I appreciate the opportunity to submit a comment to the Federal Housing Finance Agency (FHFA) in response to its proposed rulemaking addressing the capital adequacy of Fannie Mae and Freddie Mac (hereafter referred to as the enterprises). The Mercatus Center at George Mason University is dedicated to advancing knowledge about the effects of regulation on society. With that in mind, this comment does not represent the views of any particular affected party or special interest group. It is designed to help FHFA as it considers how to best implement its proposed rule. Specifically, the comment seeks to help FHFA assure that the enterprises, as private firms, are adequately capitalized, financially stable, and will not again require public bailout. By achieving these goals, it is expected that the enterprises will best serve the public interest in promoting access to affordable housing across the United States.

This comment addresses several aspects FHFA’s re-proposed capital rule for the enterprises, including the following:

- Support for proposed changes affecting the weighting schemes used in its risk-weighted models
- Support for proposed changes affecting mark-to-market countercyclical adjustments, credit risk transfers, and prescribed capital conservation buffer amounts
- A recommendation to use a single definition of capital for public disclosure purposes
- A recommendation to use Tier I capital rather than adjusted total capital when defining both the risk-weighted and leverage ratios and standards (because adjusted total capital, used when computing the risk-weighted ratio, overstates the enterprises’ loss-absorbing capacity)

---

1. Thomas M. Hoenig is a distinguished senior fellow for the Mercatus Center at George Mason University, former president at the Federal Reserve Bank of Kansas City, and former vice chairman of the Federal Deposit Insurance Corporation.
• A recommendation that the minimum leverage ratio be set higher than 4 percent of adjusted total assets
• A recommendation that the risk-weighted and leverage ratios be interchanged as primary and backstop measures when judging the enterprises’ capital adequacy

DEFINITIONS OF CAPITAL
The proposed rulemaking incorporates five different definitions of the enterprises’ capital, each relying on different measurements. Two are statutory definitions and three are supplemental definitions. All the definitions use measurements of equity: four use measurements of preferred stock; one uses measurements of excess credit reserves and subordinated debt; and another uses a measurement of a portion of other comprehensive income. Also, four of the definitions account for regulatorily-required deductions and adjustments for certain deferred tax assets, goodwill, and other intangible assets that have little loss-absorbing capacity when enterprises are under financial stress. Ultimately, FHFA relies on two of the five definitions to establish the enterprises’ minimum capital requirements. Adjusted total capital is used to set the risk-weighted capital requirement, and Tier I capital is used in setting the leverage ratio requirement. Adjusted total capital includes subordinated debt and a portion of credit reserves, while Tier I capital does not.

Having multiple definitions of capital serves to confuse the public as much as it serves to inform it, and it impedes transparency. FHFA should select a single capital definition for calculating both the risk-weighted and leverage ratios. Doing so would more clearly and consistently inform investors and the public regarding the enterprises’ financial strength and ability to absorb unexpected losses.

Supplemental Tier I capital serves this purpose best. It is defined as common equity, noncumulative preferred stock, and a portion of other accumulated comprehensive income (AOCI). Also, unlike adjusted total capital, supplemental Tier I capital excludes subordinated debt, which has no loss absorbing capacity and for which interest payments—unlike dividends—cannot be suspended without risking default. Tier I capital, therefore, should be the common numerator for both the risk-weighted and leverage ratios, reported appropriately as Tier I risk-weighted capital and Tier I leverage.

RISK-WEIGHTED CAPITAL RATIO
The risk-weighted capital ratio is composed of a base ratio, defined as adjusted total capital to risk-weighted assets, plus a prescribed capital conservation buffer amount (PCCBA). FHFA relies principally on a model-based approach for estimating risk-weighted assets, and it proposes adjusting certain of the model’s weighting schemes to better align risk with assets and capital with risk assets. These adjustments are improvements to the process of assigning risk weights among assets and should be incorporated in the revised rule.

Additional changes and additions, discussed below, would affect the mark-to-market loan-to-value (MTMLTV) adjustment, the countercyclical adjustment factor, and the treatment of credit risk transfers (CRT). Lastly, the proposed rulemaking would add several enhancements to the PCCBA.
MARK-TO-MARKET COUNTERCYCLICAL ADJUSTMENTS
The proposed rulemaking introduces useful countercyclical adjustments of single-family MTMLTV amounts when measuring risk-weighted assets, which should be adopted. Asset values and capital requirements are modified depending on the movement of current house prices relative to their long-run trend. These adjustments serve to moderate the effects of sharp changes in house prices on the enterprises’ capital requirements, and their potential procyclical effects on the housing market are a reason the proposed rulemaking should be adopted.

ADJUSTMENT TO CREDIT RISK TRANSFERS
Changes affecting the enterprises’ use of CRTs are intended to better account for the limitations in transferring balance sheet risks to a third party. While CRTs transfer credit or other risks to a counterparty, some level of risks remains related to timing, quality of the security, and the ability of the counterparty to pay as promised. The proposed rulemaking, therefore, correctly acknowledges that CRTs do not provide the same loss-absorbing capacity as equity capital and appropriately require enterprises to retain some amount of capital to allow for this risk.

PRESCRIBED CAPITAL CONSERVATION BUFFER AMOUNT
The PCCBA is composed of a countercyclical buffer, a stress buffer, and a stability buffer. It is measured as a percentage of adjusted total assets rather than of risk assets. This feature, as the proposed rulemaking notes, serves to promote greater stability through the economic cycle. The countercyclical component would be implemented at the discretion of FHFA, depending on macroeconomic conditions. It is similar to the one defined for the banking industry, and FHFA will coordinate its application with bank supervisors. The stress component of the buffer is 0.75 percent of adjusted total assets and provides the enterprises an additional margin of capital to absorb unexpected loss from significant but temporary adverse events. FHFA correctly recognizes that the 0.75 percent stress buffer component should be periodically reviewed and adjusted as needed.

The stability component of the buffer adjusts capital levels to recognize the potential systemic disruption that a failure of the enterprises would have on the housing market. Importantly, it is rule based and dependent on the enterprises’ relative concentration of industry loans. The inclusion of the stability buffer reflects lessons learned from past crises. The housing market and the enterprises’ dominant role in funding this market have a profound effect on the economy, which should be accounted for in setting capital standards. The proposed rulemaking also asks for suggestions on possible alternative measures to define this buffer; however, estimates of the enterprises’ systemic effect are subject to any number of influences and to significant error, and no other method would necessarily be superior.

While providing a significant additional margin of capital, the PCCBA also provides the enterprises’ useful flexibility in maintaining capital over the economic cycle. As long as capital remains greater than total minimum requirements, no restrictions on operations would likely be imposed. Should the ratio decline to less than the minimum required level but within the buffer, enterprises would have the opportunity to rebuild capital with limited operational restrictions, including only gradual reductions in capital distributions. Thus, FHFA’s use of the PCCBA serves to mitigate potential procyclical effects that strict capital minimums would otherwise have on the enterprises’ operations and on the broader housing market.
Overall, if FHFA chooses to implement a risk-weighted capital program for enterprises, these modifications represent improvements to the proposed rulemaking and should be included in the final rule. However, as proposed, the risk-weighted capital standard generally overstates the percentage of loss-absorbing capital relative to risk assets. To address this weakness, Tier I capital, rather than adjusted total capital, should be used to define the risk-weighted capital ratio.

**RISK-WEIGHTED CAPITAL RATIO OVERSTATES CAPITAL STRENGTH**

Using the enterprises' financial reports from September 2019, FHFA provides an example of the minimum amount of capital required under the proposed risk-weighted capital rule. The estimate, $234 billion in adjusted total capital (Tier I capital, subordinated debt, and a portion of credit reserves) plus a PCCBA, divided by $1,686 billion of risk-weighted assets, is 13.9 percent. However, to the extent that this equation includes debt, the risk-weighted capital ratio may overstate enterprises' capacity to absorb unexpected loss. In this example, by excluding any debt or excess credit loss reserves as capital, the ratio’s numerator would decline to a Tier I amount of $200 billion dollars, or 11.9 percent of risk-weighted assets, reflecting the $34 billion reduction. As noted earlier, Tier I capital, which excludes subordinated debt and credit reserves, more accurately represents the percentage of loss-absorbing capital relative to risk assets. Therefore, to enhance the transparency and clarity of the risk-weighted capital ratio, it should be redefined and recalibrated using Tier I capital only.

Finally, the proposed rulemaking would impose a floor on the adjusted risk weights for single-family mortgages of 15 percent. Such a floor acknowledges the difficulty of relying on models to fully identify relative risks within the different asset classes or to provide a fully dependable estimate of risk-weighted assets. It also recognizes the incentives to arbitrage based on the enterprises’ balance sheet to maximize leverage. If the risk-weighted capital minimums were the best means to judge the enterprises' risk and capital requirement, this floor would be unnecessary.

**LEVERAGE CAPITAL RATIO**

The leverage ratio is proposed as a capital backstop for enterprises, below which capital could not decline, regardless of the minimum estimated using the risk-weighted ratio. It is defined as Tier I capital divided by adjusted total assets. Tier I capital is composed principally of equity capital and is the best measure of the enterprises' loss-absorbing capacity. Adjusted total assets is defined as total assets under generally accepted accounting principles, adjusted for certain off-balance-sheet risk items such as loan commitments and derivatives. FHFA proposes a minimum leverage ratio of 4 percent, which, as discussed later, is insufficient to assure greater stability and should be increased to at least 5 percent.

The leverage capital ratio does not assign relative risk weights to assets and does not attempt to anticipate the source or the predictability of loss, whether from credit exposures, market spreads, or operations. Also, the leverage ratio, by excluding debt, informs investors and the public of approximately how much loss the enterprises can absorb relative to total assets before insolvency occurs. This is a clearer and more reliable indicator of an institution’s financial resiliency.

The proposed rulemaking sets 4 percent as the minimum required leverage ratio, composed of a 2.5 percent base and a 1.5 percent capital buffer. Using September 2019 financial data, FHFA
estimates that the 4 percent required Tier I capital would be $243 billion (4 percent of $6,076 billion in adjusted total assets).

Based on past events, FHFA’s proposed 4 percent Tier 1 leverage ratio most likely leaves enterprises vulnerable to unexpected adverse shocks. In setting the minimum ratio at 4 percent, FHFA notes that this percentage is comparable to the one selected for the banking industry. While this acknowledgement is correct, it raises the question of whether 4 percent is adequate to preclude the enterprises’ having to be placed into conservatorship should they encounter a significant crisis in the future. FHFA notes, for example, that the enterprises’ peak losses during the Great Recession (adjusted for comparability) were approximately 3 percent of total adjusted assets. Thus, should the enterprises’ Tier I capital decline to 1 percent, it is likely that they would once again require government assistance.

Some commentators may question whether setting the minimum leverage ratio at 4 percent would provide sufficient returns to attract private investment. This should be carefully evaluated, but it is doubtful that it would inhibit investor interest. For example, based on 2019 financial reports, if enterprises were required to maintain a higher 5 percent leverage ratio while earning a 1 percent return on assets (similar to the return earned in the banking industry), returns on equity would be roughly 20 percent, which is competitive with other industries’ returns. Thus, the tradeoff between more capital and greater returns should not necessarily inhibit investor interest.

**RISK-WEIGHTED RATIO OR THE LEVERAGE RATIO**

Using the example presented in FHFA’s proposed rulemaking, calculating both the risk-weighted and leverage ratios using Tier I capital in the numerator makes for a more direct comparison of how much loss-absorbing capital is required under each measure. As noted earlier, based on FHFA’s example, the minimum risk weight capital requirement under the proposed rulemaking would be $234 billion (adjusted total capital to risk weighted assets plus the PCCBA). However, adjusted total capital can include approximately $34 billion of debt and credit reserves, which means as little as $200 billion would be Tier I equity. Under the leverage ratio, which allows only Tier I equity in the calculation, even the 4 percent Tier I capital to adjusted total assets is a significantly higher amount of $243 billion.

For greater clarity and transparency, therefore, FHFA should use only Tier I capital in the numerator for both the risk-weighted capital and leverage ratios. In addition, if the leverage ratio is to be the backstop capital measure, the minimum levels should be recalibrated to increase the risk-weighted minimum ratio, decrease the leverage ratio, or both. Once in place, these ratios would be far more effective in capturing and comparing relative shifts in the enterprises’ risk assets, changes in leverage, and overall risk levels.

Finally, given the comparative results discussed earlier and given that the risk-weighted capital standard has shown mixed results in the past, FHFA should designate the leverage ratio as the primary measure for setting the enterprises’ minimum capital requirements. The housing market is dynamic and highly volatile, while the risk-weighted measure, even with the proposed changes, is static, since regulators are slow to change risk weights as markets change. It is also highly complex and open to manipulation. The leverage ratio is simpler and clearer in its information, since it identifies the enterprises’ total loss-absorbing capacity relative to total assets, regardless of source.
An objection to using the leverage ratio is that it fails to distinguish degrees of risks among assets, and if it were the primary standard, it would give managers an incentive to take on riskier assets for a given level of capital as a means to increase investor returns. Assuming the minimum leverage ratio is set appropriately, this outcome is unlikely. However, an antidote to this concern is to incorporate risk analysis into the stress test as the backstop to the leverage ratio. Different assumptions can be made to analyze and judge the effects of potential changes in risks among assets. FHFA staff, trained in the highly technical and complex details of a risk analysis, could best measure and provide a check in the event that management increases the enterprises’ portfolio risks over time.

CONCLUSION
FHFA’s proposed rulemaking improves the usefulness of the risk-weighted capital analysis introduced in an earlier proposal to establish minimum capital requirements for the enterprises. Nevertheless, it requires that FHFA assume that its models can anticipate and accurately measure shifting risks within a highly dynamic market, which too easily misleads the public regarding the enterprises’ financial resiliency. This public interest comment, while recognizing improvements to the proposal, offers several recommendations to strengthen it further for judging the enterprises’ capital and financial strength. I appreciate the opportunity to offer these recommendations and would be pleased to provide FHFA follow-up comments should they be helpful.