate-income borrowers, and first-time homebuyers that depend on FHA lending. It will also create regulatory inconsistency across states and between state and federal requirements. Although prudential regulation of nonbanks is desirable, it alone cannot mitigate risks, which are mostly liquidity related. We believe the most practical solution to the nonbank liquidity issue is to pair federal prudential regulation with access to a stable source of federal lending either through the Federal Reserve or the FHLBs.

Notes

- ¹ "Doing Business with Fannie Mae," Fannie Mae, accessed December 18, 2020, https://selling-guide.fanniemae.com/Selling-Guide/Doing-Business-with-Fannie-Mae/Subpart-A4-Maintaining-Seller-Servicer-Eligibility/.
- See chapter 2 of the MBS Guide at "MBS Guide: Chapters," Ginnie Mae, accessed December 18, 2020, https://www.ginniemae.gov/issuers/program_guidelines/Pages/MBSGuideLib.aspx.
- This is consistent with Corker-Warner and Johnson-Crapo housing finance reform proposals. Both envisioned creating a federal mortgage market regulator with the authority, among other things, to approve and oversee servicers.
- ⁴ "One Company, One Exam for Mortgage Companies: The Future of Mortgage Supervision," Conference of State Bank Supervisors, November 9, 2020, https://www.csbs.org/ocoemortgagepodcast.
- Federal Housing Finance Agency, "FHFA Proposes Updated Minimum Financial Eligibility Requirements for Fannie Mae and Freddie Mac Seller/Servicers," news release, January 31, 2020, https://www.fhfa.gov/Media/PublicAffairs/Pages/FHFA-Proposes-Minimum-Financial-Eligibility-Requirements-for-Fannie-Mae-and-Freddie-Mac-SellerServicers.aspx.
- See chapter 3, part 8, § C of the Ginnie Mae MBS Guide at "MBS Guide: Chapters," Ginnie Mae, accessed December 18, 2020, https://www.ginniemae.gov/issuers/program_guidelines/Pages/MBSGuideLib.aspx.
- Bonnie Sinnock, "Coronavirus Puts New Spin on Crisis-Era MSR Valuations," *National Mortgage News*, April 15, 2020, https://www.nationalmortgagenews.com/news/coronavirus-puts-new-spin-on-crisis-era-msr-valuations.
- Fannie Mae, "Incentive Fees for Retention Workout Options," lender letter LL-2020-09 to all Fannie Mae single-family servicers, June 10, 2020, https://singlefamily.fanniemae.com/media/23091/display; and Brian D.

Montgomery, "FHA's Loss Mitigation Options for Single-Family Borrowers Affected by the Presidentially Declared COVID-19 National Emergency in Accordance with the CARES Act," mortgagee letter 2020-06 to all FHA-approved mortgagees and others, April 1, 2020, https://www.hud.gov/sites/dfiles/OCHCO/documents/20-06hsngml.pdf.

Ginnie Mae PTAP Assistance, Ginnie Mae, accessed December 18, 2020, https://www.ginniemae.gov/issuers/program_guidelines/pages/ptap.aspx.

References

Freddie Mac. n.d. Mortgage Bankers' Financial Reporting Form. Tyson's Corner, VA: Freddie Mac.

Kaul, Karan, and Laurie Goodman. 2020. "Should Nonbank Mortgage Companies Be Permitted to Become Federal Home Loan Bank Members?" Washington, DC: Urban Institute.

Kaul, Karan, and Ted Tozer. 2020. "The Need for a Federal Liquidity Facility for Government Loan Servicing." Washington, DC: Urban Institute.

State Street and HFPC (State Street Global Advisors and the Urban Institute's Housing Finance Policy Center). 2017. "The Role of Nonbanks in Expanding Access to Credit." Washington, DC: Ginnie Mae.

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