

August 30, 2020

Alfred N. Pollard General Counsel Federal Housing Finance Agency Eighth Floor 400 Seventh Street, SW, Washington, DC 20219

Re: Enterprise Regulatory Capital Framework: RIN-2590-AA95

Dear Mr. Pollard:

# Introduction

Portum Trust appreciates the opportunity to share our comments on the Federal Housing Finance Agency's ("FHFA") Enterprise Regulatory Capital Framework<sup>1</sup>. Portum Trust is a secondary residential mortgage market investment fund that specializes in credit risk and predictive analytics. Our expertise facilitates the deployment of private capital to support the single-family residential mortgage market. We draw on a broad base of mortgage finance expertise and incorporate thoughtful analytics and data in providing our comments.

The proposed capital rule is a significant policy amendment intended to enable the GSEs to exit from conservatorship with a strong financial position while ensuring their performance in times of economic stress. As such, a regulatory capital framework should facilitate a stable, well-functioning, and broadly accessible housing finance system while limiting U.S. taxpayer risk. This delicate balance is essential for the GSEs' successful exit from conservatorship.

We appreciate the work done by the FHFA to address areas highlighted in response to the 2018 proposed capital framework; for example, the pro-cyclicality inherent in the 2018 proposal<sup>2</sup>. Through implementation of mark-to-market loan-to-value ("LTV") ratios and a countercyclical capital buffer, the FHFA has made meaningful and durable changes to the capital regime.

<sup>&</sup>lt;sup>1</sup> Federal Housing Finance Agency, "Enterprise Regulatory Capital Framework," June 30, 2020, 85 FR 39274. Available at: <a href="https://www.federalregister.gov/documents/2020/06/30/2020-11279/enterprise-regulatory-capital-framework">https://www.federalregister.gov/documents/2020/06/30/2020-11279/enterprise-regulatory-capital-framework</a>.

<sup>&</sup>lt;sup>2</sup> Federal Housing Finance Agency, "Enterprise Capital Requirements," July 17, 2018, 83 FR 33312. Available at: <a href="https://www.federalregister.gov/documents/2018/07/17/2018-14255/enterprise-capital-requirements">https://www.federalregister.gov/documents/2018/07/17/2018-14255/enterprise-capital-requirements</a>.

However, other well-intended capital rule modifications may not create optimal outcomes when considering housing market affordability and formal conservatorship exit. Our recommendations are intended to encourage modest changes to the capital framework including: a) policy coordination with FHA, b) a slightly modified credit risk transfer (CRT) program that is a key to encourage a variety of private capital to participate in the housing finance system, and c) capital requirements that support FHFA's mission of maintaining safety and soundness of the GSEs. We focus our commentary and recommend changes to three key features through a thoughtful, fact-based and data-driven analysis:

- 1. The proposed loan level risk weights:
- 2. The proposed treatment of credit risk transfers; and
- 3. The proposed backstop leverage ratio requirements.

# **Executive Summary**

Portum Trust has focused on areas of the FHFA's proposed capital rule that we believe are most significant. These are the loan level risk weights, the capital rule for CRT transactions and the proposed backstop leverage ratio.

- 1. Loan Level Risk Weights Overall the loan level risk weights appear reasonable and similar to those proposed in the June 2018 capital rule except for the removal of adjustments for loans with more than a single borrower and loan amounts which potentially result in cross subsidization from relatively low-risk to high-risk borrowers. Our main observation is, absent coordination with FHA housing finance policy, the risk weights have the potential to shift high LTV mortgage loans from GSE and PMI execution to the FHA. Our analysis indicates that, all else equal, the GSEs and PMIs could lose as much as 14% of their existing high LTV business. Absent FHFA and FHA policy coordination, this will result in higher cost to borrowers and a reduction in private capital supporting the housing finance system. Additionally, our analysis indicates that the proposed capital rule will result in a G-fee increase of approximately 23 bps³ in the high LTV (>80%) segment, where the FHA competes.
- <u>Credit Risk Transfer transactions</u> The proposed capital framework for CRT, while complex and nuanced, is highly thoughtful and comprehensive. However, the proposal results in a significant reduction in capital credit for use of CRT from the 2018 proposal which disincentivizes their ongoing use. This change will make the raising of equity

<sup>&</sup>lt;sup>3</sup> The analysis is based on several assumptions including; private mortgage insurance premium rates (we use an industry-wide rate card in place as of year-end 2017), Fannie Mae loan level price adjustments (LLPAs) as of May 2020, FHA mortgage insurance rates as of May 2020, FHA and conforming mortgage loan rates and points/fees as of July 2020, an after-tax target rate of return-on-capital for the GSEs of 9% that is constant across all FICO/LTV combinations and an annual payment of 10 bps to a government insurance facility that backstops MBS issued by the GSEs post-conservatorship. There are several additional assumptions underlying our analysis (e.g., the distribution of GSE purchases across high LTV loans – we use Fannie Mae 2019 acquisitions as a proxy), please contact us for further details.

capital by the GSEs more challenging and more costly. Substantial capital reduction from CRT increases GSE credit risk retention, drives greater systemic risk, and results in less diversification of capital sources. Currently the large network of diverse insurance CRT participants and capital debt market investors provides enhanced housing system capital support. Such private capital support is meaningful and significant in the event of a prolonged economic housing downturn. The proposed CRT capital framework simply requires one or two key adjustments to ensure it is practical, effective, and enduring. Specifically, the 10% risk weight floor assigned to the senior retained tranche of credit risk (i.e., the AH tranche in the CRT example provided in the proposed rule) seems high based on empirical analysis. Also, the 10% floor appears redundant when considering the proposed enhanced capital buffers. Our analysis indicates that a maximum risk weight floor of 3% for the senior retained tranche is equally effective and supported by historical loss levels as seen through the Great Recession. A 3% risk weight floor for the AH tranche supports CRT issuance under most scenarios, including the Great Recession, and strikes an effective and sustainable balance between equity and CRT capital.

3. <u>Backstop Leverage Ratio</u> - A backstop leverage ratio should balance the objective of stabilizing the GSEs with the goal of delivering affordable mortgage rates to homeowners and returns-on-equity to investors. When comparing the total backstop leverage ratio against capital levels prescribed by the loan level risk-based capital grids, the backstop leverage ratio was binding 25% of the time in our analysis of high LTV mortgage loans. The ratio was binding for more risk remote loans (i.e., higher credit scores). This may motivate the GSEs to focus on higher risk loans as they seek higher returns on capital. When the capital charge via the prescribed risk grids is taken into consideration against a backdrop of mortgage loan originations for more risk-remote loans, a 2% backstop leverage ratio is reasonable, supported by historical results and motivates a more appropriate balance between equity and CRT capital. This is borne out by comparing a 2% ratio to the GSE loss experience for risk-remote loans (i.e., 720+ credit score and LTV less than 85%), which is less than 2% for the worst performing vintage year, 2006.

### **Comments and Observations**

# I. Loan Level Risk Weights

Under the proposed capital rule we estimate that approximately 14%<sup>4</sup> of high LTV mortgages (i.e., mortgage loans with LTVs in excess of 80%) currently financed with the GSEs and private mortgage insurance (PMI) have the potential to shift to the Federal Housing Administration (FHA). The motivation for the transfer is lower monthly borrower payments. Absent policy coordination between the FHFA and FHA, there exists the potential for significant movement of

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<sup>&</sup>lt;sup>4</sup> Please see footnote number 3 for assumptions that underly our analysis.

mortgage credit risk from private capital to U.S. taxpayers and the government-backed housing finance system.

We compared monthly borrower payments of principal, interest, mortgage insurance premium and up-front points/fees for high LTV mortgage loans between the FHA and the GSEs with PMI. We examined monthly payments under the current program and under the proposed capital rule. Following, in Exhibit 1, we provide two examples of monthly payment comparisons for a borrower with a 729 credit score and 94 LTV, and a borrower with a 639 credit score and 97.1 LTV loan.

Exhibit 1

	FHA	GSE	FHA	GSE
Credit Score	639	639	729	729
LTV	97.1	97.1	94	94
FHA UFMIP or GSE LLPA	1.75%	3.500%	1.750%	0.500%
FHA MIP or PMI	0.85%	1.860%	0.800%	0.660%
Loan base rate	3.31%	3.17%	3.31%	3.17%
Monthly payment with MIP or PMI	\$1,248	\$1,509	\$1,238	\$1,186
Req'd G-fee increase with proposed plan		0.2843%		0.1564%
CAT fund payment		0.1000%		0.1000%
New mortgage rate after increased G-fee		3.554%		3.426%
New monthly payment + PMI		\$ 1,561		\$ 1,220
Monthly payment difference - current		(\$261)		\$52
Monthly payment difference - proposed		(\$313)		\$18

The example in Exhibit 1 shows that under the current system, the 729/94 borrower is better off with a GSE/PMI loan and saves \$52 per month (\$624 annually and approximately \$5,000 over the life of an average loan duration of 8 years) versus an FHA loan. Under the proposed capital plan, the savings falls to \$18 per month (\$216 per year and \$1,728 over life-of-loan). On the other hand, the 639/97.1 borrower is better served with an FHA loan and saves \$216 and \$313 per month under the current system and proposed capital rule, respectively.

We performed the monthly payment analysis using the proposed capital rule across a range of LTV and credit score combinations. Exhibit 2 below, displays the increased cost to borrowers over an average loan life of 8 years for multiple credit score and LTV combinations. For example, the 729/94 borrower will pay an additional \$3,264 over life of loan under the proposed capital rule. The sole driver of the increase is higher guaranty fees (G-fees) required to support an after-tax return on capital of 9%<sup>5</sup>.

<sup>&</sup>lt;sup>5</sup> We have made no provision for a potentially higher cost of capital that may result from less favorable treatment of credit risk transfer transactions. Specifically, reduced credit for CRT transactions is likely to result in a higher cost of capital for the GSEs and, ultimately, higher monthly payments for borrowers.

Exhibit 2

[	LTV @ Origination											
Credit												
Score		81		84		89	89 94		96.5		97.1	
639	\$	2,016	\$	2,016	\$	-	\$	-	\$	-	\$	-
659	\$	2,784	\$	2,784	\$	-	\$	-	\$	-	\$	-
669	\$	4,512	\$	4,512	\$	-	\$	-	\$	-	\$	-
679	\$	4,512	\$	4,512	\$	-	\$	-	\$	-	\$	-
689	\$	4,224	\$	4,224	\$	3,264	\$	-	\$	-	\$	-
699	\$	4,224	\$	4,224	\$	3,264	\$	-	\$	-	\$	-
709	\$	3,744	\$	3,744	\$	3,552	\$	1,344	\$	-	\$	-
719	\$	3,744	\$	3,744	\$	3,552	\$	1,344	\$	-	\$	-
729	\$	3,360	\$	3,360	\$	3,168	\$	3,264	\$	576	\$	576
739	\$	3,360	\$	3,360	\$	3,168	\$	3,264	\$	576	\$	576
749	\$	2,784	\$	2,784	\$	2,688	\$	2,784	\$	2,784	\$	2,592
759	\$	2,784	\$	2,784	\$	2,688	\$	2,784	\$	2,784	\$	2,592
769	\$	2,304	\$	2,304	\$	2,304	\$	2,400	\$	2,400	\$	2,208
779	\$	2,304	\$	2,304	\$	2,304	\$	2,400	\$	2,400	\$	2,208
789	\$	2,016	\$	2,016	\$	2,016	\$	2,016	\$	2,016	\$	2,016

An important and related item to note is the amount, or level, of GSE high LTV loan purchases where the backstop leverage ratio of 4% is binding. Our analysis incorporates those scenarios where the leverage is binding and, in effect, "overrides" the loan level risk weights. Using Fannie Mae's 2019 high LTV loan acquisition profile, we estimate that approximately 25% of high LTV loan purchases will be subject to the 4% leverage ratio versus the level of risk weight provided in the proposed capital plan's risk grids. The number varies between Fannie and Freddie given the difference in the "stability" component (i.e., Fannie @ 105 bps versus Freddie @ 64 bps) of the Prescribed Capital Conservation Buffer (PCCB). The primary driver of the leverage ratio requirement vis-à-vis the risk grids is that it will, all else equal, incentivize the GSEs to focus less on the purchase of the least risky mortgage loans and concentrate on loans with higher levels of inherent risk. Said differently, private capital will price the least risky loans at a lower price and leave the GSEs with a higher concentration of, relatively, more risky loans.

### II. Credit Risk Transfers

Our analysis indicates that the proposed capital rule will make the issuance of CRT transactions uneconomical (i.e., exceeding cost of equity capital) at least 75% of the time based on historical CRT spread levels. Thus, CRT transactions will all but cease. This outcome will result in a greater concentration of mortgage credit risk with the GSEs, and a higher level of systemic risk for the housing finance system. More importantly, this will make the raising of critical equity capital by the GSEs more challenging and more costly. Our analysis of CRT transactions is independent of

the proposed backstop leverage ratio requirements and, when considered, will further compound these issues.

Since 2013, CRT transactions have proven to be an effective method of engaging private capital to underwrite mortgage credit risk. The level, diversity and resiliency of capital supporting the GSEs has grown to include the expansion of participation by private mortgage insurers, the inclusion of highly rated, multi-line reinsurers and capital debt market investors. The expanded participation of mortgage insurers and the inclusion of multi-line reinsurers in CRT transactions is particularly important. Together they provide a significant and stable source of institutional based equity capital with a long-term commitment to underwrite mortgage credit risk. Importantly, mortgage insurers and reinsurers are not subject to mark-to-market accounting or margin calls that can, and do, disrupt the supply of private capital during times of economic stress from capital debt market investors.

We commend the FHFA for their work to further refine counterparty financial strength ratings and to further segregate those counterparties with a concentration in mortgage credit risk versus diversified counterparties. We encourage the FHFA to provide additional transparency on those attributes that distinguish a counterparty with a higher rating. In saying this, we recognize that assessing counterparties is a complex and involved task. We do not expect the FHFA, or the GSEs, to provide prescriptive guidance as to what distinguishes the strength of one counterparty from another. Rather, we seek guidance as to those primary attributes that are supportive of a higher counterparty rating. By providing such guidance, the industry will aspire to higher counterparty ratings and thereby further stabilize the U.S. housing finance system.

CRT transactions reduce the exposure of U.S. taxpayers to the uncertainties of the housing finance system and provide the GSEs with important and useful information on the inherent cost of extending mortgage credit.

Within the proposed capital framework, the FHFA puts forth a comprehensive and thoughtful analysis of CRT transactions that considers and accounts for the risks associated with this important source of capital. Though, the capital framework is sound and resilient, we recommend one adjustment regarding the risk weight floor calibration for the senior tranche of the retained risk layer. As explained below, our recommendation is based on historical loss experience through the Great Recession.

The proposed capital rule includes a valuable illustration of a CRT transaction and we use the example for our analysis of the proposed CRT capital framework. As noted in the example, a portfolio of \$1 billion of single-family residential mortgage loans has a risk weighted asset (RWA) value of \$343.8 million. At an 8% target capital level, the portfolio of loans requires \$27.5 million (8% x \$343.8 million) of capital. The CRT transaction in the example attaches at 0.50%, detaches at 4.5%, and the GSE retains a 5% vertical slice within the risk transfer layer. This results in \$38 million of CRT limit transferred to private capital along with a reduction in RWA of \$130.36 million for a post-CRT RWA of \$213.4 million. Again, at an 8% target capital

level this results in \$10.4 million (8% x \$130.36 million) of capital savings. These calculations and figures are summarized in Exhibit 3.

#### Exhibit 3

Principal balance of mortgage loans: \$ 1,000,000,000 RWA for underlying mortgage loans: \$ 343,800,000

Target capital level: 8.00%

Pre-CRT Capital Requirement: \$ 27,504,000

Attachment point of CRT tranche: 0.50%

Detachment point of CRT tranche: 4.50%

CRT layer: 4.00%

CRT amount: \$ 40,000,000

Amount of CRT layer retained: 5.00%

CRT issuance amount: \$ 38,000,000

Reduction in RWA: \$ 130,359,000

RWA after CRT Transaction: \$ 213,441,000

Capital savings: \$ 10,428,720

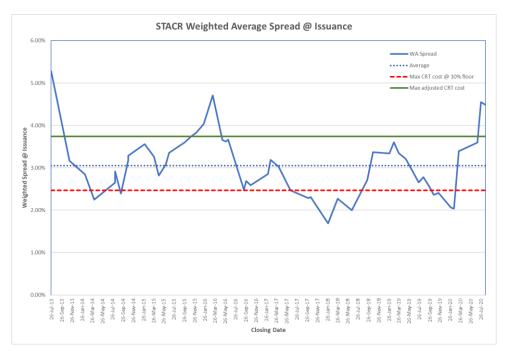
The capital relief of \$10.4 million provided by CRT issuance of \$38 million suggests that the cost of CRT capital can be no more than 27% (\$10.4/\$38) of the cost of equity capital<sup>6</sup>. Said another way, for every \$3.64 of CRT capital raised by the GSE there is a saving of \$1 of equity capital<sup>7</sup>. If we assume a 9% post-tax return on capital for the GSEs, then the maximum, economically viable, CRT issuance spread is 2.47% ( $27\% \times 9\%$ ) per annum.

Chart 1 plots the cost (i.e., issuance spread) of Freddie Mac STACR transactions beginning July 2013 through the most recent transactions issued in July 2020. The red-dash horizontal line is the maximum issuance spread that results in economically neutral execution under the proposed capital rule that uses the 10% risk weight floor for the AH tranche. The blue dotted horizontal line is the historical average issuance spread over the life of Freddie Mac STACR transactions. The green horizontal line is the maximum, economically viable, issuance spread if the risk weight floor for the AH tranche is changed from 10% to 3%.

<sup>&</sup>lt;sup>6</sup> Our assumption is that, pre-CRT, equity is the primary source of capital for the GSEs.

<sup>&</sup>lt;sup>7</sup> This analysis assumes no CRT transaction expense, when considered will further reduce the efficiency of CRT capital relative to equity capital.





Further analysis of the maximum economically viable issuance spread, under the proposed capital rule and relative to historical issuance spreads indicates that the GSEs would have issued CRT only 25% of the time, assuming zero transaction expense<sup>8</sup>. By issuing CRT transactions only 1-out-of-4 times will drive a greater concentration of credit risk at the GSEs and further expose U.S. taxpayers to housing finance credit losses.

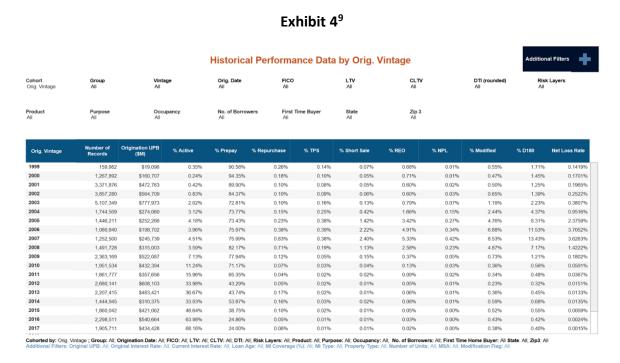
We believe that the CRT capital framework put forth under the proposed capital rule is sound and that it is simply a matter of calibration of one or two elements of the framework. In particular, the risk weight floor of 10% for the retained senior tranche (i.e., the AH tranche in the example provided) is the key issue.

We looked at the level of the risk weight floor required for the AH tranche that would result in the GSEs issuing CRT under the majority of scenarios based on historical price levels and then evaluated whether the resulting risk weight floor that follows is prudent and reasonable.

Thus, adjusting the risk weight floor to 3%, from 10%, would economically justify GSEs issuing CRT approximately 85% of the time versus 25% of the time at a 10% floor. The 3% floor still requires the GSEs to hold a prudent level of capital against the senior (i.e., AH) tranche. Further, given the historical loss experience of the GSEs through the Great Recession, the 3% risk weight floor for losses in excess of 4.5% (the detachment of the illustrative CRT transaction)

<sup>&</sup>lt;sup>8</sup> Our analysis is, again, independent of the proposed backstop leverage ratio of 4%, the result of which will further limit the issuance of CRT by the GSEs.

is a conservative measure of risk. To this end, Exhibit 4 presents historical losses for Fannie Mae by vintage year.



The 2006 vintage year has the highest realized loss of 3.7%, well below the CRT detachment of 4.5%. Thus, we believe a 3% risk weight floor on the retained layer above the CRT detachment strikes a reasonable and prudent balance between the use of CRT and equity capital at the GSEs. A higher risk weight floor of 10% results in significantly lower use of CRT capital, an over reliance on equity capital, increased cost to mortgage loan borrowers and, ultimately, a reduction in available credit through the U.S. housing finance system.

Finally, the proposed capital rule makes the argument, and provides adjustments for, the lack of fungibility of CRT capital. While we agree there is some merit to this point, equity capital is exposed to other demands (e.g., unsecured creditors, professional services, senior unsecured debt, etc.) that reduce its effectiveness, while CRT capital is dedicated exclusively to the payment of mortgage loan credit losses.

# III. Leverage Ratio

A backstop leverage ratio should balance the objective of stabilizing the GSEs with the goal of delivering affordable mortgage rates to homeowners and returns-on-equity to investors. The practical day-to-day application of a backstop leverage ratio should not incentivize risk-seeking behavior by the GSEs.

<sup>&</sup>lt;sup>9</sup> Exhibit 4 and Exhibit 6, are from Fannie Mae's Data Dynamics, Historical Loan Credit Performance Data, Single-Family Loan Performance Data Dashboard, Historical Performance.

The Portum Trust team has reviewed the backstop leverage ratio against the backdrop of the loan level risk-based capital grids. While our analysis has focused on high LTV mortgage loans, amongst this cohort the leverage ratio is binding approximately 25% of the time<sup>10</sup>.

Looking further into the capital charge via the risk-based grids versus the 4% backstop leverage ratio, we note the leverage ratio is binding, among high LTV loans, for the most risk remote loans (i.e. higher credit score). Exhibit 5 illustrates those credit score/LTV combinations where the leverage ratio is binding, in red, against credit score/LTV combinations where the risk grids impose a capital charge that is higher than 4%, in green<sup>11</sup>.

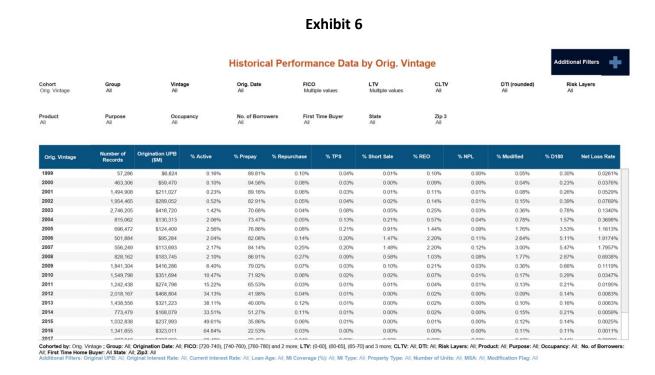
			Exhibit	t 5							
		LTV Ratio									
Credit											
Score	81	84	89	94	96.5	97.1					
639	0	0	0	0	0	0					
659	0	0	0	0	0	0					
669	0	0	0	0	0	0					
679	0	0	0	0	0	0					
689	0	0	0	0	0	0					
699	0	0	0	0	0	0					
709	0	0	0	0	0	0					
719	0	0	0	0	0	0					
729	0	0	0	0	0	0					
739	0	0	0	0	0	0					
749	0	0	0	0	0	0					
759	0	0	0	0	0	0					
769	0	0	1	0	0	1					
779	0	0	1	0	0	1					
789	1	1	1	1	1	1					

Given the risk-based loan level charges and loss experience of the GSEs through the Great Recession, we ask, what is a reasonable and prudent backstop leverage ratio? If we look at Exhibit 4, which is across all loan types (i.e., credit score, LTV, DTI, occupancy status, etc.) the 4% backstop number appears reasonable given the loss levels of 3.7% and 3.6% for vintage years 2006 and 2007, respectively. However, if we consider the capital charge imposed by the loan level risk-based grids, we note that in the majority, at least among high LTV loans, the risk

<sup>&</sup>lt;sup>10</sup> The 25% number is 22% for Fannie Mae and 27% for Freddie Mac. The difference between the two being driven by the Stability charge that is part of the PCCB. For Fannie Mae this is 105 bps and for Freddie Mac it is 64 bps. Further, the estimates are based on the distribution of Fannie Mae loan acquisitions for the 2019 vintage year.

<sup>11</sup> Results are for Freddie Mac, results for Fannie Mae differ slightly.

grid is binding with a capital charge that exceeds 4% capital. It is only for the most risk remote loans where the 4% backstop ratio comes into play. Thus, if we filter the GSE loss experience for risk-remote loans (i.e., 720+ credit score and LTV less than 85%), the realized losses, through the Great Recession, is 1.9% and 1.8%% for the worst performing vintage years, 2006 and 2007, respectively. These results are provided in Exhibit 6.



When the capital charge via the risk grids are taken into consideration against a backdrop of mortgage loan originations for more risk remote loans, a 2% Backstop Leverage Ratio is reasonable and prudent, promotes the on-going issuance of CRT transactions and incentives the GSEs to strike an appropriate balance between equity and CRT capital.

#### Conclusion

We support an Enterprise Regulatory Capital Framework that is reliant on, and makes extensive use of, private capital. The use of private capital to support the housing finance system has multiple benefits including a reduction of U.S. taxpayer exposure to credit losses in times of economic stress, mortgage credit risk price discovery that is useful for capital planning and policy making purposes, and a more stable and resilient secondary mortgage market. Our recommendations are supported by detailed data-driven analytics. We are happy to share with the FHFA the detailed analysis behind our recommendations. We encourage the FHFA to make what we believe are reasonable changes to the proposed regulatory capital framework. By coordinating housing finance policy objectives with the FHA, making a single adjustment to the CRT capital framework and adjusting the Backstop Leverage Ratio, private capital in the form of both equity and CRT, will continue to support our housing finance system. Finally, the changes we recommend, support the FHFA's mission of maintaining safety and soundness of the GSEs.

Thank you for the opportunity to comment on the Proposed Capital Rule. The Portum Trust team is committed to being a valued resource and we welcome the opportunity to address any questions you may have.

Sincerely

**Andrew Rippert** 

Doug Rivenburgh

Gina Healy

Rania Nassar