

May 12, 2023

Clinton Jones, General Counsel  
Attention: Comments/ RIN 2590-AB27  
Federal Housing Finance Agency  
400 Seventh Street, SW.  
Washington, DC 20219

Subject: Amendments to the Enterprise Regulatory Capital Framework Rule

Dear Mr. Jones

On behalf of the DUS Peer Group<sup>1</sup>, the DUS Advisory Council<sup>2</sup> welcomes the opportunity to comment on the Amendments to the Enterprise Regulatory Capital Framework. We generally support the proposal and believe that it represents another significant improvement over the Final Capital Rule, and a positive step towards a viable and vibrant housing finance system.

We applaud the FHFA's attention to the Subsidized Housing multiplier, as the proposed restoration of the 0.6x multiplier better aligns capital to risks, is supported by data, and is consistent with the mission of the FHFA and GSEs. We also fully support the suspended implementation of the Advanced Approach, which we continue to believe is exceptionally burdensome and undermines the capital visibility provided by the Standard Approach of the ERCF.

We hope these same principles can be applied to other areas in Multifamily where we believe imbalances and detriments to predictability persist. Multifamily has not benefited from the same level of continued review and attention afforded to Single Family and remains substantially untouched since the original 2018 Proposed Rule. Specifically, we recommend:

1. Capital multipliers should differentiate product subtypes with materially different risk profiles. Specifically, the multiplier for Seniors Housing should be increased to at least 1.5x. This subtype has seen a multiple of the distress witnessed in conventional Multifamily, yet is afforded the same capital treatment.
2. Multifamily Base Risk Weights should be reviewed in the Final Capital Rule, particularly for low-leverage loans, and the Risk Weight Floor should be significantly reduced or eliminated. As currently constructed, data shows that the risk-based capital mechanism is not reflective of actual risk.
3. Efforts to address procyclicality must be extended to Multifamily. We detail our proposed system herein - endorsed by Fannie Mae - which is based on free and publicly available index data, and is internally consistent with other Final Capital Rule guidance. We detail a mechanism which could address the FHFA's stated concern about releasing capital into a "hot" market, which is both simple and consistent with ERCF principles.

In short, the historical record demonstrates that Multifamily capital requirements are not reflective of the actual experience, and we ask that the either FHFA reevaluate its methodology or share the data it believes supports it. We ask the FHFA to address the previously-acknowledged and systematic flaw of procyclicality in Multifamily, as it has done for Single-Family.

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<sup>1</sup> The Delegated Underwriting and Servicing (DUS) Peer Group is a coalition of lenders who originate the preponderance of multifamily mortgages that are sold to or securitized by Fannie Mae. Most of our members also utilize the Freddie Mac and Ginnie Mae programs for financing rental housing. Our members are key participants in the multifamily rental housing market as originators, securitizers and servicers of mortgages on rental housing for millions of U.S. households. For a complete list of DUS lenders who form the DUS Peer Group, see <https://multifamily.fanniemae.com/about-multifamily/our-partners/dus-lenders>.

<sup>2</sup> The DUS Advisory Council is elected by the DUS Peer Group to represent the DUS network. The members of the DUS Advisory Council include Berkadia Commercial Mortgage, LLC; Capital One, National Association; CBRE Multifamily Capital, Inc.; Greystone Servicing Company LLC; JLL Real Estate Capital, LLC; KeyBank National Association; Newmark; PGIM Real Estate; Walker & Dunlop, LLC; and Wells Fargo Multifamily Capital

We appreciate the FHFA's ongoing efforts to ensure a viable and vibrant housing finance system. Should you have any questions or need additional information, please feel free to contact Dan Brendes, Chair, DUS Advisory Council, at [dan.brendes@berkadia.com](mailto:dan.brendes@berkadia.com).

Sincerely,

The DUS Advisory Council

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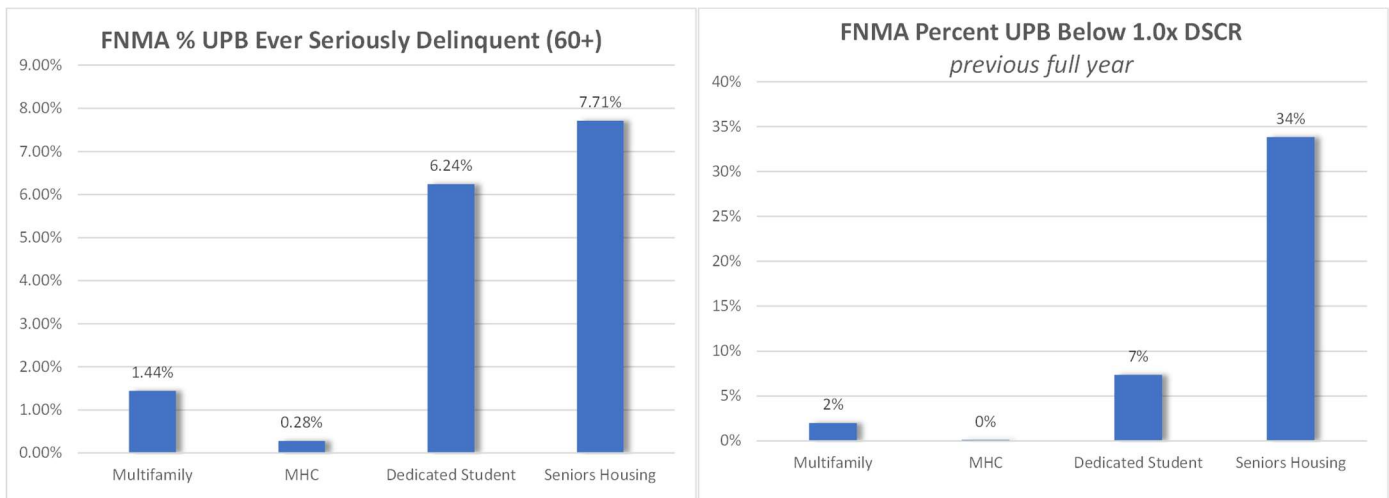
## Property Subtype Multiplier

The DUS Advisory Council has suggested since 2020 that the ERCF’s credit risk capital multipliers insufficiently differentiate between property subtypes. Specifically, the ERCF only differentiates Student Housing versus all other subtypes, with a modest 1.15x multiplier. This is despite the FHFA having specifically called out Seniors Housing as a major risk factor justifying high capital for the entire Multifamily sector, in meetings with the DUS Advisory Council.

We reiterate our agreement with the FHFA that Seniors Housing carries higher risk than conventional Multifamily. As we’ve mentioned before, Seniors Housing is more of a traditional operating business with high structural costs and thin margins. It carries disproportionately large challenges from staffing, as well as several health-related sensitivities that were exposed by COVID-19.

The increased risk is no longer academic.

The first two charts show Fannie Mae’s reporting on its current book. At left, the Fannie Mae percentages of loans that have been reported as 60+ days delinquent<sup>3</sup> is skewed heavily towards Student and Seniors Housing, by factors of more than 4x and 5x respectively. We note that these figures include loans that received forbearance through the COVID-19 pandemic, many of which are re-performing. The second chart is based on property financials per Fannie Mae’s investor reporting<sup>4</sup>. This shows that the percentage of loans for which property cash flow does not cover its debt service is 34% for Seniors versus 2% for conventional Multifamily – a 17x multiplier.



This Seniors Housing weakness is not limited to Fannie Mae. Using Trepp data<sup>5</sup> on securitized trusts, we can see that Freddie Mac’s Seniors Housing portfolio is performing somewhat better relative to Fannie Mae but still considerably behind expectations, with respect to both the percentage of loans below a 1.0x DSCR and the aggregate amount by which actual NCF trailed underwritten levels.

GSE Seniors Performance		
	NCF vs UW	% Below 1.0x
Fannie	-29%	34%
Freddie	-21%	23%

<sup>3</sup> Based on Fannie Mae MFLPD, accessed 3/9/2023

<sup>4</sup> Based on Fannie Mae data where previous full-year financials could be matched against the Specific Property Type identified at origination. The time period referenced was 2021 in 93% of cases. Data accessed March 9, 2023.

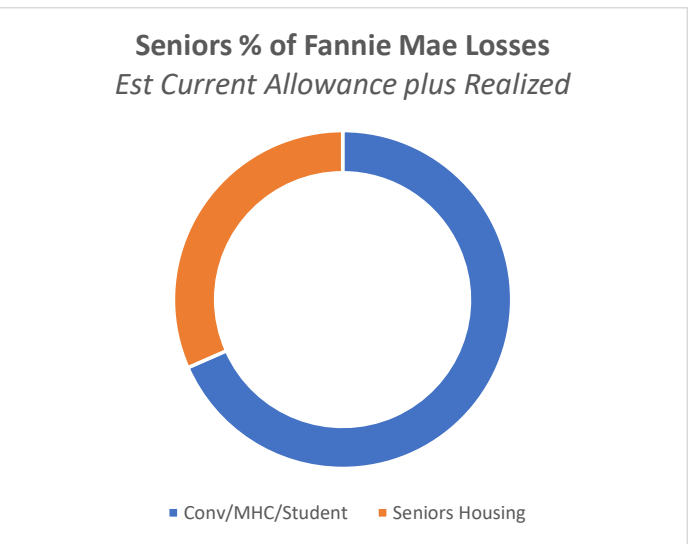
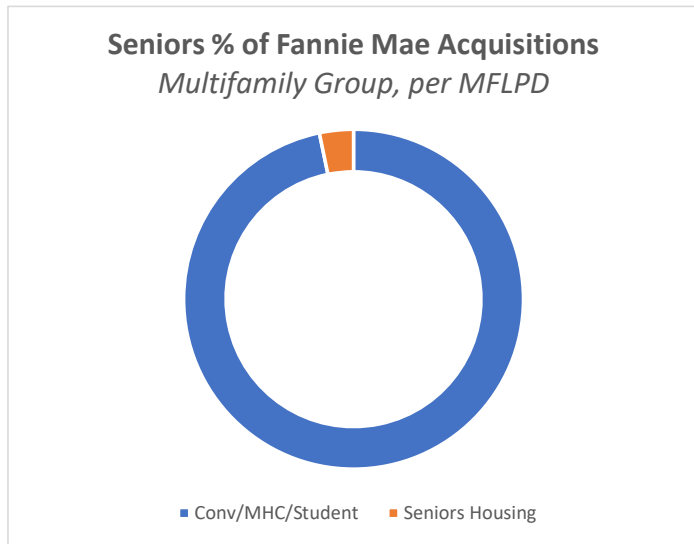
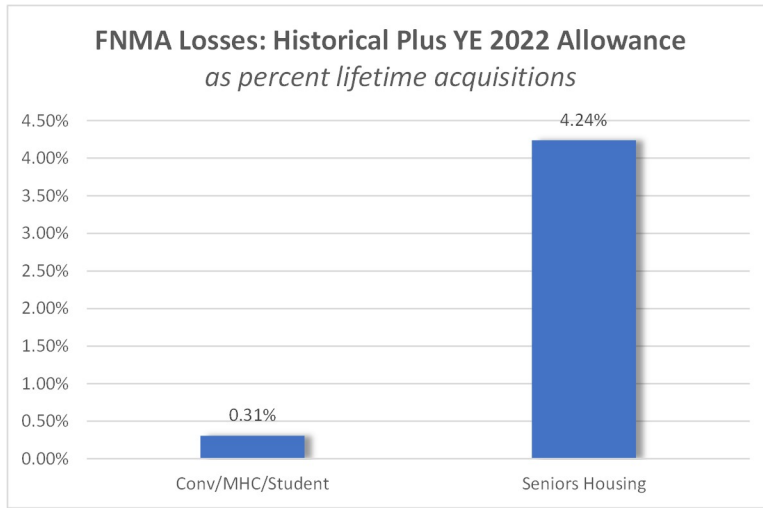
<sup>5</sup> Freddie Mac figures based on Trepp’s “Derived” NCF/DSCR figures, excluding those referencing securitization. Freddie Mac figures omit large portfolios and loans which appeared to reference the same collateral. To conform property types, all properties identified as “age restricted” were omitted from the Freddie Mac figures.

Actual and expected losses, however, relate much more directly to capital requirements. In Q4 2022, Fannie Mae incurred a credit loss of about \$0.9 billion on Seniors Housing, compared to about \$0.2 billion on its far larger conventional Multifamily portfolio. While we don't know the exact allocation of its full \$1.9 billion allowance for credit losses, we can safely say that *at least* 47% of reserves are found in less than 4% of current outstanding loan UPB<sup>6</sup>.

Even when blended with historical losses on resolved loans, including the financial crisis when conventional Multifamily did *relatively* worse<sup>7</sup>, the difference is stark – a more than 13x difference between Seniors Housing and Multifamily and the other subtypes evaluated.

**We ask that the FHFA follow through on its analysis by instituting a multiplier of at least 1.5x for Seniors Housing.**

FNMA Historical Losses per MFLPD plus Current Allowance for Loan Losses per 10-K					
	Reported Losses	Current Allowance	Potential Total Losses	Acquisition UPB	Loss Percent
Conv/MHC/Student	965	1004	1969	644,172	0.31%
Seniors Housing	10	900	910	21,469	4.24%



<sup>6</sup> Based on 12/31/2022 10-K showing \$16.6bn Seniors Housing UPB of \$440.4bn Multifamily Guaranty Book. Total allowance for loan losses shown as \$1.904 bn, while comments allocate “approximately \$900 million” of the Q4 *increase* to Seniors.

<sup>7</sup> Based on Fannie Mae MFLPD data. Omits cooperative, military housing, and “other” property types.

## The Capital Rule and the Stability Mission

Since the original 2018 ERCF Proposal, the DUS Advisory Council has advocated for a risk-based capital that is quantitatively supported and – most importantly – sufficiently risk-based to provide meaningful incentives for future originations.

Two themes have remained consistent is the historical data that we've presented for the FHFA's consideration. First, we believe that *average* capital levels specified in the Base Credit Risk Capital grids are too high. Second, we believe that this is driven not by the ERCF being too punitive on the highest-risk loans, but instead by its creating a risk-based capital regime that's insufficiently risk-based.

Put differently, the DUS Advisory Council is not making a blanket claim to the FHFA that Multifamily is universally safe; instead, we're asking FHFA to appropriately differentiate between higher and lower-risk loans, so that the Enterprises are appropriately *incentivized to promote stability*.

The Base Credit Risk Capital grids remain unchanged since their public introduction in 2018. Our prior letters have attempted to establish the need to reevaluate the grids in various ways, including:

- In **2018** the DUS Advisory Council showed that aggregate Multifamily capital were a multiple of the losses the GSEs incurred the worst vintage, and that Multifamily is held to a dramatically more conservative standard than Single-Family.
- In **2020**, we extended this analysis by showing that the Proposed ERCF continued to be calibrated to higher losses than experienced in Multifamily through the Great Financial Crisis, even if CMBS Conduit were included, and demonstrated the risk-insensitivity of the capital regime relative to losses by LTV.
- In **2021**, we showed variations of the prior risk-insensitivity analysis, and demonstrated that this extends to little differentiation existing in loan pricing. In other words, with little capital incentive to behave otherwise, Fannie Mae can afford to be relatively risk-agnostic in its loan pricing.

In the absence of the FHFA sharing the grids' detailed derivation – whether historical data, or a detailed model allowing us to assess the mechanics, calibration, and input assumptions behind them – we continue to believe that the historical record provides the best reference point for discussion.

In this **2023** letter, we'll more directly relate our response to the capital grids themselves. As we'll show, the ERCF is insufficiently risk-based with respect to both leverage (MTMLTV) and income (MTMDSCR). As a result, the capital grids are too high overall – but only because they're too onerous on the *safest* loans on *both* dimensions.

This can be directly measured by reconstructing what the base credit risk capital charges may have looked like as of early 2008, then comparing the results to the actual realized losses over the loans' remaining lives – bucketed as in the capital grids. For our analysis, we estimated the MTMDSCR and MTMLTV for both Fannie Mae and Freddie Mac loans as closely as possible to the FHFA's definitions, for the entire fixed-rate portfolio owned as of year-end 2007.

We draw particular emphasis to the fact that this analysis uses *all* total future losses over the *full remaining lives* of the loans evaluated. It therefore neither limits the calculation to a nine-quarter stress test horizon nor includes any deduction for expected losses, both of which were raised by the FHFA<sup>8</sup> to dismiss the validity of the 2008 financial crisis as a reference point.

As the fixed-rate grid is the primary determinant of credit risk capital and the Financial Crisis is generally similar to the level of shock being capitalized, this represents a valid comparison.

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<sup>8</sup> ERCF Final Rule, RIN 2590-AA95, p. 103. We note that these arguments were not raised when calibrating Single Family losses to the 2008 Financial Crisis.

The first chart summarizes historical losses according to the FHFA’s buckets. As this demonstrates, the GSEs did experience material loss rates in the GFC – but this was most concentrated in the lower-DSCR and higher-LTV buckets.

<b>View from the Brink: Future Loss Rates on 2008 GSE Portfolio</b>											
<i>Combined GSE Fixed-Rate Portfolio Measured as of 1Q 2008</i>											
	0 To 35	35 to 45	45 to 55	55 to 65	65 to 70	70 to 75	75 to 80	80 to 90	90 to 100	100 and Above	TOTAL
Up to 0.99x	0.7%	3.5%	6.3%	9.2%	11.9%	12.6%					<b>6.39%</b>
1.00 to 1.14x	0.7%	-0.5%	1.1%	-0.3%	0.5%	0.6%	0.3%				<b>0.27%</b>
1.15 to 1.19x		0.1%	0.1%	1.2%	0.0%	1.6%	5.1%				<b>1.14%</b>
1.20 to 1.24x	0.0%	0.3%	0.4%	0.7%	2.7%	2.1%	13.1%				<b>2.82%</b>
1.25 to 1.29x		0.0%	0.7%	0.2%	2.1%	1.5%	3.3%				<b>1.11%</b>
1.30 to 1.34x		0.6%	0.4%	0.9%	0.5%	0.8%	4.3%				<b>1.05%</b>
1.35 to 1.49x	0.0%	0.3%	0.1%	0.4%	0.3%	0.7%	0.5%				<b>0.29%</b>
1.50 to 1.64x	0.0%	0.3%	0.3%	0.6%	0.8%	0.9%	1.7%				<b>0.48%</b>
1.65 to 1.79x	-0.3%	0.1%	0.1%	0.3%	0.1%	0.0%					<b>0.11%</b>
1.80 to 1.94x	0.0%	0.2%	0.1%	0.0%	0.0%						<b>0.08%</b>
1.95 to 2.09x	0.0%	0.3%	0.2%	0.0%							<b>0.16%</b>
2.10 to 2.24x	0.0%	0.6%	0.5%								<b>0.39%</b>
2.25 and up	0.1%	0.0%	0.1%	0.0%							<b>0.15%</b>
<b>TOTAL</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>1.2%</b>	<b>1.4%</b>	<b>4.2%</b>	<b>0.1%</b>			<b>0.78%</b>

In the second chart, we show a reproduction of the Base Credit Risk Capital charts<sup>9</sup>, with the weighted-averages for each dimension for the early-2008 portfolio.

<b>Base Credit Risk Capital Grids, with 2008 Weighted Averages</b>												
	Up To 35	35 to 45	45 to 55	55 to 65	65 to 70	70 to 75	75 to 80	80 to 90	90 to 100	100 and Above	2008 WAVG	
Up to 0.99x	4.2%	4.8%	6.1%	8.7%	10.0%	11.2%	12.2%	13.3%	13.8%	14.6%	<b>6.82%</b>	
1.00 to 1.14x	3.6%	4.2%	5.2%	7.4%	8.4%	9.4%	10.3%	11.2%	11.6%	12.2%	<b>7.06%</b>	
1.15 to 1.19x	3.2%	3.7%	4.6%	6.5%	7.4%	8.2%	9.0%	9.8%	10.2%	10.7%	<b>6.45%</b>	
1.20 to 1.24x	3.0%	3.4%	4.2%	5.8%	6.6%	7.4%	7.8%	8.6%	9.0%	9.5%	<b>5.97%</b>	
1.25 to 1.29x	2.6%	3.0%	3.8%	5.2%	5.9%	6.5%	6.9%	7.5%	7.9%	8.4%	<b>5.25%</b>	
1.30 to 1.34x	2.5%	2.8%	3.4%	4.7%	5.3%	5.7%	6.1%	6.7%	7.0%	7.4%	<b>4.52%</b>	
1.35 to 1.49x	2.3%	2.6%	3.1%	4.3%	4.7%	5.1%	5.5%	6.1%	6.4%	6.9%	<b>3.86%</b>	
1.50 to 1.64x	2.0%	2.2%	2.5%	3.1%	3.4%	3.8%	4.1%	4.6%	5.0%	5.6%	<b>2.77%</b>	
1.65 to 1.79x	1.8%	1.8%	2.1%	2.5%	2.7%	3.0%	3.3%	3.8%	4.2%	4.9%	<b>2.15%</b>	
1.80 to 1.94x	1.3%	1.4%	1.5%	1.9%	2.1%	2.3%	2.6%	3.3%	3.8%	4.5%	<b>1.54%</b>	
1.95 to 2.09x	1.2%	1.2%	1.3%	1.6%	1.8%	2.1%	2.2%	3.0%	3.5%	4.3%	<b>1.29%</b>	
2.10 to 2.24x	1.0%	1.1%	1.2%	1.5%	1.7%	1.9%	2.0%	2.9%	3.4%	4.2%	<b>1.16%</b>	
2.25 and up	1.0%	1.0%	1.1%	1.4%	1.6%	1.8%	1.9%	2.8%	3.4%	4.2%	<b>1.07%</b>	
<b>2008 WAVG</b>	<b>1.4%</b>	<b>2.1%</b>	<b>2.8%</b>	<b>4.4%</b>	<b>5.1%</b>	<b>6.3%</b>	<b>7.0%</b>	<b>9.8%</b>	<b>10.7%</b>	<b>0.0%</b>	<b>3.52%</b>	

When expressed as a multiple in the third chart, the comparison looks particularly stark. Only five individual cells of the grid have higher losses than the grid, four of which are within reasonable bounds of an expected loss allowance which wasn’t explicitly considered. Only *one individual cell* in the grid shows material undercapitalization, and even this is surrounded by overcapitalized cells.

<sup>9</sup> Represented as a percentage of UPB; alternatively RWA from final ERCF times 8%

View from the Brink: Future Loss Rates Vs. Base Credit Risk Capital											
GSE Fixed-Rate Portfolio Measured as of 1Q 2008; no EL Adjustment, capped at 10x											
	Up To 35	35 to 45	45 to 55	55 to 65	65 to 70	70 to 75	75 to 80	80 to 90	90 to 100	100 and Above	WAVG
Up to 0.99x	5.6	1.4	1.0	0.9	0.8	0.9					1.1
1.00 to 1.14x	5.5	10.0	4.7	10.0	10.0	10.0	10.0				10.0
1.15 to 1.19x		10.0	10.0	5.6	10.0	5.2	1.8				5.6
1.20 to 1.24x	10.0	10.0	10.0	8.3	2.5	3.4	0.6				2.1
1.25 to 1.29x		10.0	5.1	10.0	2.9	4.5	2.1				4.7
1.30 to 1.34x		4.4	8.6	5.3	9.8	7.1	1.4				4.3
1.35 to 1.49x	10.0	10.0	10.0	10.0	10.0	7.5	10.0				10.0
1.50 to 1.64x	10.0	8.0	7.3	5.2	4.6	4.4	2.4				5.7
1.65 to 1.79x	10.0	10.0	10.0	7.3	10.0	10.0					10.0
1.80 to 1.94x	10.0	7.6	10.0	10.0	10.0						10.0
1.95 to 2.09x	10.0	4.3	7.1	10.0							8.0
2.10 to 2.24x	10.0	1.8	2.6								3.0
2.25 and up	10.0	10.0	8.0	10.0							7.0
WAVG	10.0	6.4	4.5	6.4	4.4	4.4	1.7	10.0			4.5

Key	< 1.00x	< 1.25	< 1.50	< 5.00x	>= 5.00x
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We acknowledge the FHFA’s prior response that earlier GFC comparisons may have technically been incomplete as the then-current portfolio had not fully resolved. This concern is of even less import now than in 2018. Of the over \$120 billion evaluated, less than \$1 billion remains; of that \$1 billion, few loans have ever defaulted only \$3 million is currently delinquent. As even a full write-off would not change the conclusion, **as of 2023 these amounts are immaterial to the discussion and the FHFA’s previous concern is no longer relevant.**

Furthermore, the DUS Advisory Council acknowledges the FHFA’s prior response that the Great Financial Crisis could have been worse, since there were displaced homeowners. In literal sense this is inarguable, but we disagree with this rationale as a justification for high capital for three primary reasons.

- First are historical patterns. The homeownership rate shows that downturns often see declines (e.g. 1980s). This is an asset, not a liability, of Multifamily.
- Second is materiality. While there were displaced homeowners, they were not enough to prevent stresses broadly similar to the 15% NOI / 35% value specified in the ERCF as there were many other forces at work. The chart above demonstrates that even a diagonal shift simulating a deeper stress wouldn’t create an undercapitalization for the majority of buckets<sup>10</sup>. Could homeownership factors really justify these multiples?
- Third is consistency. As we’ve demonstrated in prior response letters this holds Multifamily to a dramatically higher standard than Single Family, which per FHFA would have been slightly *undercapitalized* for actual losses.

**This analysis adds further evidence that while the FHFA’s concern is valid at the margin (if inconsistent with SF), it’s not supported by data for the majority of Multifamily loans.**

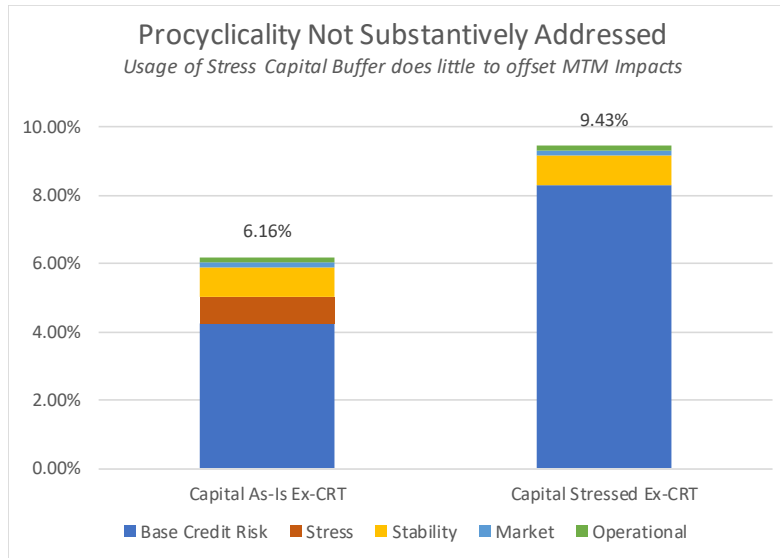
If the FHFA’s risk-based capital is not sufficiently risk-based relative to the historical record, it disincentives the safest loans in favor of the riskiest. Is it really FHFA’s mission to make the GSEs less competitive on safe loans, but maximize their competitiveness on the most aggressive?

<sup>10</sup> For example, actual losses in the 70-75% LTV / 1.25 to 1.29x LTV bucket were 1.8%, compared against 6.5% Base Credit Risk Capital. Even if this loss rate were “treated as” 65-70% / 1.35 to 1.49% and compared to that 4.7% capital, the conclusion holds.



## Procyclicality

Procyclicality works against the stability mission. The FHFA has acknowledged this problem since the 2018 Proposed Capital Rule, but only addressed it in Single-Family. In its current state, the Capital Rule charges far more capital for Multifamily assets if the very market shock from which capital is intended to offer protection is realized. As the FHFA acknowledged, this feature would lead to a prudent manager utilizing a “managerial cushion” to avoid being forced to raise capital during a downturn when it’s scarce and expensive – effectively increasing de facto capital requirements today. This concept is demonstrated in the following chart<sup>11</sup>.



A compounding problem unique to Multifamily is balloon risk. If, in a downturn, the Enterprises already lack sufficient capital due to procyclicality factor, they’ll be less incentivized to deploy capital to write new loans, thus putting downward pressure on refinancing activity and market liquidity.

The FHFA cited a lack of historical data as a reason to leave this feature for Multifamily, versus the trend approach utilized in Single-Family. As the DUS Advisory Council has argued in previous response letters and in meetings with FHFA, we believe that the trend approach has fundamental flaws. These include but are not limited to sensitivity to starting & ending dates used, instability if re-based (as already occurred), the implicit assumption that past price data is more intrinsically valuable than current fundamentals, and incompatibility with applying a peak-to-trough stress.

Establishing any trend within the capital framework should therefore be irrelevant, to the extent that the capital framework meets its stated objective of capitalizing against stated peak-to-trough declines.

We have detailed in our prior response letters an alternative approach (reproduced here as Appendix 2 with minimal changes) which was endorsed by Fannie Mae in its response to the 2020 Re-Proposal. The foundational principle behind our proposal is that if capital is calibrated to absorb shocks of 15% to NOI and 35% to value, then no additional capital should be required until these declines are substantially realized. Our framework includes a mechanism to always capitalize for a minimum additional shock, if desired by FHFA. This framework enhances the predictability of capital planning, while retaining significant roles for a surveillance function and market conditions.

We also make one potential modification to our proposal, to address the FHFA’s stated concern that capital could be released too quickly into a “hot” market. This makes some use of historical data, but within the context of the peak-

<sup>11</sup> This graphic was from our 2021 response letter, as the concept remains unchanged. Base Credit Risk based on actual Fannie Mae new originations (1/19 to 5/20) run through capital grids. MTM sensitivity based on application of prescribed 15%/35% shocks. Stability buffer estimated using 23% market share.

to-trough framework. Specifically, our modification defines “peak” in terms of the highest sustained inflation-adjusted index value, rather simply the highest historical raw index number. This would effectively allow values to be stressed by 35% in most time periods – consistent with the grids’ derivation – but by as much as 40% in periods like 2007 or 2022. We present this as distinct from the core proposal, for clarity.

With respect to data, the DUS Advisory Council believes that the NCREIF Apartment Price Index meets the FHFA’s requirements for property value / MTMLTV. This data is free and publicly-available, has been published for decades, and contains 45 years of apartment data. Moreover, the DUS Advisory Council has confirmed directly with NCREIF that NCREIF would not object to its data supporting the FHFA’s calculations.

For income / MTMDSCR the FHFA could build a same-store index based on Enterprise investor reporting.

The DUS Advisory Council cannot envision any shortcomings of using this data, and in any event cannot see that any such issues that could be raised would outweigh the risks to the Enterprises’ capacity to lend – and by extension the multifamily market itself – if procyclicality is not specifically, and carefully, addressed.

## Appendix 1: Historical Loss Analysis Methodology

### Background

Our historical loss analysis was intended to capture future losses on the Enterprises' portfolios as they existed at the outset of the financial crisis, segregated by the FHFA's MTMDCR / MTMLTV buckets and compared to corresponding Base Credit Risk Capital for the same. We focused on the fixed-rate portfolio for simplicity, to allow a direct comparison against the most important Multifamily grid in the ERCF.

MTMDCR and MTMLTV are not reported by the GSEs. As a result, these had to be calculated. As detailed below, given the unique limitations on the reporting available from each Enterprise, methodologies could not be consistent between Fannie Mae and Freddie Mac. We made the best estimations we could from available data.

We acknowledge that all information used was tied to the reporting dates, despite that information not being practically available at the reporting date – for example, 2007 financials not being reported for a few months after year-end. However, we do not believe this was relevant to our analysis.

### Data Sources and Criteria Applied

- Fannie Mae
  - o The primary loan data was from the MFLPD dated September 2022 (most recent as of this writing)
    - Filtered to:
      - Reporting date of 1/1/2008
      - Acquisition date of before 1/1/2008
      - Fixed Rate
    - For each loan, added field with total of reported losses in all *future* reporting dates
    - Population: \$68.5 billion on 10,672 loans
  - o DSCR File dated September 2022
- Freddie Mac
  - o All data from MLPD dated Q4 2022
    - Filtered to:
      - Calendar Quarter of “y08q1”
      - Fund date of before 1/1/2008
      - Fixed Rate
    - For each loan, added field with total of reported losses in all *future* reporting dates
    - Population: \$51.7 billion on 5,414 loans
- NCREIF
  - o Price – used Apartment series of price index available under <https://www.ncreif.org/data-products/naic-price-change>
  - o NOI - constructed index chaining reported “NOI Growth” under NOI Growth Template, for
    - Property Data – NPI
    - Property Type = Apartment
    - All Managers

### MTMDCR and MTMLTV Estimation

- MTMLTV: this was comparatively straightforward and consistent between the GSEs
  - o Reported LTV at Acquisition
  - o Divided by ratio of: NPI Price Index as of the 2008 reporting date, divided by the same as of origination
  - o Times ratio of: current UPB, divided by UPB at acquisition/purchase
- MTMDCR:
  - o Freddie Mac

- DSCR at origination
- Times ratio of: NPI NOI Index as of the 2008 reporting date, divided by the same as of origination
- Notes
  - Only at-origination DSCR was available, which was a limiting but simplifying factor
  - This was assumed to represent an amortizing-equivalent DSCR on all loans with interest only periods
  - This was *conservative* (i.e. low) due to conventional usage of NCF versus NOI which is specified by FHFA
- Fannie Mae
  - If prior year (2007) financials ARE available
    - If was in interest-only period through year-end 2007, multiplies Reported 2007 DSCR by ratio of
      - Interest Rate (3% if not available)
      - Divided by Amortizing constant at stated interest rate at given amortization term (360 months if not available)
    - Otherwise, used year-end 2007 figure
  - If prior year financials ARE NOT available
    - DSCR at origination
    - Times ratio of: NPI NOI Index as of the 2008 reporting date, divided by the same as of origination
  - NOTES
    - At-origination DSCRs assumed to represent an amortizing-equivalent DSCR on all loans with interest only periods
    - Actual reporting assumed to represent IO DSCR if in interest only period for entirety of reporting period
    - Like for Freddie, this pushes DSCRs down relative to FHFA guidelines due to NCF versus NOI basis

### *Loss Rates*

Total historical losses are equal to the total of the subject loans' *future* losses (as of early 2008) per MLDP/MFLDP datasets, and were divided by total then-current UPB. We did not display rates for individual cells with fewer than 10 observations, as the small sample size led to large fluctuations in both directions (e.g. one loan driving a high result in a high-DSCR/low-LTV bucket, countered by uncharacteristically low results in some high-LTV buckets).

For Fannie Mae, the loss amounts are reported net of loss sharing and must be grossed up. Despite the MFLPD reporting loss sharing types, due mostly to timing differences between Lender and Fannie Mae realization there is insufficient data to determine losses at a gross level. Instead, these were grossed up using a generic factor of 70%. This is reasonable given a one-third standard with some modified risk sharing, and is supported by Fannie's statement that "*Fannie Mae lender partners have assumed approximately 30% of all losses on Multifamily loans that have gone through settlement since 2011*" in their Multifamily Business Information Presentation dated November 2022.

## Appendix 2: The DUS Advisory Council’s Proposed Framework

The DUS Advisory Council offers its own suggestion for dealing with Procyclicality, with the following core objectives:

- Present a simple construction that fits the contours of the Proposed Rule
- Ensure capitalized stresses represent peak-to-trough declines
- Ensure systemic stress does not increase capital requirements (i.e. cyclical movements do not lead to Procyclical capital) until the prescribed stresses have been substantially realized
- Leave judgment on whether markets are overvalued in the purview of the Countercyclical Capital Buffer
- Retain the importance of surveillance to capital (i.e. not use at-origination values)
- Optionally, include a mechanism to prevent the release of capital (i.e. charge a limited amount of marginal capital) in times of particularly high inflation-adjusted values

### Principles Addressed

Multifamily shocks at the foundation of the Base Credit Risk Capital grids are 35% value and 15% NOI peak-to-trough declines. We therefore can only interpret the axes of the grids as corresponding to *at-peak* values – or else the Enterprises would always be capitalizing to *additional* shocks of 35% / 15%, regardless of the stage in the cycle.

As a starting point for discussing our proposal, if capital levels are calibrated to absorb systemic shocks of these levels, we think it’s only logical that additional capital should not be required until the market has breached these hurdles, or is close to doing so. In simple terms, our framework adds back the first 35% of market-driven value declines and 15% of market-driven NOI declines versus peak values, subject to allowances discussed below.

We recognize that there is always risk of some additional NOI & value declines even in the depths of a recession, and therefore introduce a variable ( $Stress_{Min}$ ) to ensure coverage to a given level of stress at the FHFA’s discretion – for example always ensuring capitalization to another 5 or 10% decline regardless of the market cycle.

We commend the FHFA for devoting considerable thought to the role of asset surveillance – as evidenced by its mandating an expanded risk rating infrastructure and requiring MTM-driven inputs to the capital grids. We agree with the FHFA that it would be reckless to undermine this function’s connection to capital by using at-origination values. Our framework therefore maintains the ability to differentiate between loans exhibiting large idiosyncratic swings relative to market (e.g. over- and underperforming assets), as well as loans originated in different economic environments (a 75% LTV loan originated in 2013 has a much different risk profile than a 75% loan from 2022).

### Core Proposal

We propose a Countercyclical Adjustment that’s governed by two simple ratios:

- How peak values relate to current values, and
- The maximum allowable credit or “add-back”, governed via factors capturing the FHFA’s discretionary minimum stress, relative to the prescribed stress (e.g. 35%) used for capital calibration

$$\text{Countercyclical Adjustment} = \text{MIN}(\text{Index}_{\text{Peak}} / \text{Index}_{\text{Curr}} , \text{Stress}_{\text{Min}} / \text{Stress}_{\text{FHFA}}) - 1$$

$$\text{Adjusted MTMLTV} = \text{MTMLTV} / (1 + \text{Countercyclical Adjustment})$$

$$\text{Adjusted MTMDSCR} = \text{MTMDSCR} * (1 + \text{Countercyclical Adjustment})$$

Where:

$\text{Index}_{\text{Curr}}$  = Current Index Value (e.g. NCREIF)

$\text{Index}_{\text{Peak}}$  = Peak Index Value (e.g. NCREIF)

$\text{Stress}_{\text{FHFA}}$

$\text{Stress}_{\text{Min}}$

= 1 – Mandated shock (i.e. 35% value / 15% NOI)

= 1 – Minimum shock (if applied)

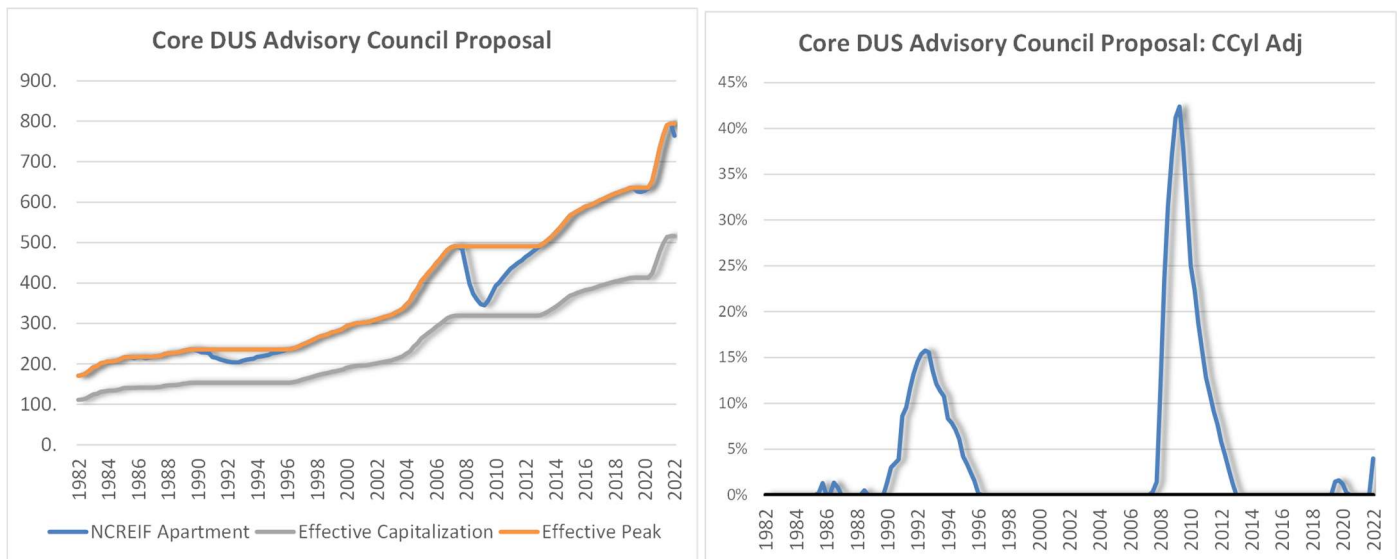
With respect to index values, a wide range of alternatives could be used which could be *shared with the derivation of the MTM figures themselves*, including but not limited to:

- Value: NCREIF NPI (*such an index is already a permitted method of determining MTMLTV itself*)
- Income: Enterprise investor reporting on same-store basis

All motivations for this proposal are conceptually-driven, but there are also practical advantages. It does not rely on logarithms and regressions like the FHFA’s which require recalibration, and terminology adheres closely to the FHFA’s Single-Family Countercyclical Adjustment, so we believe it would be very easy to integrate into the Capital Rule.

Through the value lens using the NCREIF Apartment price index, this can be easily visualized. In the left chart, the blue line represents the price index itself while the orange shows the highest value realized to date. The “Effective Capitalization” is 35% that historical peak – the implicit index that the 35% peak-to-trough decline used in the Multifamily grids would shock values down to.

At right, the Countercyclical Adjustment simply shows the difference between the index and its historical peak<sup>12</sup>, to ensure that the Adjusted MTMLTV is stressing down to that “Effective Capitalization” when passed through the Base Credit Risk Capital grids.



### Optional Enhancement to Address FHFA Concerns

To the extent that price appreciation is moderate and/or inflation-driven, as a starting principle the DUS Advisory Council believes that this appreciation can and does lower the risk profile of an existing mortgage – and that this lower risk profile should result in lower capital requirements. By any measure, a loan originated in 2012 at 75% LTV would have dramatically lower risk than a 75% loan originated in 2022 – and in fact this is already a feature of the ERCF.

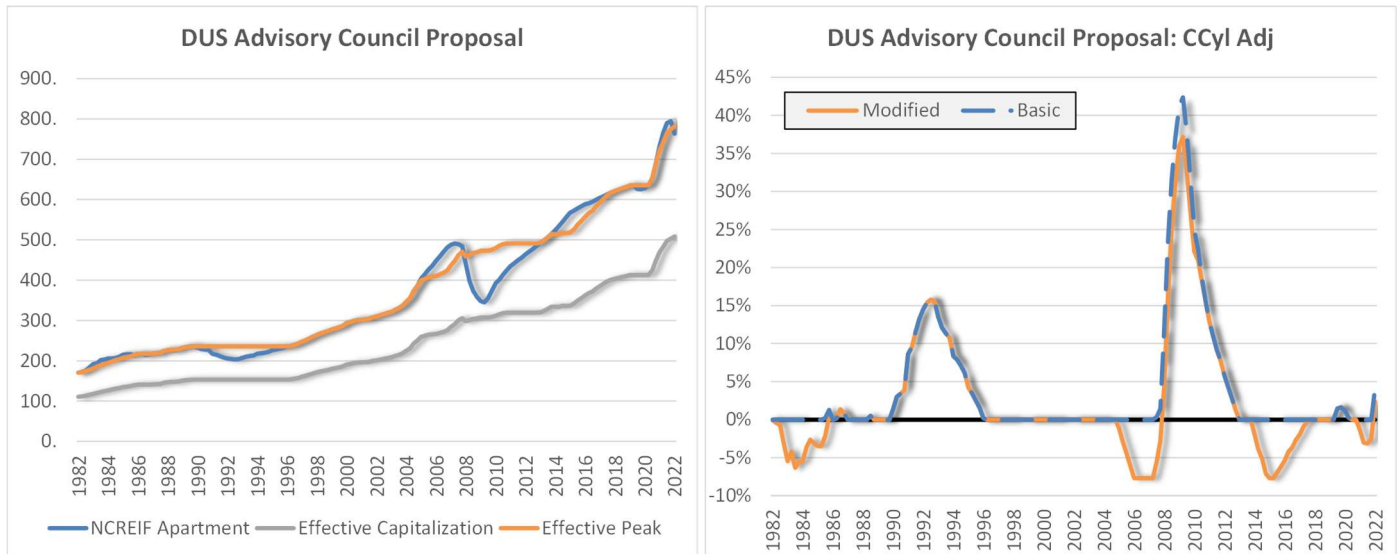
That said, we understand the FHFA’s concern that in periods of rapid inflation-adjusted price appreciation (i.e., a bubble), the existing ERCF may shed *too much* capital. In a similar way, we understand the FHFA’s hesitation to use a Countercyclical Adjustment that would fully mark up to the previous peak, if the previous peak was particularly frothy.

To address this, we suggest a potential modification which simply redefines the term “Peak” for purposes of the calculations, to the *lower of a) The peak nominal index; or b) [105%] of the peak trailing 5-year average inflation-adjusted price index*

<sup>12</sup> As specified with  $Stress_{Min} = 1$  and historical data. This would not be true in a decline of more than 35% or with a low  $Stress_{Min}$ .

In effect, this modification would haircut the previous peak value to the extent that it materially exceeded sustained, inflation-adjusted values. Lastly, we suggest that if used, the Countercyclical adjustment not fall *below* -7.7% (0.60 / 0.65 – 1), so that the “Effective Capitalization” could never exceed 40% - materially more severe than any known downturn.

This modification would charge *more* capital than the in-place ERCF on multiple occasions, including the mid-1980s before the Tax Reform Act and S&L Crisis, from late 2005 to mid-2008 in the lead-up to the Great Financial Crisis, the post-crisis reinflation peaking in 2016, and to a small extent early- to mid-2022. However, it would have been too heavy-handed in 2022 since this appreciation was largely inflation-driven. The charts would then appear as:



The parameters above (e.g. 105% of average, the 5 years for the average, or the -7.7% limitation) to set the collar’s width and behavior could all be adjusted at FHFA’s discretion.

With respect to value, in parameterized form this appears as:

$$\text{Index}_{\text{Peak}} = \text{MIN}(\text{Index}_{\text{PeakNom}}, \text{Index}_{\text{PeakRealAvg}} * \text{Factor}_{\text{Deviation}})$$

$$\text{Countercyclical Adj} = \text{MAX}(\text{Stress}_{\text{Max}} / \text{Stress}_{\text{FHFA}}, \text{MIN}(\text{Index}_{\text{Peak}} / \text{Index}_{\text{Curr}}, \text{Stress}_{\text{Min}} / \text{Stress}_{\text{FHFA}})) - 1$$

$$\text{Adjusted MTMLTV} = \text{MTMLTV} / (1 + \text{Countercyclical Adjustment})$$

Where, for value:

- |                                     |                                     |                               |                                  |
|-------------------------------------|-------------------------------------|-------------------------------|----------------------------------|
| $\text{Index}_{\text{Curr}}$        | = Current Index Value (e.g. NCREIF) | $\text{Stress}_{\text{FHFA}}$ | = 1 – Mandated shock (i.e. 35%)  |
| $\text{Index}_{\text{PeakNom}}$     | = Peak Index Value (e.g. NCREIF)    | $\text{Stress}_{\text{Max}}$  | = 1 – Maximum shock (i.e. 40%)   |
| $\text{Index}_{\text{PeakRealAvg}}$ | = Peak 5-Yr CPI-Adjusted Average    | $\text{Stress}_{\text{Min}}$  | = 1 – Minimum shock (if applied) |
| $\text{Factor}_{\text{Deviation}}$  | = Allowed Deviation (e.g. 105%)     |                               |                                  |

We believe that this framework provides a common-sense solution to the ongoing Procyclicality issue in the ERCF for Multifamily when values *decline*, while at the same time solving the FHFA’s stated concern that excessive capital could be released when the market is deemed too frothy.

This solution is programmatic, objective, consistent with the derivation of the MTMDSCR/MTMLTV figures themselves, and is internally consistent with the ERCF’s peak-to-trough construction.

### Examples of Our Proposal in Action

The following examples reinforce the principles that capital should be raised *once* for a specified *systemic* shock, that all loans with the same risk profile should be treated equally, and that surveillance should remain linked to capital.

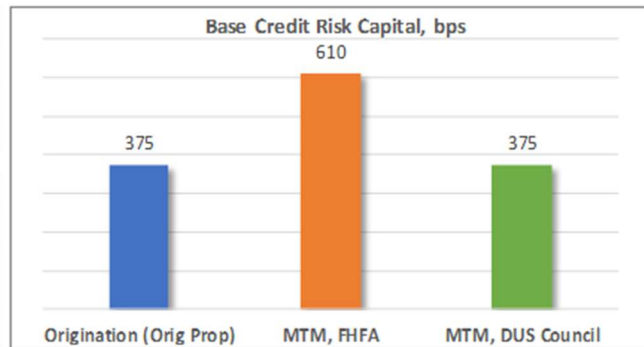
We now present four examples of how our proposal would behave, relative to the FHFA's, for an original 75% LTV / 1.50x DSCR loan in four situations. Please note that for simplicity of demonstration we've set our minimum additional stress to zero ( $Stress_{Min} = 100\%$ ), but this could be adjusted by the FHFA to achieve slightly more conservative results.

#### Scenario A: Loan behaves like market, market in decline but within specified bands

In Scenario A, the loan's MTMDSCR and MTMLTV have suffered as a direct result of the market's performance and are now estimated at 1.35x and 88% respectively. Under the original usage of the grid, this would have led to a capital requirement increasing by more than 50% to 610 basis points. In the DUS Advisory Council's formulation, since the market is well within the prescribed shocks and the loan showed no idiosyncratic behavior, the Countercyclical Capital Buffer compensates and no additional capital is charged.

Market Indicators					
	Index <sub>Peak</sub>	Index <sub>Curr</sub>	Stress <sub>FHFA</sub>	Stress <sub>Min</sub>	CCycl Adj
Value	100%	85%	65%	100%	18%
Income	100%	90%	85%	100%	11%

Loan Indicators & Capital			
	Origination	MTM (FHFA)	AdjMTM (DUS C)
LTV	75%	88%	75%
DSCR	1.50x	1.35x	1.50x
Capital	375	610	375



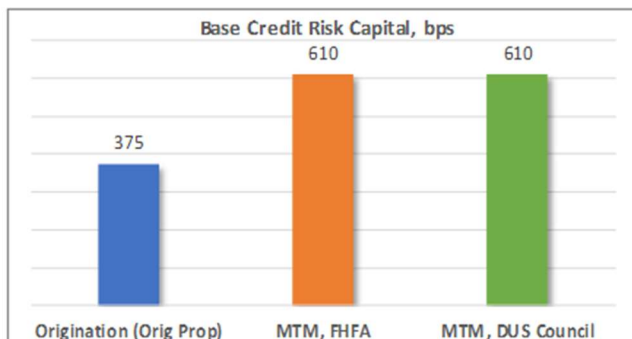
**Key Takeaway:** Capital should not increase, since market experiencing a shock within the range that capital was originally intended to cover

#### Scenario B: Loan underperforms the market, market at peak levels

In Scenario B, the loan's MTMDSCR and MTMLTV have suffered as a result of its own idiosyncratic poor performance and are estimated at 1.35x and 83% respectively. This shows that the poor performance translates to more capital – to 610 basis points under either regime.

Market Indicators					
	Index <sub>Peak</sub>	Index <sub>Curr</sub>	Stress <sub>FHFA</sub>	Stress <sub>Min</sub>	CCycl Adj
Value	100%	100%	65%	100%	0%
Income	100%	100%	85%	100%	0%

Loan Indicators & Capital			
	Origination	MTM (FHFA)	AdjMTM (DUS C)
LTV	75%	83%	83%
DSCR	1.50x	1.35x	1.35x
Capital	375	610	610



**Key Takeaway:** Loan surveillance is still important, and if poor performance is unrelated to market forces, no credit should be given

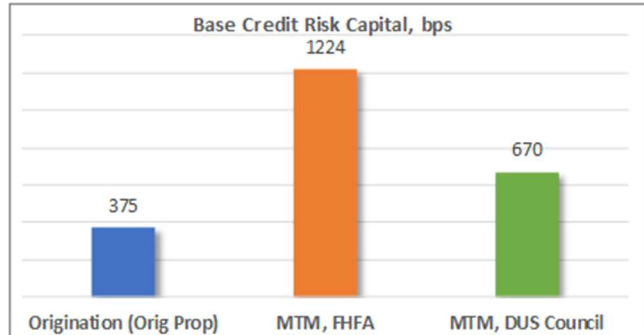
#### Scenario C: Loan behaves like market, market in deep decline outside specified bands



In Scenario C, the loan’s MTMDSCR and MTMLTV have suffered due to the market’s extremely poor performance and are now estimated at 1.13x and 125% respectively. Under the original usage of the grid, this would have led to a capital requirement more than tripling to 1224 basis points – due to the fact that the implied value drop of its stress is now an aggregate 61% decline. In our proposal, the Adjusted MTMDSCR and Adjusted MTMLTV would reflect the revised values but no additional stress (subject to Stress<sub>Min</sub>) resulting in 670 basis points of capital.

Market Indicators					
	Index <sub>Peak</sub>	Index <sub>Curr</sub>	Stress <sub>FHFA</sub>	Stress <sub>Min</sub>	CCycl Adj
Value	100%	60%	65%	100%	54%
Income	100%	75%	85%	100%	18%

Loan Indicators & Capital			
	Origination	MTM (FHFA)	AdjMTM (DUS C)
LTV	75%	125%	81%
DSCR	1.50x	1.13x	1.32x
Capital	375	1,224	670



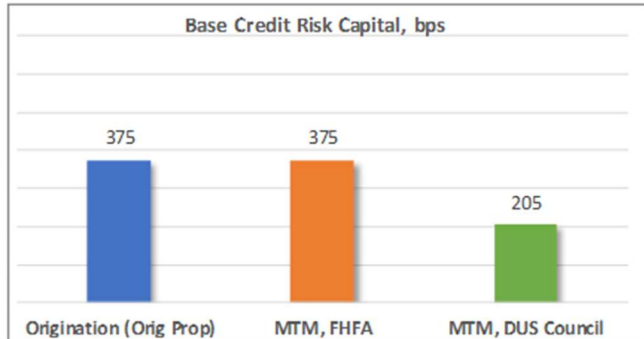
**Key Takeaway:** Capital should and does increase due to the depth of market’s decline, but unlike FHFA only capturing extent of bands being exceeded

**Scenario D: Loan originated while market in distress**

In Scenario D, the loan is originated into a distressed market. As the distressed peak-to-trough “path” has already been realized and not assumed to repeat (again subject to Stress<sub>Min</sub>), the asset would be charged 45% less capital or 205 basis points. We note that this ensures consistent treatment, and application of market shocks, across all assets – after all, following a 35% value decline a 50% OLV asset originated at peak has the same MTMLTV as a 77% OLV asset originated in the trough.

Market Indicators					
	Index <sub>Peak</sub>	Index <sub>Curr</sub>	Stress <sub>FHFA</sub>	Stress <sub>Min</sub>	CCycl Adj
Value	100%	65%	65%	100%	54%
Income	100%	85%	85%	100%	18%

Loan Indicators & Capital			
	Origination	MTM (FHFA)	AdjMTM (DUS C)
LTV	75%	75%	49%
DSCR	1.50x	1.50x	1.76x
Capital	375	375	205



**Key Takeaway:** The DUS Council proposal calls for less capital at the bottom of the market, as less susceptible to stress than same LTV lent at market peak