



# RE-PROPOSED RULE ON ENTERPRISE CAPITAL

OVERVIEW OF NOTICE OF PROPOSED RULEMAKING

JUNE 2020

# RATIONALE FOR THE RE-PROPOSAL

## Three key reasons for re-proposal of the entire capital rule:

- 1) **Ending Conservatorships** - FHFA has begun the process to responsibly end the conservatorships of the Enterprises. This policy change is a departure from the expectations of interested parties at the time of the 2018 proposal.
- 2) **Quantity and Quality of Capital** - FHFA is proposing to increase the quantity and quality of the regulatory capital to ensure:
  - the safety and soundness of each Enterprise; and
  - that each Enterprise can fulfill its statutory mission to provide stability and ongoing assistance to the secondary mortgage market across the economic cycle, in particular during periods of financial stress.
- 3) **Pro-cyclicality** - FHFA also is proposing changes to mitigate the pro-cyclicality of the aggregate risk-based capital requirements of the 2018 proposal.

# 2018 PROPOSAL REMAINS FOUNDATIONAL

- ❑ The 2018 proposal remains the foundation upon which the proposed rule was developed.
- ❑ Risk-based capital requirements are backstopped by leverage restrictions.
- ❑ Risk-based requirements for:
  - Credit risk (remains capital for unexpected loss)
  - Market risk (spread risk)
  - Operational risk
- ❑ Credit risk capital requirements continue to utilize risk-sensitive grids and multipliers for both single-family and multifamily mortgage exposures.
  - Single-family grids continue to be based on updated home values and loan balances (mark-to-market LTV), and other loan characteristics.
  - Multifamily grids unchanged, with only minor changes to multipliers.
- ❑ Enterprises continue to receive capital relief for loan-level credit enhancement and CRT.

# KEY ENHANCEMENTS

## □ Quality of Capital

- Supplemental capital requirements based on the Basel framework's definitions of capital to ensure loss absorbing capacity – common equity tier 1 (CET1), tier 1 and adjusted total capital
- Mitigates the risks posed by the statutory definitions of capital
- Uses risk-weighted assets (RWA) to measure capital adequacy for risk-based requirements\*

## □ Quantity of Capital

- Risk weight floor (15%) on single-family and multifamily mortgage exposures
- Appropriate capital for retained CRT exposures
- Capital buffers
- Operational risk capital
- Meaningful leverage ratio requirements and buffer to backstop risk-based requirements

## □ Addressing Pro-cyclicality

- Capital buffers
- Countercyclical LTV adjustment for single-family mortgage exposures

## □ Advanced Approaches

- Risk-based requirements the higher of advanced or standardized requirements

\* In the 2018 proposal, the grids were populated with credit risk capital requirements expressed in basis points. To convert to a risk weight, a credit risk capital requirement is divided by 800 basis points and expressed as a percent (e.g., an exposure with an 800 basis point credit risk capital requirement is assigned a 100% risk weight).



# SERVICE TO THE MISSION

- ❑ The proposed rule is designed to enable the Enterprises to fulfill their mission promoting access and affordability across the economic cycle.
- ❑ The Enterprises must be able to serve the market in times of stress – when they are needed most. The proposed rule accomplishes this through:
  - A going-concern capital standard
  - Capital buffers that can be drawn down in a period of financial stress
  - Greater stability of capital requirements through the economic cycle by addressing pro-cyclicality
- ❑ The proposed rule was designed with careful consideration to affordability and access.
  - Risk multipliers that would have allocated much more capital to small balance and one-borrower single-family mortgage exposures were eliminated.
  - Risk weight floors only impact the lowest risk acquisitions while providing a significant measure of added safety and soundness.
  - Capital buffers for risk-based requirements are calculated on adjusted total assets, rather than risk-weighted assets as done in the banking system.

# ADJUSTED TOTAL ASSETS AND RISK-WEIGHTED ASSETS

\$ in billions

As of 9/30/2019

	Fannie Mae	Freddie Mac	Enterprises Combined
Total on-balance sheet assets	\$3,494	\$2,170	\$5,665
Less: on-balance sheet assets for derivative transactions and repo-style transactions	<u>(24)</u>	<u>(53)</u>	<u>(76)</u>
Adjusted on-balance sheet assets	3,471	2,117	5,588
Less: deductions from common equity tier 1 capital and additional tier 1 capital	<u>0</u>	<u>0</u>	<u>0</u>
Total on-balance sheet exposures	3,471	2,118	5,588
Plus:			
Derivatives exposures	3	7	10
Repo-style transaction exposures	25	51	76
Off-balance sheet exposures	<u>49</u>	<u>349</u>	<u>397</u>
Adjusted Total Assets	\$3,547	\$2,525	\$6,072
Risk-weighted Assets	\$1,015	\$674	\$1,689
Weighted average single-family risk weight (net credit risk)			26%
Weighted average multifamily risk weight (net credit risk)			51%

The weighted average single-family and multifamily risk weights are roughly half that of the U.S. banking framework for similar exposures.





# OVERVIEW OF REQUIREMENTS AND BUFFERS

Risk-Based Capital Requirements		
Capital Definitions		% of RWA
Statutory	Total Capital	8.00%
Supplemental	CET1	4.50%
	Tier 1	6.00%
	Adj. Total Capital	8.00%
Risk-Based Capital Buffers*		
Buffers		% of Adj. Total Assets
Stress Capital Buffer <sup>(1)</sup>		0.75%
Stability Capital Buffer <sup>(2)</sup>		0.88%
Countercyclical Buffer <sup>(3)</sup>		0.00%

Leverage Ratio		
Capital Definitions		% of Adj. Total Assets
Statutory	Core Capital	2.50%
Supplemental	Tier 1	2.50%
Leverage Buffer*		
Buffers		% of Adj. Total Assets
Leverage Buffer		1.50%

Credit risk capital requirement for an exposure = Required Capital Percentage x RWA

RWA = Exposure Amount x Risk Weight.

The weighted average single- and multifamily risk weights are approx. half that of the U.S. banking framework for similar exposures as of 9/30/2019.

\* Buffers apply to the supplemental requirements only.

(1) Going-concern buffer requirement in 2018 proposal.

(2) Fannie Mae 1.05%, Freddie Mac 0.64% based on 2019 Q3 market shares.

(3) Initially set to 0 percent, intended to address excess credit growth.



# CAPITAL REQUIREMENTS

## Risk-based Capital Requirements (Enterprises Combined)

As of 9/30/2019

*\$ in billions*

	Total Capital (Statutory)	% of RWA	CET1	% of RWA	Tier 1	% of RWA	Adjusted Total Capital	% of RWA
<b>Capital Requirement</b>	<b>\$135</b>	8.0%	<b>\$76</b>	4.5%	<b>\$101</b>	6.0%	<b>\$135</b>	8.0%
<b>Prescribed Buffers</b>								
Stress Capital Buffer			46	2.7%	46	2.7%	46	2.7%
Stability Capital Buffer			53	3.2%	53	3.2%	53	3.2%
Countercyclical Capital Buffer Amount			<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>
<b>Prescribed Capital Conservation</b>								
<b>Buffer Amount (PCCBA)</b>	<b><u>0</u></b>	<b><u>0.0%</u></b>	<b><u>99</u></b>	<b><u>5.9%</u></b>	<b><u>99</u></b>	<b><u>5.9%</u></b>	<b><u>99</u></b>	<b><u>5.9%</u></b>
<b>Requirement and PCCBA</b>	<b>\$135</b>	8.0%	<b>\$175</b>	10.4%	<b>\$200</b>	11.9%	<b>\$234</b>	13.9%
Risk-Weighted Assets (RWA)	\$1,689							

## Leverage Capital Requirements (Enterprises Combined)

*\$ in billions*

	Core Capital (Statutory)	% of Adjusted Total Assets	Tier 1	% of Adjusted Total Assets
<b>Capital Requirement</b>	<b>\$152</b>	2.5%	<b>\$152</b>	2.5%
<b>Prescribed Leverage Buffer Amount (PLBA)</b>	<b><u>0</u></b>	<b><u>0.0%</u></b>	<b><u>91</u></b>	<b><u>1.5%</u></b>
<b>Requirement and PLBA</b>	<b>\$152</b>	2.5%	<b>\$243</b>	4.0%
Adjusted Total Assets	\$6,072			



# SPECIAL TOPICS

Capital definitions

Capital buffers

Countercyclical adjustment

Credit risk transfer

# DEFINITIONS OF CAPITAL

- ❑ Total capital and core capital would have the meaning given in the Safety and Soundness Act.
- ❑ Adjusted total capital, tier 1 capital and CET1 capital are defined based on the definitions of total capital, tier 1 capital and CET1 capital in the United States banking regulators' capital framework.
- ❑ Deferred tax assets (DTAs) and other adjustments: There are no limitations on the amount of DTAs included in statutory capital. There are limitations on the amount of DTAs included in CET 1, tier 1 and adjusted total capital, as well as deductions and other adjustments for other capital elements having less loss-absorbing capacity.

## Statutory

## Supplemental

	Core Capital	Total Capital	CET 1 Capital	Tier 1 Capital	Adjusted Total Capital
Common stock	✓	✓	✓	✓	✓
Par value of preferred stock	✓	✓		✓	✓
AOCI related to AFS and Defined Benefit Plans			✓	✓	✓
AOCI related to cash flow hedge relationships					
General allowance for loan losses		✓			
Excess credit reserves					✓
Subordinated debt					✓

# DEFINITIONS OF CAPITAL

The supplemental requirements mitigate the weaknesses in the Enterprises' statutorily defined capital requirements that became evident in the 2008 financial crisis.

<i>\$ in billions</i>	Fannie Mae			Freddie Mac		
	<u>Dec 31,</u>	<u>Dec 31,</u>	<u>Jun 30,</u>	<u>Dec 31,</u>	<u>Dec 31,</u>	<u>Jun 30,</u>
	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Core Capital	\$42	\$45	\$47	\$35	\$38	\$37
Proposed Tier 1 Capital	40	36	23	36	26	1
<b>Proposed Tier 1 Capital minus Core Capital</b>	<b>(\$2)</b>	<b>(\$10)</b>	<b>(\$24)</b>	<b>\$1</b>	<b>(\$12)</b>	<b>(\$36)</b>
Total Capital	\$43	\$49	\$56	\$36	\$41	\$43
Proposed Adjusted Total Capital	48	42	23	38	30	7
<b>Proposed Adjusted Total Capital minus Total Capital</b>	<b>\$5</b>	<b>(\$6)</b>	<b>(\$33)</b>	<b>\$2</b>	<b>(\$11)</b>	<b>(\$36)</b>
<b>Proposed CET 1 Capital</b>	<b>\$31</b>	<b>\$19</b>	<b>\$1</b>	<b>\$26</b>	<b>\$12</b>	<b>(\$13)</b>

# RATIONALE FOR CAPITAL BUFFERS

- ❑ Capital buffers are a sound construct drawn from Basel and U.S. bank capital frameworks.
- ❑ Benefiting from the lessons learned through the crisis, capital buffers:
  - Encourage capital conservation;
  - Enhance the resilience of the Enterprises by maintaining an overall high level of loss-absorbing capacity.
  - Better enable the Enterprises to provide support to the market in times of financial stress by drawing down on the buffers and re-building them when conditions improve.
- ❑ The proposed rule would limit capital distributions and discretionary bonus payments for an Enterprise that does not hold a specified amount of regulatory capital in excess of its required capital.

# CAPITAL CONSERVATION BUFFER

- ❑ The prescribed capital conservation buffer amount (PCCBA) would complement the supplemental risk-based capital requirements.
- ❑ The PCCBA would consist of three separate component buffers:
  - Stress Capital Buffer
  - Countercyclical Capital Buffer
  - Stability Capital Buffer
- ❑ The stress capital buffer would equal 0.75 percent of adjusted total assets, and is similar in amount and rationale to the 0.75 percent going-concern buffer contemplated by the 2018 proposal.
- ❑ The countercyclical capital buffer amount would initially be set to zero percent and could be increased as a macro-prudential tool, analogous to United States banking regulators' countercyclical capital buffer.

# STABILITY CAPITAL BUFFER

- ❑ The 2008 financial crisis, including the taxpayer-funded rescue of the Enterprises, established that the failure of an Enterprise could do significant harm to the national housing finance markets, as well as the U.S. economy more generally.
- ❑ FHFA is proposing an Enterprise-specific stability capital buffer that is tailored to the risk that the Enterprise's default or other financial distress could have on the national housing finance market.
- ❑ Under FHFA's market share approach, an Enterprise's stability capital buffer would depend on an Enterprise's share of total residential mortgage debt outstanding.
- ❑ FHFA is also soliciting comment on whether to replace or supplement the market share approach with another approach that considers other indicators of the housing finance market stability risk posed by an Enterprise.
- ❑ Under either methodology, the stability capital buffer would be set as a percent of adjusted total assets.

# STABILITY CAPITAL BUFFER

As of 9/30/2019

\$ in billions

## Total Mortgage Debt Outstanding

Single-Family	\$11,080
Multifamily	<u>1,561</u>
Total	\$12,641

	Fannie Mae	Freddie Mac
Regular	\$3,280	\$1,969
Pools	<u>8</u>	<u>268</u>
Total mortgages	\$3,288	\$2,238
Market Share	26%	18%
less 5%	<u>-5%</u>	<u>-5%</u>
Share subject to buffer	21%	13%
x 5 bps	105	64
Adjusted Total Assets	\$3,547	\$2,525
Stability Capital Buffer	\$37	\$16



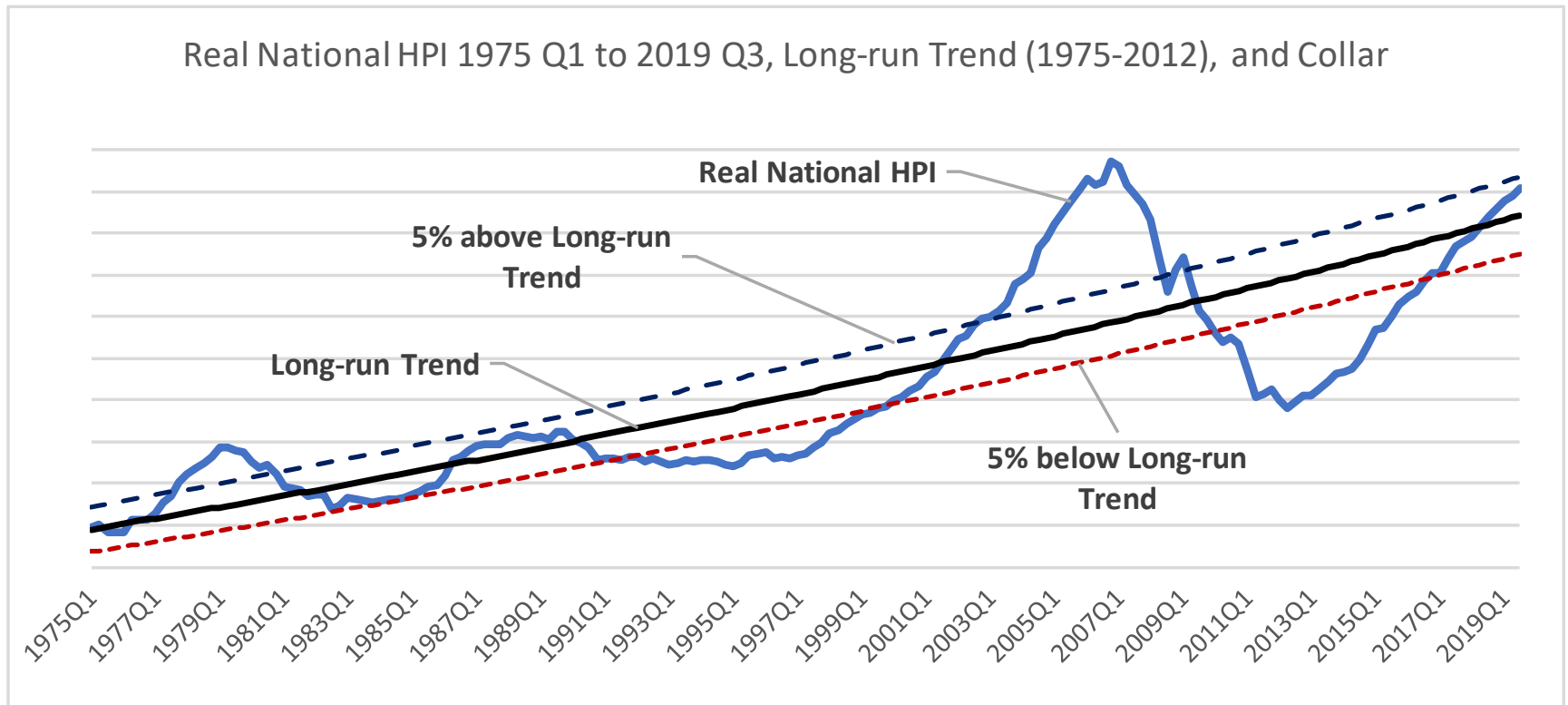


# ADDRESSING PRO-CYCLICALITY

- ❑ The proposed rule includes an innovative approach to mitigate the pro-cyclicality of the 2018 proposal while preserving valuable credit risk signals.
- ❑ Introduces a long-term single-family HPI trend and collar methodology to mitigate the pro-cyclicality of aggregate single-family credit risk capital requirements.
- ❑ Methodology adjusts single-family MTMLTVs upward when HPI is above trend by more than 5% and adjusts MTMLTVs downward when HPI is below trend by more than 5%.
  - Moderates excessive capital reductions when HPI is materially above trend.
  - Moderates excessive capital increases when HPI is materially below trend.
  - Overall impact is a much more stable regulatory capital profile.
  - Also has beneficial effect of sending more countercyclical lending signals.
- ❑ A similar framework is possible for multifamily, but there is no specific methodology proposed. FHFA seeks comment on how such a framework could be implemented.
- ❑ A number of other changes also provide increased stability to the aggregate capital requirements, such as asset-level floor on risk weights.

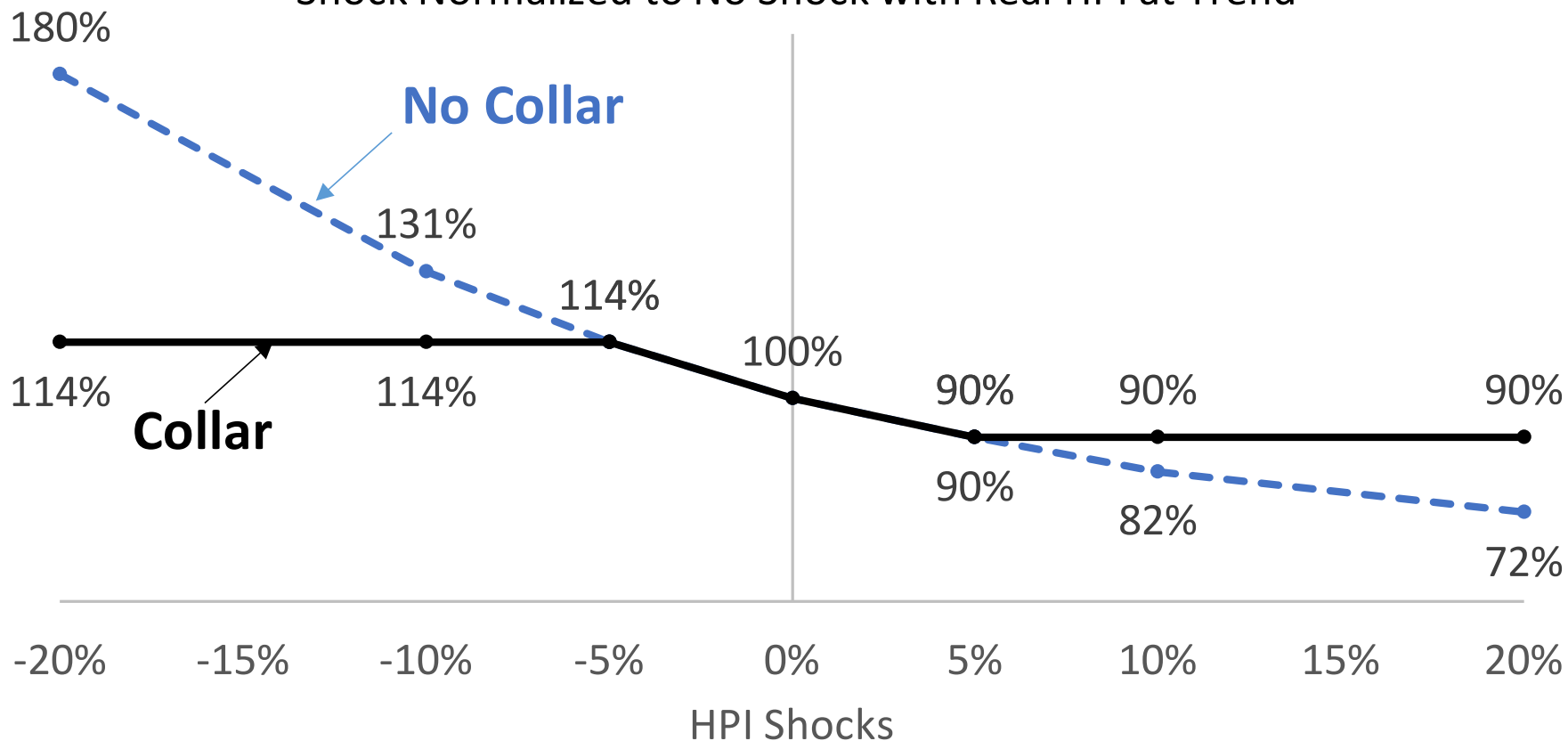
# SF COUNTERCYCLICAL ADJUSTMENT

The proposed rule includes a new, countercyclical adjustment to MTMLTV that adjusts single-family MTMLTVs upward when HPI is above trend by more than 5% and adjusts MTMLTVs downward when HPI is below trend by more than 5%.



# EFFECT ON RISK-BASED CAPITAL REQUIREMENTS

Stylized Example of Single-Family Net Credit Risk Capital by HPI Shock Normalized to No Shock with Real HPI at Trend



# SF COUNTERCYCLICAL ADJUSTMENT CONTD.

	<u>Dec 31, 2006</u>	<u>Jun 30, 2012</u>	<u>Sept 30, 2019</u>
Change from the long-run trend to real HPI	24%	-18%	3%
<b>Adjusted MTMLTV</b>			
	<u>Dec 31, 2006</u>	<u>Jun 30, 2012</u>	<u>Sept 30, 2019</u>
<b>MTMLTV = 60%</b>	71%	52%	60%
<b>MTMLTV = 80%</b>	95%	69%	80%
<b>MTMLTV = 95%</b>	113%	82%	95%

Adjusted MTMLTV = MTMLTV/(1 + Countercyclical Adjustment)

Countercyclical Adjustment:

If the change from the long-run trend to HPI is:

- Greater than 5%, Countercyclical Adjustment = 1.05 x Long-run trend HPI/Real National HPI -1
- Less than -5%, Countercyclical Adjustment = 0.95 x Long-run trend HPI/Real National HPI -1
- Between 5% and -5%, Countercyclical Adjustment = 0



# CREDIT RISK TRANSFERS

- ❑ CRT transactions transfer potential credit losses on single-family and multifamily mortgage exposures from an Enterprise to private parties.
- ❑ Therefore, an Enterprise may benefit from calculating risk-weighted assets for its retained exposure to the CRT rather than the risk-weighted asset amounts for the pool of underlying mortgage exposures.
- ❑ The proposed CRT approach contains the following enhancements to the CRT methodology in the 2018 proposal:
  - A prudential risk weight floor of 10%;
  - Effectiveness adjustments for counterparty risk, loss timing, and the potential that CRT is less effective than equity capital; and
  - Operational criteria and disclosure requirements to mitigate the risk that the terms or structure of the CRT would not be effective in transferring credit risk.

# CRT – RISK WEIGHT FLOOR

- ❑ The proposed rule would assign a prudential risk weight floor of 10 percent to any retained CRT exposure.
- ❑ Under the 2018 proposal, a retained CRT exposure with an attachment point greater than the sum of net credit risk capital requirement and expected loss would have had a risk weight of 0 percent, even though these exposures do pose some risk.
- ❑ The prudential floor avoids treating any exposure as posing no credit risk.
- ❑ The prudential floor is generally consistent with the U.S. banking framework, but less than the U.S. banking framework’s 20 percent minimum risk weight for securitization exposures.
- ❑ FHFA sized the minimum risk weight for a CRT exposure to strike a balance between permitting CRT while also mitigating the safety and soundness, mission, and housing stability risk that might be posed by some CRT.

# CRT – EFFECTIVENESS ADJUSTMENTS

- ❑ In the proposed CRT approach, an Enterprise would calculate adjusted exposure amounts for its retained CRT exposures to reflect the effectiveness of the CRT in transferring credit risk.
- ❑ Adjustments would be made for:
  - Overall effectiveness - this adjustment increases retained exposure by 10 percent to reflect that CRT transactions may not provide the same flexibility, fungibility, and loss-absorbing capacity as equity capital, as discussed by several commenters on the 2018 proposal;
  - Loss sharing effectiveness - this adjustment increases retained exposure to reflect the counterparty risk inherent in uncollateralized risk-in-force. Under the 2018 proposal, counterparty risk would have been assessed on the basis of estimated stress loss rather than total risk-in-force;
  - Loss timing effectiveness - this adjustment increases retained exposure to better reflect any mismatch between lifetime losses on the underlying mortgage exposures and the duration of the CRT's coverage. Under the 2018 proposal, the loss timing adjustment applied uniformly to all tranches and did not change as the CRT coverage seasoned.



# CRT – OPERATIONAL CRITERIA

- ❑ Consistent with the U.S. banking framework, FHFA is proposing operational criteria to mitigate the risk that the terms or structure of the CRT would not be effective in transferring credit risk.
- ❑ The operational criteria would mitigate this risk by, for example, prohibiting provisions that would allow for the termination of a CRT due to deterioration in the credit quality of the underlying exposures and ensuring clean-up calls relating to a CRT are limited to specified circumstances.
- ❑ FHFA’s operational criteria for CRT are somewhat less restrictive than those applicable to traditional or synthetic securitizations under the U.S. banking framework.
- ❑ To partially mitigate the safety and soundness risks posed by this less restrictive approach, FHFA would require an Enterprise to publicly disclose material risks to the effectiveness of the CRT in order to foster market discipline and FHFA’s supervision and regulation.

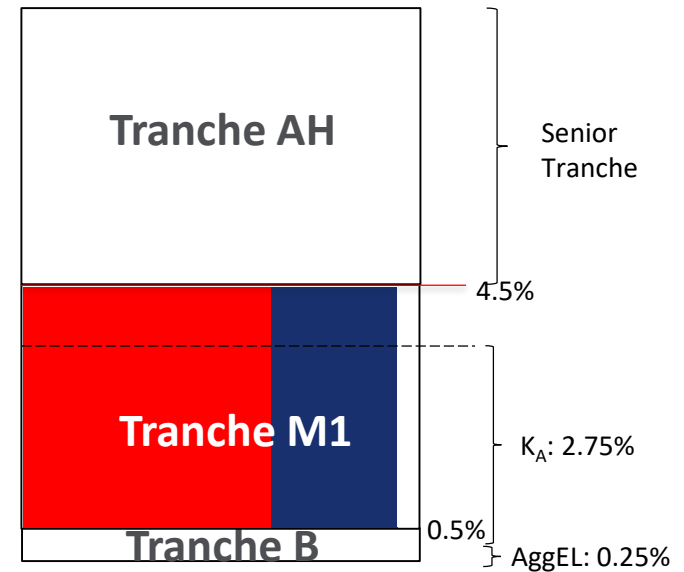
# CRT – IMPLICATIONS AND OPTIONAL ELECTION

- ❑ Under this approach, FHFA generally would require more credit risk capital on a transaction-wide basis at the inception of a CRT than would be required if the underlying mortgage exposures were not in a CRT.
- ❑ This departure from strict capital neutrality is important to manage the potential safety and soundness risks of CRT, including:
  - Model risk associated with the calibration of the credit risk capital requirements of the underlying exposures, and the model risk posed by the calibration of the loss-timing and counterparty risk adjustments;
  - Structural and other risks posed by complex CRT;
  - Regulatory capital arbitrage through CRT.
- ❑ As this departure from capital neutrality might result in a higher credit risk capital requirement for retained CRT exposures than for the underlying mortgage exposures for some existing CRT structures, an Enterprise may elect to not recognize a CRT for purposes of the credit risk capital requirements and instead hold risk-based capital against the underlying exposures (as under the U.S. banking framework).

# CRT – EXAMPLE, SUMMARY COMPARISON

Comparing the 2018 proposal to the proposed rule, using the simplified illustrative CRT example from the 2018 proposal, shows a reduction in transferred RWA of \$129 million.

	RWA <sub>S</sub> (\$millions)		
	Transferred	Retained	Total
<b>2018 Proposal</b>	\$ 259	\$ 85	\$ 344
<b>Enhancements</b>			
Tranche-level floor	(96)	96	
Overall effectiveness	(25)	25	
Loss timing and loss sharing effectiveness	(8)	8	
<b>Total change from enhancements</b>	<b>(129)</b>	<b>129</b>	
<b>Proposed Rule</b>	<b>\$ 130</b>	<b>\$ 214</b>	<b>\$ 344</b>



# APPENDIX: IMPACT ANALYSIS



# SUMMARY OF KEY CHANGES TO RISK-BASED CAPITAL

<b>Risk-based Capital Walk-forward</b>		
<i>\$ in billions</i>		
	<b>2018 Proposal</b>	<b>\$ 136.9</b>
Buffers	Stability Capital Buffer	53.3
	Going-Concern Buffer to Stress Capital Buffer	2.0
Credit risk capital	Single-family and Multifamily 15% Risk Weight Floor	22.7
	CRT Tranche Risk Weight Floor	15.7
	CRT Less Effective than Equity Capital	4.3
DTA	DTA Methodology	(7.4)
Ops. Risk	Operational Risk Floor	4.1
Other	Other (Net)	2.3
	Changes Total	\$ 97.0
	<b>Proposed Rule</b>	<b>\$ 233.9</b>

The 2018 proposal increased the total capital requirement by a DTA offset, while the proposed rule instead deducts that DTA offset from the supplemental capital requirements. The 2018 proposal's \$136.9 billion capital requirement would have been, in effect, \$129.5 billion under the DTA approach of the proposed rule.

# COMPARISON OF RBC PROPOSALS: BY RISK CATEGORY

Enterprises Combined	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	\$ in billions	% of Total	\$ in billions	% of Total	\$ in billions	% of Total	% of Adjusted Total Assets
Gross Credit Risk			\$127.0		\$151.9		2.50%
Loan-Level Credit Enhancement			<u>(17.9)</u>		<u>(17.0)</u>		<u>(0.28%)</u>
Net Credit Risk	\$112.0		\$109.1		\$134.9		2.22%
CRT Impact, net	<u>(21.5)</u>		<u>(41.3)</u>		<u>(22.1)</u>		<u>(0.36%)</u>
Post-CRT Net Credit Risk	90.5	50%	67.8	50%	112.8	84%	1.86%
Market Risk	19.4	11%	13.6	10%	13.6	10%	0.22%
Going-Concern Buffer	39.9	22%	43.5	32%	0.0	0%	0.00%
Operational Risk	4.3	2%	4.6	3%	8.7	6%	0.14%
Deferred Tax Assets	<u>26.7</u>	<u>15%</u>	<u>7.4</u>	<u>5%</u>	<u>0.0</u>	<u>0%</u>	<u>0.00%</u>
Total Capital Requirement	\$180.9	100%	\$136.9	100%	\$135.1	100%	2.22%
Prescribed Capital Conservation Buffer Amount (PCCBA)					98.8		1.63%
Total Capital Requirement and PCCBA	\$180.9		\$136.9		\$233.9		3.85%
Adjusted Total Assets	\$5,619.9		\$6,072.0		\$6,072.0		
Total Capital Requirement and PCCBA/ Adjusted Total Assets	3.22%		2.25%		3.85%		

## Notes:

Fannie Mae: Original Proposal as of 9/30/2019 - \$85.8B (2.42% of Adjusted Total Assets) vs New Proposal - \$145B (4.1% of Adjusted Total Assets)

Freddie Mac: Original Proposal as of 9/30/2019 - \$51.1B (2.02% of Adjusted Total Assets) vs New Proposal - \$89B (3.5% of Adjusted Total Assets)



# COMPARISON OF RBC PROPOSALS: BY ASSET CATEGORY

Enterprises Combined	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	\$ in billions	% of Total	\$ in billions	% of Total	\$ in billions	% of Total	% of Adjusted Total Assets
Single-family excluding Going-Concern Buffer	\$95.6	53%	67.8	49%			
Single-family Going-Concern Buffer	<u>34.9</u>	<u>19%</u>	<u>36.9</u>	<u>27%</u>			
Single-family	130.5	72%	104.7	76%	\$111.0	82%	1.83%
Multifamily excluding Going-Concern Buffer	10.2	6%	12.2	9%			
Multifamily Going-Concern Buffer	<u>3.7</u>	<u>2%</u>	<u>4.7</u>	<u>3%</u>			
Multifamily	13.9	8%	16.9	12%	17.8	13%	0.29%
Deferred Tax Assets	26.8	15%	7.4	5%	0.0	0%	0.00%
Other Assets excluding Going-Concern Buffer*	8.4	5%	6.1	4%			
Other Assets Going-Concern Buffer	<u>1.3</u>	<u>1%</u>	<u>1.8</u>	<u>1%</u>			
Other Assets	<u>9.7</u>	<u>5%</u>	<u>7.9</u>	<u>6%</u>	<u>6.3</u>	<u>5%</u>	<u>0.10%</u>
Total Capital Requirement	\$180.9	100%	\$136.9	100%	\$135.1	100%	2.22%
Prescribed Capital Conservation Buffer Amount (PCCBA)					\$98.8		1.63%
Total Capital Requirement and PCCBA	\$180.9		\$136.9		\$233.9		3.85%
Adjusted Total Assets	\$5,619.9		\$6,072.0		\$6,072.0		
Total Capital Requirement and Buffer Target/ Adjusted Total Assets	3.22%		2.25%		3.85%		

\*Includes PLS, CMBS, Other.

\* Includes PLS, CMBS and other assets





# SINGLE-FAMILY BUSINESS CAPITAL REQUIREMENTS

<i>\$ in billions</i>	Enterprises Combined			
	2018 Proposal	Risk- Weight	Proposed Rule	Risk- Weight
Gross Credit Risk	\$99.9	25%	\$122.4	31%
Loan Level Enhancement	<u>(17.9)</u>		<u>(17.0)</u>	
Net Credit Risk	82.0	20%	105.4	26%
CRT Impact, net	<u>(27.2)</u>		<u>(10.9)</u>	
Post-CRT Net Credit Risk	54.7	14%	94.5	24%
Market Risk	9.1		9.1	
Operational Risk	<u>3.9</u>		<u>7.4</u>	
Subtotal	67.8		111.0	
Going-concern Buffer	<u>36.9</u>		<u>0.0</u>	
Total Capital Requirement	\$104.7		\$111.0	
Total UPB	\$5,003.8		\$5,003.8	
<i>Includes single-family whole loans, Fannie Mae and Freddie Mac guarantees of single-family securities held by third parties, and investments in single-family securities guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae.</i>				

# MULTIFAMILY BUSINESS CAPITAL REQUIREMENTS

<i>\$ in billions</i>	Enterprises Combined			
	2018 Proposal	Risk- Weight	Proposed Rule	Risk- Weight
Net Credit Risk	\$24.7	47%	\$27.0	51%
CRT Impact, net	<u>(14.1)</u>		<u>(11.2)</u>	
Post-CRT Net Credit Risk	10.6	20%	15.8	30%
Market Risk	1.1		1.1	
Operational Risk	<u>0.5</u>		<u>0.9</u>	
Subtotal	12.2		17.8	
Going-Concern Buffer	<u>4.7</u>		<u>0.0</u>	
Total Capital Requirement	\$16.9		\$17.8	
Total UPB	\$655.5		\$655.5	
 <i>Includes multifamily whole loans, Fannie Mae and Freddie Mac guarantees of multifamily securities held by third parties, and investments in multifamily securities guaranteed by Fannie Mae, Freddie Mac or Ginnie Mae.</i>				

# FANNIE MAE CAPITAL REQUIREMENTS

Fannie Mae		As of 9/30/2019							
<b>Risk-based Capital Requirements</b>									
<i>\$ in billions</i>	Total Capital (Statutory)	% of RWA	CET1	% of RWA	Tier 1	% of RWA	Adjusted Total Capital	% of RWA	
Capital Requirement	\$81	8.0%	\$46	4.5%	\$61	6.0%	\$81	8.0%	
Prescribed Buffers									
Stress Capital Buffer			27	2.6%	27	2.6%	27	2.6%	
Stability Capital Buffer			37	3.7%	37	3.7%	37	3.7%	
Countercyclical Capital Buffer Amount			<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>	
Prescribed Capital Conservation Buffer Amount (PCCBA)	<u>0</u>	<u>0.0%</u>	<u>64</u>	<u>6.3%</u>	<u>64</u>	<u>6.3%</u>	<u>64</u>	<u>6.3%</u>	
Requirement and PCCBA	\$81	8.0%	\$110	10.8%	\$125	12.3%	\$145	14.3%	
<hr/>									
Risk-Weighted Assets (RWA)	\$1,015								
<hr/>									
<b>Leverage Capital Requirements</b>									
	Core Capital (Statutory)	% of Adjusted Total Assets	Tier 1	% of Adjusted Total Assets					
Capital Requirement	\$89	2.5%	\$89	2.5%					
Prescribed Leverage Buffer Amount (PLBA)	<u>0</u>	<u>0.0%</u>	<u>53</u>	<u>1.5%</u>					
Requirement and PLBA	\$89	2.5%	\$142	4.0%					
<hr/>									
Adjusted Total Assets	\$3,547								



# FREDDIE MAC CAPITAL REQUIREMENTS

Freddie Mac		As of 9/30/2019							
<b>Risk-based Capital Requirements</b>									
<i>\$ in billions</i>	Total Capital (Statutory)	% of RWA	CET1	% of RWA	Tier 1	% of RWA	Adjusted Total Capital	% of RWA	
Capital Requirement	\$54	8.0%	\$30	4.5%	\$40	6.0%	\$54	8.0%	
<b>Prescribed Buffers</b>									
Stress Capital Buffer			19	2.8%	19	2.8%	19	2.8%	
Stability Capital Buffer			16	2.4%	16	2.4%	16	2.4%	
Countercyclical Capital Buffer Amount			<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>	<u>0</u>	<u>0.0%</u>	
Prescribed Capital Conservation Buffer Amount (PCCBA)	<u>0</u>		<u>35</u>	<u>5.2%</u>	<u>35</u>	<u>5.2%</u>	<u>35</u>	<u>5.2%</u>	
Requirement and PCCBA	\$54		\$65	9.7%	\$75	11.2%	\$89	13.2%	
<hr/>									
Risk-Weighted Assets (RWA)	\$674								
<hr/>									
<b>Leverage Capital Requirements</b>									
	Core Capital (Statutory)	% of Adjusted Total Assets	Tier 1	% of Adjusted Total Assets					
Capital Requirement	\$63	2.5%	\$63	2.5%					
Prescribed Leverage Buffer Amount (PLBA)	<u>\$0</u>	<u>0.0%</u>	<u>\$38</u>	<u>1.5%</u>					
Requirement and PLBA	\$63	2.5%	\$101	4.0%					
<hr/>									
Adjusted Total Assets	\$2,525								



# FANNIE MAE RBC REQUIREMENTS BY RISK CATEGORY

Fannie Mae	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	% of				% of Adjusted		
	\$ in billions	Total	\$ in billions	% of Total	\$ in billions	% of Total	Total Assets
Gross Credit Risk			\$76.5		\$90.8		2.56%
Loan-Level Credit Enhancement			<u>(11.0)</u>		<u>(10.4)</u>		<u>(0.29%)</u>
Net Credit Risk	\$70.5		\$65.4		\$80.3		2.26%
CRT Impact, net	<u>(11.5)</u>		<u>(19.8)</u>		<u>(10.5)</u>		<u>(0.30%)</u>
Post-CRT Net Credit Risk	59.0	51%	45.6	53%	69.8	86%	1.97%
Market Risk	9.5	8%	6.2	7%	6.2	8%	0.18%
Going-Concern Buffer	24.0	21%	25.7	30%	0.0	0%	0.00%
Operational Risk	2.6	2%	2.7	3%	5.1	6%	0.14%
Deferred Tax Assets	<u>19.9</u>	<u>17%</u>	<u>5.6</u>	<u>6%</u>	<u>0.0</u>	<u>0%</u>	<u>0.00%</u>
Total Capital Requirement	\$115.0	100%	\$85.8	100%	\$81.2	100%	2.29%
Prescribed Buffers							
Stress Capital Buffer					26.6		0.75%
Stability Capital Buffer					37.3		1.05%
Countercyclical Capital Buffer Amount					<u>0.0</u>		<u>0.00%</u>
Prescribed Capital Conservation							
Buffer Amount (PCCBA)					63.9		1.80%
Total Capital Requirement and PCCBA	\$115.0		\$85.8		\$145.1		4.09%
Adjusted Total Assets	\$3,357.5		\$3,547.4		\$3,547.4		
Total Capital Requirement and PCCBA/ Adjusted Total Assets	3.42%		2.42%		4.09%		



# FREDDIE MAC RBC REQUIREMENTS BY RISK CATEGORY

Freddie Mac	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	\$ in billions	% of Total	\$ in billions	% of Total	\$ in billions	% of Total	% of Adjusted Total Assets
Gross Credit Risk			\$50.6		\$61.2		2.42%
Loan-Level Credit Enhancement			<u>(6.9)</u>		<u>(6.6)</u>		<u>(0.26%)</u>
Net Credit Risk	\$41.5		\$43.7		\$54.6		2.16%
CRT Impact, net	<u>(10.0)</u>		<u>(21.5)</u>		<u>(11.6)</u>		<u>(0.46%)</u>
Post-CRT Net Credit Risk	31.5	48%	22.2	43%	43.0	80%	1.70%
Market Risk	9.9	15%	7.4	14%	7.4	14%	0.29%
Going-Concern Buffer	15.9	24%	17.8	35%	0.0	0%	0.00%
Operational Risk	1.7	3%	1.9	4%	3.6	7%	0.14%
Deferred Tax Assets	<u>6.8</u>	<u>10%</u>	<u>1.8</u>	<u>4%</u>	<u>0.0</u>	<u>0%</u>	<u>0.00%</u>
Total Capital Requirement	\$65.9	100%	\$51.1	100%	\$53.9	100%	2.13%
Prescribed Buffers							
Stress Capital Buffer					18.9		0.75%
Stability Capital Buffer					16.0		0.64%
Countercyclical Capital Buffer Amount					<u>0.0</u>		<u>0.00%</u>
Prescribed Capital Conservation Buffer Amount (PCCBA)					35.0		1.39%
Total Capital Requirement and PCCBA	\$65.9		\$51.1		\$88.9		3.52%
Adjusted Total Assets	\$2,262.4		\$2,524.6		\$2,524.6		
Total Capital Requirement and PCCBA/ Adjusted Total Assets	2.91%		2.02%		3.52%		



# FANNIE MAE RBC REQUIREMENTS BY ASSET CATEGORY

Fannie Mae	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	\$ in billions	% of Total	\$ in billions	% of Total	\$ in billions	% of Total	Adjusted Total
Single-family excluding Going-Concern Buffer	\$58.6	51%	\$41.6	48%			
Single-family Going-Concern Buffer	<u>21.5</u>	<u>19%</u>	<u>22.4</u>	<u>26%</u>			
Single-family	80.1	70%	64.0	75%	\$66.5	82%	1.88%
Multifamily excluding Going-Concern Buffer	7.4	6%	9.1	11%			
Multifamily Going-Concern Buffer	<u>2.0</u>	<u>2%</u>	<u>2.5</u>	<u>3%</u>			
Multifamily	9.4	8%	11.6	13%	10.7	13%	0.30%
Deferred Tax Assets	19.9	17%	5.6	6%	0.0	0%	0.00%
Other Assets excluding Going-Concern Buffer*	5.1	4%	3.9	5%			
Other Assets Going-Concern Buffer	<u>0.5</u>	<u>0%</u>	<u>0.8</u>	<u>1%</u>			
Other Assets	<u>5.6</u>	<u>5%</u>	<u>4.7</u>	<u>5%</u>	<u>4.0</u>	<u>5%</u>	<u>0.11%</u>
Total Capital Requirement	\$115.0	100%	\$85.8	100%	\$81.2	100%	2.29%
Prescribed Buffers							
Stress Capital Buffer					26.6		0.75%
Stability Capital Buffer					37.3		1.05%
Countercyclical Capital Buffer Amount					<u>0.0</u>		<u>0.00%</u>
Prescribed Capital Conservation Buffer Amount (PCCBA)					\$63.9		1.80%
Total Capital Requirement and PCCBA	\$115.0		\$85.8		\$145.1		4.09%
Adjusted Total Assets	\$3,357.5		\$3,547.4		\$3,547.4		
Total Capital Requirement and Buffers/ Adjusted Total Assets	3.43%		2.42%		4.09%		

\*Includes PLS, CMBS, Other.



# FREDDIE MAC RBC REQUIREMENTS BY ASSET CATEGORY

Freddie Mac	2018 Proposal As of				Proposed Rule As of		
	9/30/2017		9/30/2019		9/30/2019		
	\$ in billions	% of Total	\$ in billions	% of Total	\$ in billions	% of Total	% of Adjusted Total Assets
Single-family excluding Going-Concern Buffer	\$37.0	56%	\$26.2	51%			
Single-family Going-Concern Buffer	<u>13.4</u>	<u>20%</u>	<u>14.5</u>	<u>28%</u>			
Single-family	50.4	77%	40.7	80%	\$44.5	83%	1.76%
Multifamily excluding Going-Concern Buffer	2.8	4%	3.1	6%			
Multifamily Going-Concern Buffer	<u>1.7</u>	<u>3%</u>	<u>2.2</u>	<u>4%</u>			
Multifamily	4.5	7%	5.3	10%	7.1	13%	0.28%
Deferred Tax Assets	6.8	10%	1.8	4%	<u>0.0</u>	0%	0.00%
Other Assets excluding Going-Concern Buffer*	3.3	5%	2.2	4%			
Other Assets Going-Concern Buffer	<u>0.8</u>	<u>1%</u>	<u>1.0</u>	<u>2%</u>			
Other Assets	<u>4.1</u>	<u>6%</u>	<u>3.3</u>	<u>6%</u>	<u>2.3</u>	<u>4%</u>	<u>0.09%</u>
Total Capital Requirement	\$65.9	100%	\$51.1	100%	\$53.9	100%	2.13%
Prescribed Buffers							
Stress Capital Buffer					18.9		0.75%
Stability Capital Buffer					16.0		0.64%
Countercyclical Capital Buffer Amount					<u>0.0</u>		<u>0.00%</u>
Prescribed Capital Conservation Buffer Amount (PCCBA)					\$35.0		1.39%
Total Capital Requirement and PCCBA	\$65.9		\$51.1		\$88.9		3.52%
Adjusted Total Assets	\$2,262.4		\$2,524.6		\$2,524.6		
Total Capital Requirement and Buffers/ Adjusted Total Assets	2.91%		2.02%		3.52%		
*Includes PLS, CMBS, Other.							

# APPENDIX: RISK-BASED CAPITAL



# CREDIT RISK CAPITAL

## Advanced Approach

- The advanced approach for credit risk-weighted assets relies on the Enterprises' internal models.

## Standardized Approach

- Credit risk-weighted assets for single-family mortgage exposures and multifamily mortgage exposures would be determined using lookup grids and multipliers that assign an exposure-specific risk weight based on the risk characteristics of the mortgage exposure.
- For single-family mortgage exposures, the MTMLTV would be subject to a countercyclical adjustment to the extent that national house prices are 5 percent greater or less than an inflation-adjusted long-term trend.
- Base grids** determine risk weights for “baseline” exposures.
- Risk multipliers** adjust the risk weights to reflect individual risk characteristics of exposures that differ from those of baseline exposures.
- Credit enhancement multipliers** decrease risk weights on exposures with loan-level credit enhancement. Counterparty haircuts reduce the benefit from credit enhancements to reflect counterparty credit risk.
- The adjusted risk weight would be subject to a floor of 15 percent.

# CREDIT RISK CAPITAL – KEY CHANGES

- ❑ Preserves grids and multipliers as the foundation of credit risk capital.
  - Combines select base grids and certain multipliers.
- ❑ Introduces a prudential exposure-level capital floor (15% risk weight) for multifamily credit risk.
- ❑ Preserves significant risk transfer benefit for CRT but introduces a capital floor on CRT tranches (10% risk weight) and a capital relief haircut (10%).
  - Seeks feedback on an option for CRT based on the Basel Simplified Supervisory Formula Approach (SSFA)
- ❑ Modestly reduces mortgage insurance counterparty haircuts.
- ❑ Adds capital requirements for Enterprise cross-holdings and guarantees of MBS (20% risk weight).
- ❑ Adds counterparty credit risk capital for derivatives.
- ❑ Aligns capital requirements for non-mortgage assets with U.S. bank capital requirements.

# MARKET RISK & OPERATIONAL RISK

## ☐ Market Risk

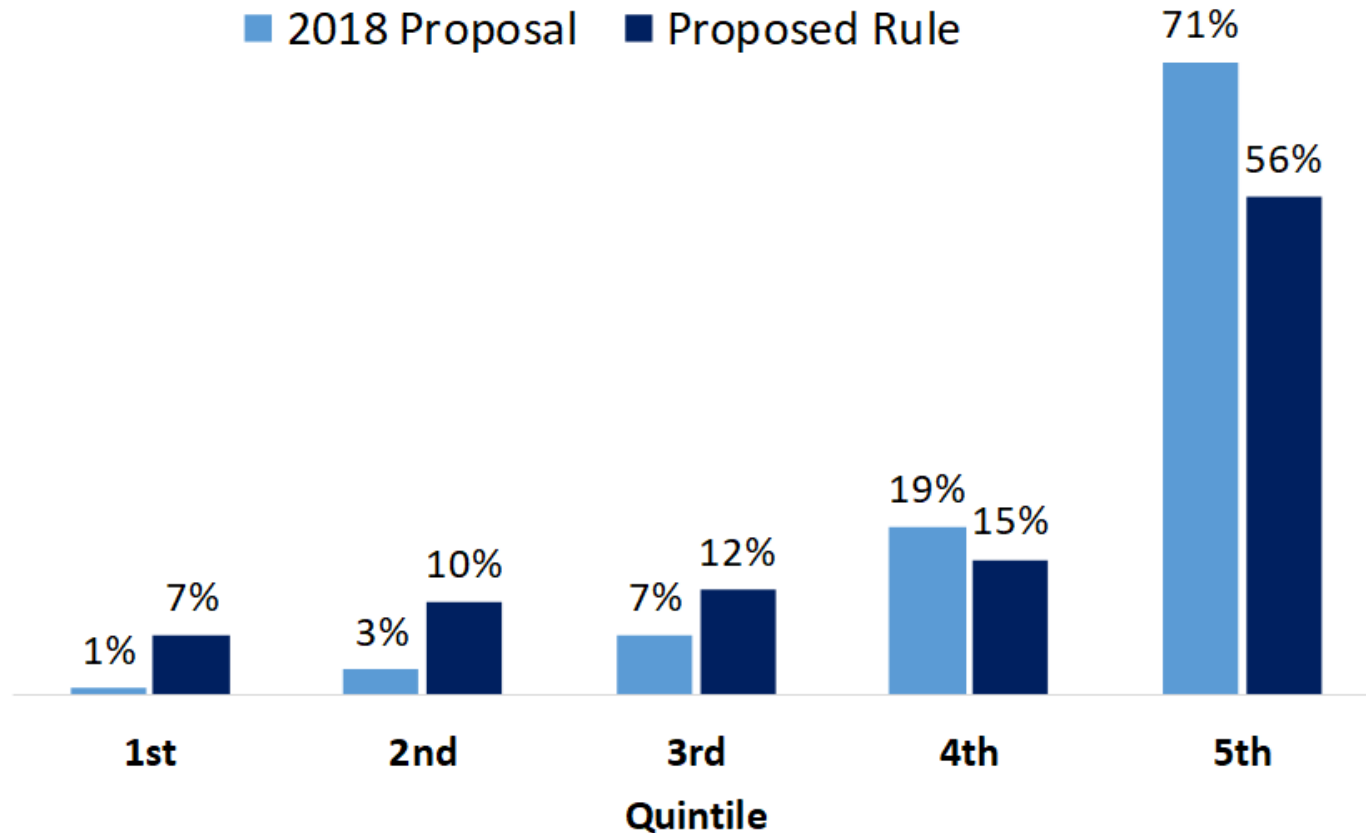
- An Enterprise would determine its market risk weighted assets for spread risk. Market risks other than spread risk would not be assigned a market risk capital requirement.
- Standardized Approach: Uses FHFA-specified formulas for some exposures and Enterprise models for other exposures.
- Advanced Approach: An Enterprise would separately determine its market risk-weighted assets using internal models for all exposures.

## ☐ Operational risk

- Uses the U.S. banking framework's advanced measurement approach, subject to a floor equal to 15 basis points of the Enterprises' adjusted total assets.

# DISTRIBUTION OF CREDIT RISK CAPITAL

## Share of Single-family Net Credit Risk Capital by Risk-weight Quintile



# SINGLE-FAMILY CREDIT RISK EXAMPLE

Consider a performing loan with an MTMLTV of 90 percent, a credit score of 730, a loan purpose of purchase, an occupancy type of owner occupied, property type of condominium, DTI of 42 percent, and mortgage insurance coverage of 25 percent.

## Base Risk Weight Grid for Performing Single-family Mortgage Exposures

Credit Score	Adjusted MTMLTV						
	> 30%, <= 60%	> 60%, <= 70%	> 70%, <= 75%	> 75%, <= 80%	> 80%, <= 85%	> 85%, <= 90%	> 90%, <= 95%
≥680, < 700	9%	26%	38%	55%	67%	88%	109%
≥700, < 720	8%	22%	33%	47%	57%	75%	94%
≥720, < 740	6%	19%	28%	41%	50%	66%	84%
≥740, < 760	5%	16%	23%	33%	40%	54%	69%
≥760, < 780	4%	13%	19%	27%	32%	43%	56%
≥ 780	3%	10%	14%	21%	25%	33%	43%

## Select Single-family Risk Multipliers

Loan Purpose	Purchase	1.0
	Cashout Refinance	1.4
	Rate/Term Refinance	1.3
Occupancy Type	Owner Occupied or Second Home	1.0
	Investment	1.2
Property Type	1-Unit	1.0
	2-4 Unit	1.4
	Condominium	1.1
	Manufactured Home	1.3
DTI	DTI ≤ 25%	0.8
	25% < DTI ≤ 40%	1.0
	DTI > 40%	1.2
Product Type	FRM30	1.0
	ARM1/1	1.7
	FRM15	0.3
	FRM20	0.6
Credit Enhancement	OLTV: (80%, 85%], Cov. % = 12%	0.867
	OLTV: (85%, 90%], Cov. % = 25%	0.551
Multipliers by Guide for 30 Year Amortizing	OLTV: (90%, 95%], Cov. % = 30%	0.412
	OLTV: (95%, 97%], Cov. % = 35%	0.322
	OLTV: >97%, Cov. % = 35%	0.272

# SINGLE-FAMILY CREDIT RISK EXAMPLE

The product of (1) the base risk weight, (2) the risk multipliers, and (3) the credit enhancement multipliers after adjusting for counterparty haircuts yields (4) the adjusted risk weight.

<b>(1) Base Risk Weight</b>		<b>(3) Credit Enhancement Multiplier and Counterparty Haircut</b>	
		Credit Enhancement Multiplier	0.551
		Counterparty Haircut	14.2%
		Adj. Credit Enhancement Multiplier =	
		$1 - (1 - 0.551) \times (1 - 0.142) =$	0.615
<b>(2) Select Risk Multipliers</b>			
Loan Purpose	1.0		
Occupancy Type	1.0		
Property Type	1.1		
DTI	1.2		
Product Type	1.0		

**(4) Adjusted Risk Weight** =  $(66\%) \times (1.0 \times 1.0 \times 1.1 \times 1.2 \times 1.0) \times (0.615) = 54\%$



## CONTACT US

Submit Written Comments to:

<https://www.fhfa.gov/SupervisionRegulation/Rules/Pages/Enterprise-Regulatory-Capital-Framework.aspx>

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