

**Danielle:**

Good afternoon, everyone. This is Danielle Walton with the Federal Housing Finance Agency. I want to thank you all for joining us for this webinar on the re-proposed rule on capital requirements for Fannie Mae and Freddie Mac. Before we begin, please ensure you have the opened the WebEx chat panel by using the associated icon located at the bottom of your screen. Note that all audio connections are muted at this time. If you require technical assistance, please send the message via chat to the host.

We will not be taking live questions on content, but we've received several questions in advance, many of which are technical in nature. However, in the essence of time, we will be fielding those of general interest throughout the presentation. Joining me for today's webinar are members of FHFA's Office of Financial Analysis Modeling and Simulations team who'll provide insight into the rationale and the re-proposal and highlight key enhancements.

Once the webinar's concluded, we will make the recording available on fhfa.gov, where you can also find the full proposed rule and submit your written comments. With that, I'd like to turn things over to Principal Deputy Director Adolfo Marzol for opening remarks. Adolfo.

**Adolfo:**

Thank you, Danielle. Let me also welcome everyone that has joined the webinar. I think we've got a terrific level of attendance, so we really appreciate your interest in this subject. I think we have a very informative presentation for everyone today. I think as part of the agency's efforts to provide an exceptional level of transparency around the rule to the public, and we hope you find value in it. We will get over to the presentation in just a minute. I wanted to just make a few introductory remarks.

The agency was very pleased to release the proposed rule approximately two weeks ago. It's intended to create a housing finance system that provides all Americans, especially low- and moderate-income households with access to affordable mortgage financing through the economic cycle – a Fundamental premise of the rules to ensure the safety and soundness of Fannie Mae and Freddie Mac. We believe the enterprises have a mission to serve the American housing market during good times and bad. When credit dries up, it affects low- and moderate-income households the most.

We believe we have to chart a course for the enterprises toward a sound capital footing so they can serve the market in times of stress. My

colleagues will take you through some of the details in a moment. I just wanted to emphasize the size and the scale of these entities. Together they're nearly half of the US mortgage market and they represent \$6.1 trillion in on balance sheet and off-balance sheet exposures that require capital.

We have to return Fannie Mae and Freddie Mac to becoming well-capitalized entities that can stand on their own two feet and never need another taxpayer bailout. Just to put a little context around this, a year ago these entities were leveraged a thousand to one. We've made some real progress on that. Thanks to the work of FHFA and Treasury in amending the PSPA agreements and allowing Fannie Mae and Freddie Mac to begin to retain some capital, we're down to 250 to one today. But I think it's clear that 250 to one is not sustainable, would certainly not survive a serious housing downturn.

The goal of the re-proposed rule is to eventually make sure that we're at or below 25 to one. Now some may argue that that's not enough capital. By reference, some of our largest banks average about 12 to one. But we believe taking in its totality that the rule provides the framework for both long term safety and soundness and mission fulfillment by Fannie Mae and Freddie Mac. Now, of course, having a capital rule is not the same as having capital, but this is a critical milestone towards the enterprises continuing for the path of becoming well capitalized financial institutions, and it's part of FHFA's statutory responsibility to end the conservatorships of Fannie Mae and Freddie Mac.

It's an important milestone and it's an important step in the process. I also wanted to just take a moment and address the timing of the re-proposal. I think the question of why move forward with the re-proposal while our nation [deals] with the health and the financial challenges that have arisen from COVID-19? First, I want to say that I believe our agency working with our regulated entities has done an exceptional job of responding to the COVID-19 emergency and making sure that the housing finance system has continued to function, and that borrowers and renters have been kept in their homes.

I think that we have demonstrated the ability to respond and we'll continue to respond and prioritize COVID-19 while continuing to move forward with the critically important work of the agency. This capital rule re-proposal is certainly that. If anything, the COVID-19 situation really highlights the need to have enterprises be well sized. Financial

stress can come at any time from [anywhere], and we have to be prepared. While Fannie Mae and Freddie Mac remain under capitalized, the system remains vulnerable.

This re-proposal really puts forward a regulatory capital framework that we believe positions Fannie and Freddie to fulfill their mission for the long term. With that, Danielle, perhaps we could go to slide two and begin the PowerPoint presentation. Let me just take a moment as well to provide everyone on the webinar [with] the rationale for the re-proposal. They were really three rationales for re-proposing the entire rule.

First, the context has changed very significantly from the 2018 proposal. At the time of 2018 proposal, there really weren't expectations on part of interested parties that conservatorships were going to be ended. That has clearly changed under the leadership of Director Calabria and the director felt it very important for the public to have an opportunity to comment with appropriate context in terms of the future of the conservatorships.

Secondly, we're proposing changes that enhance the quantity and the quality of the regulatory capital at Fannie Mae and Freddie Mac. My colleagues will take you through those details in a moment.

Finally, this re-proposal contains some really fundamental changes intended to address one of the most significantly commented on items in the 2018 proposal, which was the very high degree of pro-cyclicality in the capital requirements in the 2018 proposal. We believe this proposal takes some very important steps to address that pro-cyclicality.

With that context, I'll turn it over to my colleague, Naa Awaa Tagoe to take you through the next slides.

**Naa Awaa:**

Thanks Adolfo. Hello, good afternoon. This is Naa Awaa Tagoe. The capital rule team is happy to walk you through an overview of the re-proposed rule on enterprise capital and to provide some insight into some of the choices we've made after considering comments on the 2018 proposal. I will start with a high-level overview of the rule, and then I'll pass it on to my colleagues to walk through a few more topics in more detail. I'm going to ask each speaker to introduce themselves.

The 2018 proposal remains the foundation on which the proposed rule was developed. Many of the key elements we'll discuss will look familiar

to people who've been following the discussion. The rule still has risk-based capital requirements backstopped by leverage restrictions. The risk-based capital requirements continue to capitalize for credit risk, market risk and operational risk. Credit risk capital is still for unexpected losses and market risk capital addresses spread risk.

Credit risk capital requirements for both single-family and multifamily mortgage exposures continue to be based on lookup tables, which we called grids and multipliers, which form the backbone of what we now call the standardized approach. The single-family grids continue to be mortgage risk sensitive based on mark-to-market loan-to-value and updated credit scores, as well as other risks characteristics.

The multifamily grids are unchanged, and they continue to be based on mark-to-market LTV and updated debt service coverage ratios, as well as other risk characteristics. The enterprises continue to receive meaningful credit risk capital relief for loan level credit enhancements, such as mortgage insurance, and for credit risk transfer.

Turning to slide four. With the 2018 proposal as the foundation for the proposed rule, what has changed in the new proposal? There are four key enhancements in the proposed rule: the quality of capital, the quantity of capital, addressing pro-cyclicality, which Adolfo mentioned already, and there's also an addition of an advanced approach. I'll walk through each one. The first enhancement is the quality of capital and you may know that the definitions of regulatory capital for the enterprises are set by statute and those statutory definitions have some weaknesses.

However, FHFA does not have the authority to change the statutory definitions of capital. The 2018 proposal attempted to partially address this issue by setting capital requirements for deferred tax assets. The proposed rule takes a different approach to solve this problem. Specifically, the proposed rule strengthens the quality of regulatory capital by including a set of supplemental capital requirements that are based on the US banking frameworks definitions of capital: common equity tier one, tier one, and adjusted total capital.

These requirements mitigate weaknesses in the statutory definitions of capital by improving the loss absorbing capacity of regulatory capital. Another enhancement is the conversion of grids of capital requirements in the 2018 proposal to grids of risk rate in the proposed rule. An 8% capital requirement is now a hundred percent risk rate.

The second enhancement is the quantity of capital. The proposed rule increases the quantity of enterprise capital through a number of enhancements, including a risk weight floor for single-family and multifamily mortgage exposures of 15% and refinements to capital for CRT exposures, which reduce capital relief for CRT compared to the 2018 proposal, but still provide meaningful capital relief for CRT.

We've added capital buffers to support the enterprises remaining going concerns through a period of financial stress. There's now a floor for operational risk capital of 15 basis points of adjusted total assets, which is an increase from eight basis points in the 2018 proposal. We also have a higher combined leverage ratio requirement and buffer.

The third enhancement is addressing pro-cyclicality. We received many comments on pro-cyclicality on the 2018 proposal, and the proposed rule continues to use updated risk characteristics. However, it mitigates the pro-cyclicality of the credit risk capital requirements in the 2018 proposal by adding risk-based and leverage capital buffers that can be drawn down in a period of financial stress and then rebuilt over time as economic conditions improve. The proposed rule also includes a new, countercyclical adjustment to mark to market LTV that we will describe in more detail later.

The fourth enhancement is the inclusion of an advanced approach, which is based on the enterprises assessing their own credit, market, and operational risks. The enterprises must maintain regulatory capital of the greater of the amount required under the advanced approach or the standardized approach.

Turning to slide five. This is on service to the mission. The proposed rule is designed to help the enterprises fulfill their mission of promoting access and affordability across the economic cycle.

There are two ways in which this is achieved. First, with respect to supporting the broad mission, the proposed rule would help the enterprises support the secondary mortgage market when it needs support the most and that's in times of stress. The rule accomplishes this through: a going concern standard, by which we mean having sufficient capital to survive the stress and write new business, capital buffers that can be drawn down in times of stress, and more stable capital requirements through the economic cycle.

Then second, with respect to supporting mortgage affordability and access, FHFA made careful choices in the proposed rule to support

affordability and access across the risk spectrum. For example, the proposed rule eliminates risk multipliers from the 2018 proposal that would have allocated much more capital to mortgages with small balances and mortgages with one borrower. In the 2018 proposal, the risk multiplier for mortgages with one borrower was 1.5, meaning that all other risks being held constant, the capital requirement for a mortgage with one borrower would have been 50% higher than the capital requirements for a mortgage with multiple borrowers.

In a similar vein, in a 2018 proposal, the risk multiplier for mortgages with loan balances of \$50,000 to \$100,000 was 1.4, meaning 40% more capital, and the risk multiplier for mortgages with loan balances of \$50,000 or less was 2.0, meaning double the capital requirements for mortgages with loan balance is greater than \$100,000. To support mortgage affordability and access, the proposed rule eliminates risk multipliers for mortgages with one borrower and mortgages with loan balances of a hundred thousand dollars or less.

Furthermore, new risk weight floors in the proposed rule impact only the lowest risk acquisition. The risk-based capital buffers are based on an enterprise's adjusted total assets rather than risk weighted assets, which is the metric used in the US Bank Capital framework. This method allocates less capital to higher risk assets than using the risk weighted assets.

Let's turn to slide six. There are two important concepts of total assets in the proposed rule for measuring capital requirements, and we want to walk you through these.

The first is adjusted total assets, and this is used to calculate leverage requirements and all the capital buffers. The second is risk-weighted assets, and it's used to calculate risk-based capital requirements. This slide illustrates the calculation of adjusted total assets for both enterprises as of September 30th, 2019. As you can see, we start on the first row with total assets as reported on the balance sheet for the two enterprises combined it's 5.7 trillion.

Then these amounts are adjusted to include exposure to derivatives and repo style transactions and some off-balance sheet exposures primarily related to the multifamily businesses. This gets us to adjusted total assets for the enterprises combined of \$6.1 trillion. The second concept is risk-weighted assets, and you can see we're reporting risk-weighted assets for the enterprises combined of 1.7 trillion.

Those risk-weighted assets are calculated at the loan level, using the grids and multipliers to calculate risk weights, and then multiplying the risk weight for each loan and by the carrying value of the loan. As you can see, the weighted-average single-family net credit risk weight for the enterprises combined is 26%. The weighted-average multifamily risk weight is 51%, and those risk weights are roughly half that of the US banking framework for similar exposures.

**Danielle:**

Before we move to the next slide, we do have a couple of questions related to this. Why did FHFA choose single family and multifamily risk weights roughly half as large as comparable US banking risk weights?

**Naa Awaa:**

Just to be clear, the single-family risk weight of 26% and the multifamily risk weight of 51%, those are weighted-averages for the enterprises' single family and multifamily portfolios for the aggregate portfolios. In contrast to the US banking framework, which generally assigns a single risk weight to all performing loans, the proposed rule assigns risk weights to loans based on an array of risk characteristics such as LTV, credit score, loan purpose, and product type.

The proposed rule also provides credit for mortgage insurance, which is not reflected in the US bank risk weights. Now risk weights in the proposed rule will change with the risk characteristics of the portfolio, which may also change over time. In the future, the weighted average risk weights of the enterprises' portfolios may be higher, may be lower, than the figures reported as of September 30<sup>th</sup>, 2019.

For example, at this point in time, as of September 30<sup>th</sup>, 2019, that weighted average single-family risk weight of 26% reflects relatively low mark to market LTV for the enterprises' single family portfolios.

They were in the range of about... the mark to market LTV was about 56%, and in a higher risk environment, if the enterprises' weighted average risk weights are higher, they could end up being higher than those used in the US banking framework. In general, we view the proposed rule's dynamic risk weights as a feature, not a bug. We look forward to receiving public comments on this part of the proposal.

If we could turn to slide seven, this slide provides an overview of the capital requirements and capital buffers. Risk based capital requirements are on the left and the leverage requirements and leverage buffer are on the right. The proposed rule has four risk-based capital requirements consisting of a statutory requirement of 8% of risk weighted assets met with total capital and three supplemental capital

requirements. Supplemental requirements are 4.5% of risk weighted assets met with common equity tier one capital, a requirement of 6% of risk weighted assets met with tier one capital and a requirement of 8% of risk weighted assets met with adjusted total capital.

Below that you can see the risk-based capital buffers, there's three buffers, and these apply to the supplemental risk-based capital requirements only. The stress capital buffer of 75 basis points of adjusted total assets, which is equivalent to the going concern buffer in the 2018 proposal. You have a stability capital buffer, which is similar to the systemic risk buffers used by bank regulators of 88 basis points of adjusted total assets as of September 30th, 2019. You have a countercyclical buffer, which is similar conceptually to the countercyclical buffer used by bank regulators, and which is initially set to zero.

On the right side, on the leverage side, you can see that the proposed rule has two leverage ratio requirements. There's a statutory requirement of 2.5% of adjusted total assets, which is met with core capital, and a supplemental requirement of 2.5% of adjusted total assets, which is met with tier one capital. The proposed rule also has a leverage buffer of 1.5% of adjusted total assets.

We'll turn then to slide eight. This slide summarizes the capital requirements for the enterprises combined as of September 30th, 2019. The risk-based capital requirements are on the top panel and the leverage capital requirements are in the bottom panel. I know there are a lot of numbers on this page, we're going to focus on the numbers in bold. Starting with the risk-based capital, focusing on the first row. You can see that the statutory capital requirement met with total capital is \$135 billion, 8% of risk rated assets.

You have a tier one capital requirement of 101 billion. I skipped the CET1 requirement, which is \$76 billion and the adjusted total capital requirement, which is \$135 billion. Below that you have the buffers, you have the stress capital buffer of \$46 billion and the stability capital buffer of \$53 billion, the countercyclical capital buffer amount, I already mentioned, with zero. You have these three buffers combined, called the prescribed capital conservation buffer amount, of \$99 billion. Together, risk-based capital requirement and buffers total \$175 billion for CET1, \$200 billion for tier one and \$234 billion for adjusted total capital.

On the leverage side, in the lower panel, the statutory leverage capital requirement and the tier one leverage capital requirement are both \$152 billion, 2.5% of adjusted total assets. The leverage buffer is \$91 billion or 1.5% of adjusted total assets. Together the leverage requirement and buffers total \$243 billion for tier one capital or 4% of adjusted total assets. An observation on this page is that as you can see the combined leverage requirements and buffer of \$243 billion exceeds the combined adjusted total capital requirement and buffer of \$234 billion after September 30<sup>th</sup>, 2019 and so the leverage requirement is binding.

There's some question about whether FHFA believes this is the right relative relationship between the leverage requirement and the risk-based capital requirement into perpetuity on the ordinary course of business. I just wanted to say that we continue to believe that the leverage ratios should serve as a backstop to the risk-based capital requirements most of the time. But we also believe that because FHFA has chosen to use updated risk characteristics for risk-based capital requirements, it's appropriate for the leverage requirement to be binding occasionally and particularly at this point in the economic cycle.

I mean, in particular, the credit risk capital requirements at the end of the third quarter of 2019 benefited from several years of robust house price appreciation, lower mark to market LTVs. I mentioned already that for the single-family book, we're looking at like 56% mark to market LTV. We had very low levels of delinquencies, less than 1% for both enterprises. This is from record low unemployment rates. We had reduced counterparty risk from MI counterparties that have strengthened their capital levels post-crisis.

We had robust access to credit risk transfer markets and the enterprises transferred significant credit risk, and we had low levels of legacy NPLs and private label securities. At that point in the cycle, we think that our binding leverage requirement seems to make sense to us. If we turn to the next page, we have a number of special topics and I will turn it over to my colleague, Chris Vincent, to walk you through the capital definitions.

**Chris:**

Thank you, Naa Awaa. This is Christopher Vincent, and I'll begin on slide 10. Here we see laid out five definitions of capital utilized in the proposed rule, as well as some important items that comprise and differentiate each definition. The definitions fall into two broad categories, statutory definitions, and supplemental definitions. On the

statutory side, core capital and total capital have the meaning provided in the Safety and Soundness Act and vary primarily in the treatment of an enterprise's allowance for loan losses. Specifically, the allowance is generally included in total capital, but excluded from core capital.

On the supplemental side, common equity tier one capital, tier one capital and adjusted total capital are defined based on the definitions of each measure in the US Banking Regulators Capital framework. Shown in the table, CET1 capital is the most exclusive supplemental definition of capital and generally has the highest loss absorbing capacity while adjusted total capital is the most inclusive supplemental definition of capital, and generally has the lowest loss absorbing capacity.

An important difference between the statutory and the supplemental definition is that the statutory definitions of capital do not limit the amount of deferred tax assets or AOCI included in capital, nor do they include other adjustments for capital elements with generally less loss absorbing capacity. The supplemental definitions include the adjustments for familiar items such as goodwill and intangible assets, among others.

Turning to slide 11, as discussed in the preamble to the proposed rule, a lesson of the 2008 financial crisis is that the quality of regulatory capital and especially its loss absorbing capacity is critical to the enterprise's safety and soundness. The table on this slide illustrates the importance of requiring high quality capital, showing how the supplemental definitions of capital would have mitigated the weaknesses and the enterprises statutorily defined capital requirements leading up to, and in the early stages of the financial crisis.

In the first few rows, we see that the core capital at each enterprise increased between December 2006 and June 2008, potentially suggesting at first glance a position of some financial strength. However, over the same time period, the tier one capital at each enterprise decreased markedly due in large part to the limits placed on the amount of deferred tax assets included in tier one capital, indicating a deteriorating capital position with substantially less loss absorbing capacity than suggested by core capital.

Similarly, the statutorily defined total capital at each enterprise increased between December 2006 and June 2008, while over the same time period each enterprise's adjusted total capital fell substantially due to the aforementioned DTA limits and the way in which the allowance

for loan losses is treated in adjusted total capital relative to statutorily defined total capital.

This again highlights the disconnect between the statutory definitions of capital and the new supplemental definitions.

The last row of the table shows that using CET1, the form of capital with the highest loss absorbing capacity, Freddie Mac would have had a negative book value as of June 30th, 2008, and Fannie Mae's book value would've been positive by only the slimmest of margins. This stands in stark contrast to the picture painted by the statutory definitions of capital. So not only the quantity, but the quality of capital is important. Now I will pass the microphone to my colleague, Ron Sugarman to discuss capital buffers.

**Ron:**

Thank you, Chris. On slide 12, we start to talk about the capital buffers. Buffers appeared in Basel III in the US banking framework in response to the 2008 financial crisis. Buffers encourage a capital surplus beyond the normal capital requirements. They help to conserve capital and maintain a high level of loss absorbing capacity. In times of market stress, the enterprises can draw down on the buffers and later rebuild them when conditions improve.

The way buffers work is that it's not a capital requirement. Rather the enterprises need to hold the prescribed buffer amount, or we start to limit the capital distributions such as dividends and stock repurchases, and we also limit discretionary bonuses to executives.

On slide 13, there are three separate capital buffers that in sum make up the prescribed capital conservation buffer amount, which we call the PCCBA. These buffers sit on top of the supplemental risk-based capital requirements.

We have the stress capital buffer, the countercyclical capital buffer, and stability capital buffer. The stress capital buffer is equal to 0.75% of adjusted total assets and it's similar to the going-concern buffer in our 2018 proposal. The difference is that it's now a buffer instead of a capital requirement. The next buffer, the countercyclical capital buffer would initially be set to 0% and could be applied during a period of excessive credit growth. This is similar to the US banking approach.

On Slide 14, we have the stability capital buffer. In the 2008 financial crisis the government rescued Fannie Mae and Freddie Mac because their failure would have done significant harm to the housing finance

market and the broader US economy. Our stability capital buffer is tailored to this systemic risk. We use a market share approach. The buffer would depend on an enterprise's share of the total US residential mortgage debt outstanding. We're also asking for public comment on potential other approaches.

Next, we'll do a walk-through of how the buffer is calculated. On slide 15, we see data from September of last year. There was \$12.6 trillion of outstanding housing debt in the US, including the single-family and multifamily housing. Fannie Mae had \$3.3 trillion and Freddie Mac had \$2.2 trillion. Their respective market shares were 26% and 18%. This market share data was taken from the federal reserve's financial account of the United States.

In calculating the buffer, the first 5% of market share is exempt from the buffer. The buffer is calculated as five basis points for each 1% of the remaining market share. We get 1.05% for Fannie Mae and 0.64% for Freddie Mac. We multiply that by adjusted total assets and the stability capital buffer is \$37 billion for Fannie Mae, 16 billion for Freddie Mac, or \$53 billion in total.

**Danielle:**

Ron, we see some questions on this as well. How did FHFA calibrate the 5% threshold to initiate a non-zero stability buffer and how did we calibrate the 5% basis point increase for the five-basis point increase in stability capital buffer for every percentage point increase in market share?

**Ron:**

For the first part, how did we calculate the non-zero threshold? For indicators, we took a look at the asset sizes of the GSIB's, or Global systemically important banks in the US. An enterprise with a 5% share of the \$12 trillion of outstanding mortgage debt would have about \$600 million in assets. We feel comfortable using that as our threshold for the buffer exemption. For the second part, how did we calculate the five-basis point increase for each 1% increase in share?

We look at the capital surcharge methodology for the GSIB banks and developed estimates within Fannie Mae, Freddie Mac. Given their market shares of 26% and 18%, and our calculation method, we get to about the same GSIB buffer levels. However, our formula is simpler because the federal reserve considers factors beyond size for the GSIB buffer. However, size is really the main driver for the enterprises and that led to our market share approach. With that, let me now turn it over to Andrew Varrieur to talk about pro-cyclicality on slide 16.

**Andrew:**

Thank you, Ron. This is Andrew Varrieur. We received a number of comments with concerns about the pro-cyclicality of the 2018 proposal, particularly around the use of mark to market LTVs. The current proposal includes an approach to mitigate that pro-cyclicality while continuing to preserve the credit signals from using mark to market LTV. We are proposing a methodology that utilizes the long run trends in single family house prices and a collar around that trend.

The methodology adjust mark to market LTVs upward when HPI is above trend by more than 5%. It adjusts mark to market LTVs downward when HPI is below trend by more than 5%. Within the collar, there is no mark to market LTV adjustment. The adjustment is calculated at the national level. Under the proposed rule, the enterprises would continue to mark to market single-family loans using FHFA state level HPI, and then apply the national adjustment to arrive at the adjusted mark to market LTV.

The overall impact of the proposal is a much more stable risk-based capital regime. It moderates excessive capital reductions when HPI is materially above trend and it moderates excessive capital increases when HPI is materially below trend. The proposed methodology also has the beneficial effect of sending countercyclical lending signals. The methodology only applies to single-family loans, but we're asking commenters on how to implement a countercyclical adjustment for multifamily loans.

Slide 17 shows the approach graphically. The blue line is the real national HPI since 1975. The black line is the long run trend. The blue dashed line is 5% above trend and the red dashed line is 5% below trend. The dashed lines define the collar. When the real HPI is above or below the collar, the proposed methodology would adjust the MTM LTVs back to the dashed line. When the real HPI is within the collar, no adjustment is made.

Slide 18. This is a somewhat stylized example that shows how the countercyclical adjustment contributes to the stability of the RBC requirement. This graph shows the change in net credit risk requirements for a stylized portfolio given HPI shocks. The blue dashed line shows the change in net credit risk capital requirements for a set of house price shocks without the collar. The black line shows the change in net credit risk capital requirements with the collar. The graph is normalized to a 0% shock in the center of the graph.

To the left we have house price decreases. All the way on the left, with a 20% decline in house prices, the no collar approach would result in an 80% increase in capital while the collar limits the increase to 14%. To the right, we have house price increases. All the way on the right, with a 20% increase in house prices the no collar approach would result in a 28% decrease in capital, while the collar limits the decrease to 10%. Overall, in the stylized example, without the collar, capital requirements would change by over a hundred percent through the cycle while with the collar capital requirements only changed by 24%.

Onto slide 19. This slide shows how the proposed countercyclical adjustment sends countercyclical lending signals. Looking at the numbers from 2006, we see that house prices were 24% above trend. Under the proposal mark to market LTVs are adjusted up when house prices are more than 5% above trend. Looking at the table below, we see a 60% LTV would be adjusted up to 71%, and 80% LTV would be adjusted up to 95%, et cetera. These higher adjusted mark to market LTVs would all lead to higher capital requirements, providing a signal that on the margin, the enterprises should pull back from the market.

Conversely house prices were 18% below trend in 2012. Under the proposal mark to market LTVs are adjusted down when house prices are more than 5% below trend. Looking at the table below, we see a 60% LTV would be adjusted down to 52%, and 80% LTV would be adjusted down to 69% and so on. These lower adjusted mark to market LTVs would all lead to lower capital requirements, providing a signal that on the margin, the enterprises should do more to support the market.

Finally, in 2019 house prices were 3% above trend, and being within the collar no adjustment is applied, implying the enterprises should be market neutral. Next, Bryan Goudie will discuss credit risk transfers.

**Bryan:**

Thank you very much, Andrew. Let's turn to slide 20 here. The enterprises can reduce credit risk on their single-family and multifamily books of business by transferring and sharing risk beyond loan level credit enhancements for single-family and multifamily credit risk transfers or CRTs. Examples of single-family CRTs include capital markets, structured debt issuances such as Freddie Mac's STACR and Fannie Mae's CAS, and insurance/reinsurance transactions such as Fannie Mae's CIRT and Freddie Mac's ACIS.

Examples of multifamily CRTs include Fannie Mae's DUS loss sharing program and Freddie Mac's K-deal multifamily securitization program.

This proposal would, under certain circumstances, permit an enterprise to use the proposed rule's securitization framework to calculate risk weighted assets in place of calculating aggregate risk weighted assets on the whole loans and guarantees underlying the CRT exposures.

For background, the 2018 proposal also provided the enterprises capital relief for credit risk transfer.

In particular, the 2018 proposal use a step by step formulaic approach where the CRT approach maintained capital neutrality across credit risk transfer. That is, if the Enterprises held the entire CRT after securitization the capital requirement would not increase above pre-securitized amounts. The 2018 approach maintained capital neutrality across risk transfer, but the 2018 proposal reduced capital relief to account for one, loss timing, and two, counterparty credit risk.

The Proposed rule introduces several notable enhancements to the 2018 methodology. They include the following three; one, a prudential risk weight floor of 10%. This will lead to a departure from strict capital neutrality. Two, effectiveness adjustments for counterparty risk, loss timing, and the potential that CRT is less effective than equity capital. In the case of the counterparty credit risk and loss timing adjustments, these are refinements to the 2018 proposal.

And finally, three, operational criteria and disclosure requirements to mitigate the risk that the terms or structure of the CRT would not be effective in transferring credit risks. We'll cover these enhancements in that order. Turning to slide 21. The first enhancement in the proposed rule increases risk weights on retained CRT exposures by introducing a prudential risk weight floor of 10%. As a refresher, risk-weighted assets combine risk weights and exposures, so increasing risk weights increases an enterprise's risk weighted assets.

Now for comparison under the 2018 proposal, only retained CRT exposures with an attachment point less than the sum of net credit risk capital and expected losses would have had a positive risk weight. The prudential floor ensures that all retained CRT exposures receive a positive risk weight and a minimum capital treatment. FHFA sized the minimum risk weight for CRT exposures at 10%, which is less than the 20% floor from US banking frameworks to strike a balance between fostering CRT while also mitigating the safety and soundness, mission, and housing stability risk that some CRTs may pose. In practice and issuance, the 10% risk rate floor would add an 80-basis point capital

charge to an enterprise within CRTs exposures. Let's turn to slide 22 for the second set of enhancements.

The second set of enhancements increase an enterprise's retained exposure, which ultimately increases an enterprise's risk weighted assets. The proposed rule introduces three adjustments to retained exposures for the effectiveness of CRT. One, overall effectiveness, two, loss sharing effectiveness, and three, loss timing effectiveness. Overall effectiveness.

This adjustment increases retained exposure by 10% since the CRT transactions may not provide the same flexibility, fungibility, and loss absorbing capacity as equity capital. This was discussed by several commenters in response to the 2018 proposal. Second, loss sharing effectiveness. This adjustment increases retained exposure to reflect the counterparty credit risk inherent in uncollateralized risk in force.

Under the 2018 proposal, counterparty credit risk would have been assessed on the basis of estimated stress loss rather than total risk in force. This adjustment applies to loss sharing programs, such as ACIS, CIRT, DUS, and MCIRT. Loss timing effectiveness. This adjustment increases retained exposures to reflect any mismatch between; one, lifetime losses of the underlying mortgage exposures, and two the duration of the CRTs coverage. In particular, CRT coverage can expire before for the underlying loans mature. Under the 2018 proposal, the loss timing adjustment applied uniformly to all tranches and did not change as a CRT coverage seasoned.

Under the proposed rule, loss timing effectiveness applies first to senior then to junior tranches, and then all else equal, the effectiveness of the CRT's coverage declines as CRT.

The third major enhancement, turning to slide 23. The third major enhancement from the 2018 proposal is a set of operational criteria that help to mitigate the risk that the terms or structure of the CRT would not be effective in transferring credit risk.

For example, the proposal includes criteria that one, prohibits the termination of a CRT due to the deterioration in the credit quality of the underlying exposures, and two, target clean-up calls. Notably FHFA's operational criteria for CRT are somewhat less restrictive than those applicable to traditional or synthetic securitizations under the US banking frameworks. To partially mitigate the safety and soundness risks posed by this less restrictive approach, foster market discipline, and

enhance FHFA's supervision and regulation, FHFA would also require an enterprise to publicly disclose material risks to the effectiveness of the CRT.

Let's turn to slide 24. What are the implications to these enhancements?

Well, increasing risk weight and enterprise exposures all else equal increases the capital requirement. Under the proposed approach, FHFA generally would require more credit risk capital on a transaction-wide basis at the inception of a CRT (and before transfer) than would be required if the underlying mortgage exposures were not in the CRT. Additional requirements were introduced to address model risk associated with the calibration of the credit risk capital requirements, structural and other risks posed by complexity, and the potential for regulatory arbitrage that may be reached through a CRT.

Of course, using the securitization section is optional. The enterprise may elect to not recognize a CRT for the purposes of credit risk capital requirements, and instead hold credit risk-based capital against the underlying whole loans and guarantees of a CRT.

Let's take a stylized example on slide 25 to compare the 2018 proposal and the proposed rule. The details of the stylized capital come from the 2018 proposal where we layer on the proposed rule's new requirements. Going to the end, relative to the \$259 million in risk-weighted assets transferred in the example provided in the 2018 proposal, under the proposed rule risk-weighted assets transferred fall to \$130 million.

This nearly 50% decline is further reflected in the decline in capital relief under the proposed rule. The decline in risk-weighted assets for this stylized example is primarily driven by the addition of the tranche-level floor, in this case, \$96 million under the changed CRT methodology. The overall effectiveness enhancement accounts for the next largest decline of about \$25 million, followed by the other enhancements at \$8 million.

In summary, the proposed rule's CRT enhancements increased risk weights to reflect tranche-level minimums, and increase the enterprise's retained exposures to reflect CRT effectiveness. In general, relative to the 2018 proposal, these changes increase the CRT requirements. Let's turn it back to Ms. Tagoe.

**Naa Awaa:**

Thanks Bryan. Before we wrap up, I just wanted to give you a brief overview of the slides in the appendix. We're not actually going to walk through those slides. I think you may find the information useful. There

are two appendices. The first is on impact analysis and it has comparisons of the risk-based capital requirements under the proposed rule to the 2018 proposal. Those comparisons are by risk category and by asset category.

It also has a summary of all the capital requirements, risk-based and leverage, for each enterprise as of September 30th, 2019. This information is also in the preamble, but it's just easier to find this way. The second appendix is on risk-based capital and it discusses key changes to the credit risk capital requirements. It has a walk-forward of the capital requirements under the 2018 proposal to the proposed rule and it has an example of how to calculate credit risk capital requirements using the grids and multipliers in the standardized approach. So that's a quick summary and I will turn it over back to Danielle. Thanks.

**Danielle:** Thanks, so much Naa Awaa. We have a little bit of time left to answer a few more questions I received. Adolfo you can help us with these. The first question: given the reduction in capital relief for CRTs relative to the 2018 proposal, does FHFA expect a decline in the enterprises' issuance of CRT, and won't this make it more difficult for the enterprises to raise the amount of capital required to exit their conservatorships?

**Adolfo:** Thanks, Danielle. I will answer that question, but before I do just want to thank Naa Awaa, Chris, Ron, Andrew, and Bryan. They worked tirelessly on the re-proposal of the capital rule. I thought their presentations were excellent, and so thank you for that. Let me comment on the question here on CRT. First in terms of future CRT issuance, I think that's going to depend on a number of things, including market factors. I'm not going to speculate in terms of the dollar amount of future CRT issuance.

In terms of the impact on the exit from conservatorship, I think there's a couple of things to think about here. CRT may very well be helpful to the exit from conservatorship. The proposed rule continues to provide a meaningful capital relief for CRT. I would encourage folks to look at the appendix section and the impact analysis that Naa Awaa just mentioned to see those numbers. On the flip side of the coin, the Director has been very clear that there's no point ending the conservatorship in a manner that isn't safe and sound and to have Fannie Mae and Freddie Mac just exit to come back into conservatorship in the future.

It was very important as we continued to refine the agency CRT assessment framework the motivations behind the changes in the re-

proposal were really to make sure that the enterprises had sufficient capital for the exposures that they retain after they conduct a CRT transaction. Bryan just did a terrific job with taking you through the two most significant changes, the relatively modest adjustment to reflect the fact that CRT is not the same dollar for dollar, not totally fungible, with equity capital, and the prudent 10% risk weight for which I would mention again, is half of the 20% risk weight floor that would be applicable to a CRT exposure in the US banking framework.

The agency felt that these were prudent changes that to help ensure that Fannie and Freddie have sufficient capital and can operate in a safe and sound manner after conservatorship.

**Danielle:** Thank you. Does the FHFA plan to increase guarantee fees as a result of the proposed rule's higher capital requirements?

**Adolfo:** I will address the issue g-fees specifically in a moment, but I think it might be important for me to take a moment and really address what I think is the subtext to the question. I think the subtext of the question is fundamentally, are the enterprises going to be able to provide access and affordability going forward under this re-proposed rule? We believe the answer to that question is very much yes. I want to reinforce some of the earlier comments that Naa Awaa made about the ability of the enterprises to fulfill their mission under this re-proposed rule.

One, the fundamental structure of the rule was meant so that they could provide support to the market, particularly in a period of stress. Naa Awaa mentioned the going concern capital standard, making sure that the enterprises can continue to write business during, and after a period of stress. We went through the capital buffers, which really can be utilized – our intent is that they utilized – in a period of broad financial stress. We believe as the environment improves, this really allows the enterprises to play a countercyclical role.

Andrew Varrieur did a great job of taking us through some of the fundamental changes that we've made to make these capital requirements much more stable through the cycle. We think that will play a very valuable role. He also talked about the countercyclical lending signals that have been built into the rule. We look forward to comments on all of that, of course. But I think that those structural elements are very important and very different from the 2018 proposal.

I think now we're describing the kind of careful, detailed choices that we made in the rule. Things like removing the small balance multiplier and

treating single (one) borrowers the same as multiple borrowers, applying a risk weight floor only to the safest exposures, and how the buffers were constructed based on adjusted total assets. I think the totality of those changes was to ensure, what I would describe as a more equitable allocation of capital in the rule and trying to make sure that higher risk exposures didn't bear an undue burden in the regulatory capital requirements.

I think an assessment of the rule and its impact really has to take those broad changes under consideration. Specific to g-fees, we really think that it's too early to speculate on the impacts. This is a re-proposal not a final rule. During this comment period FHFA is going to be working with our financial advisor to continue to progress on the roadmap to exit conservatorship. Making the re-proposal public is extremely helpful. Here, it's going to allow us to engage with capital market participants and real providers of capital to truly assess the re-proposed rule and its impact on a number of key items, including things such as guarantee fees while we're gathering public comments.

We think that input from the market and the public including greater specificity and understanding the kinds of returns that are going to be necessary to attract the capital the enterprises need will really help us better understand the potential impacts on g-fees. Finally, I'd end my comment here by noting that, if you look at the post financial crisis experience, enhanced regulatory capital requirements have been put in place in both the US banking system and the US private mortgage insurance industry. Those don't appear to have really resulted in a significant increase in borrowing costs or a significant reduction in access to credit. I think that our experience through COVID-19 is proving that they have definitely provided for more resilient markets in a period of stress.

Danielle do we have time for one more?

**Danielle:** I think we have time for two more--

**Adolfo:** Okay.

**Danielle:** I've just gotten this question from a number of people. Will FHFA consider extending the comment period?

**Adolfo:** Yeah. Let me comment on our thoughts about the comment period. The proposed rule went up on the website a couple of weeks ago. Our thinking at the time was that it would be about a month from the time it

went up on the website until the book came out in the federal register and that we would provide for a 60 day comment period from the time that it was published in the federal register. That continues to seem, broadly speaking, a reasonable timeframe. In totality, we see this as having provided a 90-day comment period.

We also believe that a good bit of the rule, as Naa Awaa spoke earlier, a good bit of the foundation of the rule remains the 2018 proposal with the grids and the multipliers so we would hope that that time period is sufficient. We would encourage commenters to work along that timeframe and we will certainly continue to assess and evaluate this question about the length of the comment period in the weeks ahead.

**Danielle:** I think in our last minute, I'll ask you one more question. The proposal contemplates a lot of capital, is it realistic to contemplate an exit from conservatorship in the near future?

**Adolfo:** I guess what I want to emphasize here is a point that the Director makes quite regularly and that we take very seriously at the agency. The process of responsibly ending the conservatorship is about milestones, not timelines. We know that there's great, great interest in timelines, but it's really about building this process step by step in a thoughtful and responsible way so that if we can end the conservatorships, and when we do end the conservatorships, it's really done in a safe, sound, and responsible manner.

Eventually, any end of the conservatorship is going to require a final regulatory capital framework and so this was an important, significant, very significant milestone towards that ultimate requirement. We're going to continue to take it a step at a time, we're going to continue to focus on achieving and fulfilling the milestones, and the timelines will end up being what they end up being.

**Danielle:** Great. Thank you so much. With that, it looks like we're at time. Thank you so much, Adolfo and team, and thank you so much for all of our participants who've stuck with us for this webinar. Up on the screen, you will see a link to our webpage where you can submit your written comments. Also, contact information for the members of this team if you have any additional questions. As a final reminder, we will post the recording and a slide deck of this webinar in short order on that page as well. Thank you so much.

**Operator:** That concludes our conference. Thank you for using AT&T Event Conferencing Enhanced. You may now disconnect.