Global Index Group[1] comment on FHFA's Enterprise Capital Framework

Introduction

For the GSEs to move out of conservatorship, there are several steps that must happen. One of them is the establishment of an Enterprise Capital Framework and associated rules to govern the quality and quantity of capital to be held by the GSEs. We take no position on any of the other steps required to end the conservatorship. We are focused on recommending improvements to Enterprise Capital Framework that make sense for the GSEs and the overall mortgage market whether the conservatorship is ended or not.

We share the FHFA's concern that the GSEs are currently insufficiently capitalized for the level of risk they are taking and therefore the taxpayers are still at inordinate exposure to the risks of the companies. While we agree with the goals of the FHFA in proposing the Framework, we make a series of recommendations on changes to the Framework in order to improve the ability of GSEs to achieve those goals and allow for a smoothly operating mortgage and housing finance market.

Below we show that the risk management tools of today are dramatically different from those available pre-2008 and that due to the nature of their riskiness, they actually will perform effectively in another crisis. Changing the Framework to take these tools into account appropriately significantly reduces one's assessment of the risk of the GSE's businesses. We recommend improving the treatment of fully collateralized, no counterparty risk securities for both the GSEs and banks to level the playing field and reduce risk across the mortgage markets.

We make specific recommendations for changes across a variety of issues to move the Framework towards getting a correct assessment of the risk of the GSEs' businesses, improving the safety and soundness of the GSEs as compared to today, and leveling the playing field between the banks and the GSEs. These recommendations will improve the competitiveness of the mortgage markets and make for a smoother transition to post-conservatorship should the other required steps ever be accomplished.

The net result of the recommendations will be a reduction in the risk level of the GSE businesses due to increased use of risk management tools such as Credit Risk Transfers ("CRTs"). The rules will be considerably less pro-cyclical; in fact, becoming countercyclical at times. All of this allows us to cut the current target capital level to roughly $180 billion for the GSEs rather than the current Framework's current target capital level of roughly $240 billion without reducing the safety and soundness of the GSEs. This would reduce the difficulty in raising capital and reduce the g-fees required as compared to the current proposed Framework.

[1] Global Index Group ("GIG") applies index technology from the stock and bond markets to illiquid asset classes such as housing. GIG's down up Equity Trust Securities ("duETS") are tied to indexes of illiquid assets such as the Zillow Home Value Index.

This package of recommendations, if implemented, would improve the mortgage markets as a whole, while improving the safety and soundness of the GSEs as compared to the current level of capital and risk in the GSEs. These recommendations are designed to be constructive towards the FHFA achieving its goals.

FHFA Goals

In re-proposing an Enterprise Capital Framework, the FHFA has several goals and we are going to focus our comments on the accomplishment of just four of those goals in the most efficient and effective ways. Those FHFA goals are:

1) Improve the Safety and Soundness of the Enterprises and reduce the cost to the taxpayers of the implied guarantee. Of course, more stringent capital rules will reduce the risk of needing a bailout at all as well as reducing the size of any potential future bailout.
2) Increase the amount of private capital in mortgage markets and reduce the taxpayers' inordinate exposure to the risks of the companies.
3) Reduce or reverse the procyclical funding policy of the enterprises and the broader market.

We add a goal of ours: throughout the implementation of the changes stemming from the new Enterprise Capital Framework, we envision a smoothly functioning mortgage market able to finance our housing industry.

Background: Basel III, Credit Default Swaps, Credit Risk Transfers and duETS

During the 2008-2009 financial crisis, many felt "the correlation of all assets went to 1." A big part of the reason for this belief was the behavior of Credit Default Swaps (CDS) with their counterparty risk. CDS exposure and the associated counterparty risk was one of the large contributors to the bankruptcies of AIG and Lehman Brothers and the related systemic risk. In fact, during the crisis times, with only the balance sheets of one's counterparty backing up the value of one's assets the correlations between such assets went to 1 since counterparties could not make good on their commitments. Assets with significant counterparty risk add to systemic risk.

As part of the reaction to this set of events, the Fed properly didn't like off-balance sheet deals by the banks that purported to be risk transfer, but which were really just accounting gimmicks with significant counterparty risk. Since there were no assets available fully collateralized by Treasuries, the Fed has not allowed for such securities in its regulation. For banks, this is one of the reasons why they have shied away from parts of the mortgage market; in particular the non-agency RMBS market. This weakness in banking regulation should not be mimicked in the ECF. Fixing this problem in banking regulation is a critical part of a smooth transition to a post-conservatorship world with a healthy housing finance industry.

Freddie Mac and Fannie Mae engaged in developing Credit Risk Transfers (CRTs) that were specifically designed to solve the counterparty risk problems of CDS. CRT securities (in particular CAS (Connecticut Avenue Securities) and STACR (Structured Agency Credit Risk)) are fully collateralized securities where capital is paid upfront and set aside in a trust to cover future mortgage credit losses. The capital is fully dedicated to paying maximum mortgage credit losses covered by the bonds, and the capital framework should recognize these accounts as a direct source of capital. Additional capital on top of the funds set aside in trusts, as proposed in the capital framework, results in redundant capital. The proposed framework does not recognize these trust funds as sources of capital to cover future credit losses.

In the private sector, Fully Collateralized, No Counterparty Risk Investment Funds ("FCNCRIF") were also designed to avoid the problems of CDS with a somewhat different approach from CRTs. Housing market FCNCRIF securities are used to hedge housing market risk. The Capital Framework should recognize these securities as a direct source of capital. Additional capital on top of the funds set aside in trusts results in redundant capital. The proposed framework does not recognize these trust funds as sources of capital to cover housing market risk.

Chart 1 below shows why CRTs and Fully Collateralized, No Counterparty Risk Investment Funds deserve different treatment from CDS.

Chart 1

Characteristics of CDS, CRTs, and Housing FCNCRIF

Characteristic	CDS	CRTs	Housing FCNCRIF
Positioned as hedging tools	Yes	Yes	Yes
Fully backed by Treasuries In bankruptcy remote custody	No	Yes	Yes
Eliminate counterparty risk	No	Yes	Yes

The fundamental difference between CDS and the instruments developed since the financial crisis (e.g. CRTs and Housing FCNCRIF) is the lack of counterparty risk and the full collateralization of the value of the securities by Treasuries. Basel III and existing banking regulation does not contemplate such instruments and does not provide for anything like the appropriate treatment of such instruments. To use existing banking regulation as a model will result in higher capital costs for the enterprises without improving their safety and soundness. Worded differently, using the banking model for these instruments will discourage their use which result in riskier businesses and more systemic risk.

Due to the above, we believe that the prudential risk floor is inappropriate as there actually is no credit risk in Treasuries. *We recommend that the prudential risk floor for CRTs be eliminated.* The remainder of the treatment for CRTs we would leave in place. This change will allow CRTs to continue to be economically effective tools for reducing the risk of the GSEs businesses.

Part of the reason why CRTs merit the treatment described above is that they are bonds. Housing FCNCRIF are different in several ways including that they are equities. Chart 2 below describes the differences between CRTs and Housing FCNCRIF.

Chart 2

Characteristics of CRTs and Housing FCNCRIF

Characteristic	CRTs	FCNCRIF
Type of Security	Bonds	Equities
Hedges	Credit Risk	Housing Market Risk
Tied to	Mortgage Pools	Housing Indexes
Issued by	GSEs only	Private Securities Backed by Treasuries
Possible Hedgers	GSEs only	GSEs, banks, Insurance cos., etc.
Market Priced	Yes	Yes
Increases in Value in times of stress	No	Yes
Reduce Systemic Risk	Yes	Yes
Effectiveness Risk	Small	No

Within the Enterprise Capital Framework, the capital treatment of CRTs and Housing FCNCRIF should reflect the differences between the two types of assets. In particular, certain Housing FCNCRIF securities actually increase in value during housing market stress while the capital assets in trust for CRTs maintain their value. Both of these assets do this with no counterparty risk with their values fully backed by Treasuries. Owning assets that increase in value during times of economic stress has a countercyclical impact on the business and would help reduce or eliminate the pro-cyclical nature of the businesses. *See Appendix A for our detailed*

recommendations for the Capital Framework with regards to Fully Collateralized, No Counterparty Risk Investment Funds.

Mortgage Market Needs More Risk Management Tools, Not Fewer

The development and issuance of CRTs by the enterprises has improved the safety and soundness of the enterprises and has reduced the systemic risk in the mortgage markets. Adding the capability to use Fully Collateralized, No Counterparty Risk Investment Funds to manage the risk of the enterprises' businesses would further improve the safety and soundness of the enterprises. To implement the changes above with regards to Fully Collateralized, No Counterparty Risk Investment Funds alone would give the Enterprises a large competitive advantage if nothing is done on the bank regulation side.

To encourage more private capital to move into the mortgage markets, we recommend the FHFA work with the FSOC and the Fed to enhance banking regulation by adding language to 12 CFR 217 which would provide explicit, fair treatment of Fully Collateralized, No Counterparty Risk Investment Funds.

This is a critical step in leveling the playing field between the Enterprises and the banks. This is a critical step in bringing more private capital into the mortgage market. This would allow the banks to manage the housing risk of their mortgage business without inappropriately large capital costs. This would encourage the banks to compete with the Enterprises and that competition would result in lower prices for consumers while reducing the systemic risk of the market. To ensure a smoothly operating housing finance industry, these changes to banking regulation need to be made before ending the conservatorship.

Having more risk management tools available in the housing finance market is better than fewer. For details about our specific recommendations regarding additions to 12 CFR 217, see Appendix B.

Replace the Grid and Multipliers with a Countercyclical Stress Test

The Credit Risk Capital grid and multiplier is complicated, difficult to maintain and is not a holistic approach to reducing procyclicality. Required upkeep would likely need to include quarterly updates to the grid and associated multipliers. Further, as shown in the financial crisis when 4 states incurred the majority of the problem mortgages, it would probably be necessary to shift to a state level set of grids further complicating the process. *To directly address the procyclicality of the GSEs funding, we recommend replacing the grids and multipliers with a new test to the capital framework. The new test would be Federal Home Loan Bank (FHLB)-like countercyclical stress test results + a 1% Stress Capital Buffer.* Currently, we guesstimate the GSEs would come in between 2.0% and 2.5% on the stress test results, so the constraint would be between 3.0% and 3.5% of assets.

During the financial bubble prior to the mortgage crisis (2008), Fannie Mae's countercyclical stress test results got as high as 5%. Obviously, when binding this constraint would have a countercyclical impact on funding policy. Underwriting standards would increase, and some markets would be priced such that volume would dry up. This reduces the funding of risky mortgages in a market bubble. This is precisely the objective of the FHFA.

By adding another test, we reduce "model risk." The current proposal can be thought of as one model of risk, the Market and Operational risk model plus one back-up, the leverage ratio test. Adding in another test reduce the risk of the model being wrong.

Eliminate the Stress Capital Buffer from the Risk-Weighted Assets Calculations

Since we are adding a Stress Capital Buffer in the new Countercyclical Stress Test, this buffer is redundant and can be eliminated.

Eliminate Countercyclical Capital Buffer from the Risk-Weighted Assets Calculations

The countercyclical capital buffer concept from banking relies too much on a subjective process and is not rules based. It has never been proven to be effective. By introducing the countercyclical stress test, one eliminates the need for this capital buffer. We recommend eliminating the countercyclical capital buffer.

Relax the Leverage Ratio test to 3.0%

By adding the countercyclical stress test to the Framework, we reduce the model risk of the Framework and make reducing the leverage ratio test to 3.0% prudent.

There are those who are concerned that when the leverage ratio is binding, the enterprises have no need to control market risk and will increase the riskiness of their business to maximize their profits. This would mean that when the leverage ratio test is binding, the enterprise funding policy will become pro-cyclical. This is precisely what the FHFA is trying to avoid.

By adding the countercyclical stress test and relaxing the leverage ratio test, one would lower the amount of time that the pro-cyclical leverage ratio would be binding.

Summary of Recommended Changes to Framework

We recommend the changes listed below as a way of achieving the FHFA's goals in a more capital efficient way, cutting the cost of capital for the enterprises as well as for private capital.

1) Improve the treatment of fully collateralized securities backed by Treasuries in the Market and Operational Risk calculation.
2) As part of 1) above, the prudential risk floor for CRTs should be eliminated.

3) As part of 1) above, we make a series of recommendations for FCNCRIF in the ECF in Appendix A.
4) Work with the FSOC and the Fed to add appropriate treatment of FCNCRIF into 12 CFR 217 for banks (see Appendix B for details).
5) Replace the grids and multipliers with a Countercyclical Stress Test to the ECF.
6) Eliminate the Stress Capital Buffer from the Risk Weighted Assets Calculation.
7) Eliminate the Countercyclical Capital Buffer from the Risk Weighted Assets Calculation.
8) Relax the Leverage Ratio test to 3.0%.

Please note that Recommendations 5, 6, 7 and 8 should be done together as a package. Recommendation 5 is a precursor to recommendations 6, 7 and 8.

Together these recommendations will reduce the risk of the GSE businesses, will reduce the systemic risk of the housing market, will increase the use of fully collateralized risk management tools, and will result in solid safety and soundness of the enterprises in a more capital efficient way. Together these recommendations reduce the current estimate of the amount of capital required to be held from about $240 billion to about $180 billion. The changes will dramatically increase the countercyclicality of the ECF and bring in more private capital in the mortgage markets. By adopting the recommended changes, the FHFA will ensure the safety and soundness of the enterprises as well as the smooth operation of the secondary market in mortgages in line with the enterprises' charters.

These are designed to be constructive recommendations to help the FHFA to achieve its goals. We would be happy to discuss these recommendations with FHFA staff at any time and welcome such discussion.

Appendix A
Additional Rules for the Enterprise Capital Framework for FHFA Consideration

Proposed New Definitions for Enterprise Capital Framework

Trust Securities means securities backed by assets held in a bankruptcy remote trust. Examples include Exchange Traded Funds and down up Equity Trust Securities.

Fully Collateralized, No Counterparty Risk Investment Fund means an investment fund which issues Trust Securities and invests solely in US Treasury instruments and cash.

Near Cash means Securities that can be redeemed for Treasuries or cash in one business day or less.

Create new shares means a standardized process of creating new shares of an open-ended fund such as an ETF or a duET where an authorized primary market participant provides to the fund a predetermined basket of securities and receives back shares from the fund administrator of the investment fund.

Redeeming shares means a standardized process of redeeming shares of an open-ended fund such as an ETF or a duET where an authorized primary market participant provides to the fund the predetermined number and type of shares and receives back a basket of securities or cash from the fund administrator.

duETS mean down up Equity Trust Securities. duETS can be created and redeemed in pairs of Downs and Ups. duETS are Fully Collateralized, No Counterparty Risk Investment Funds. Each duET has designated an index, measurement period and multiplier in its prospectus. duETS are equities individually, but pairs of Downs and Ups are near cash.

Down securities means equity shares of a duET that are inversely correlated with the associated index of the duET.

Up Securities means equity shares of a duET that are positively correlated with the associated index of the duET.

Measurement period of a duET means the period of time over which a duET's index return is measured for distribution of the assets in the Trust.

Multiplier of a duET means the multiple of the index return used in determining the distribution of the assets in the Trust at the end of the Measurement Period.

Proposed additional sections under Enterprise Capital Framework Risk Weighted Assets calculations

New Section - Near Cash

(a) Near Cash securities or pairs of securities will be assigned a zero percent risk weight.

New Section - Ups and Downs

(a) Up Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are assigned a 15% X multiplier risk weight.
(b) Down Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are considered hedge assets against mortgages of similar type (e.g. residential mortgage versus residential indexes). If a bank holds Downs that do not entirely hedge the real estate risk of their mortgage holdings, then the Downs plus the appropriate amount of Mortgages will be considered hedge positions and given a zero percent risk weight. Down Securities tied to an index unrelated to the real estate of existing Mortgage positions or in excess of a hedged position are given a 15% X multiplier percent risk weight.

Proposed additional sections for Enterprise Capital Framework Risk-Weighted Assets for Equity Exposures

New section: Near Cash

(a) Near Cash securities or pairs of securities will be assigned a zero percent risk weight.

New section: Ups and Downs

(a) Up Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are assigned a 15% X multiplier percent risk weight.
(b) Down Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are considered hedge assets against mortgages of similar type (e.g. residential mortgage versus residential indexes). If a bank holds Downs that do not entirely hedge the real estate risk of their mortgage holdings, then the Downs plus the appropriate amount of Mortgages will be considered hedge positions and given a zero percent risk weight. Down Securities tied to an index unrelated to the real estate of existing Mortgage positions or in excess of a hedged position are given a 15% X multiplier percent risk weight.

<u>Appendix B</u>
<u>Additional Rules for 12 CFR 217 for Fed and FHFA Consideration</u>

Proposed New Definitions for CFR Section 217.2

Trust Securities means securities backed by assets held in a bankruptcy remote trust. Examples include Exchange Traded Funds and down up Equity Trust Securities.

Fully Collateralized, No Counterparty Risk Investment Fund means an investment fund which issues Trust Securities and invests solely in US Treasury instruments and cash.

Near Cash means Securities that can be redeemed for Treasuries or cash in one business day or less.

Create new shares means a standardized process of creating new shares of an open-ended fund such as an ETF or a duET where an authorized primary market participant provides to the fund a predetermined basket of securities and receives back shares from the fund administrator of the investment fund.

Redeeming shares means a standardized process of redeeming shares of an open-ended fund such as an ETF or a duET where an authorized primary market participant provides to the fund the predetermined number and type of shares and receives back a basket of securities or cash from the fund administrator.

duETS mean down up Equity Trust Securities. duETS can be created and redeemed in pairs of Downs and Ups. duETS are Fully Collateralized, No Counterparty Risk Investment Funds. Each duET has designated an index, measurement period and multiplier in its prospectus. duETS are equities individually, but pairs of Downs and Ups are near cash.

Down securities means equity shares of a duET that are inversely correlated with the associated index of the duET.

Up Securities means equity shares of a duET that are positively correlated with the associated index of the duET.

Measurement period of a duET means the period of time over which a duET's index return is measured for distribution of the assets in the Trust.

Multiplier of a duET means the multiple of the index return used in determining the distribution of the assets in the Trust at the end of the Measurement Period.

Addition to financial institutions definition

Financial Institution means

(7) For purposes of this part, “financial institution” does not include the following entities:

(vii) Fully Collateralized, No Counterparty Risk Investment Funds.

Proposed additional sections under 12 CFR 217.51 Simple risk-weight approach

New Section 217.54 Near Cash

(b) Near Cash securities or pairs of securities will be assigned a zero percent risk weight.

New Section 217.55 Ups and Downs

(c) Up Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are assigned a 15% X multiplier risk weight.

(d) Down Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are considered hedge assets against mortgages of similar type (e.g. residential mortgage versus residential indexes). If a bank holds Downs that do not entirely hedge the real estate risk of their mortgage holdings, then the Downs plus the appropriate amount of Mortgages will be considered hedge positions and given a zero percent risk weight. Down Securities tied to an index unrelated to the real estate of existing Mortgage positions or in excess of a hedged position is given a 15% X multiplier percent risk weight.

Proposed additional sections under 12 CFR 217.151 Risk-Weighted Assets for Equity Exposures

New section: 12 CFR 217.156 Near Cash

(b) Near Cash securities or pairs of securities will be assigned a zero percent risk weight.

New section: 12 CFR 217.157 Ups and Downs

(c) Up Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are assigned a 15% X multiplier percent risk weight.

(d) Down Securities of Fully Collateralized, No Counterparty Risk Investment Funds tied to indexes of private real estate are considered hedge assets against mortgages of similar type (e.g. residential mortgage versus residential indexes). If a bank holds Downs that do not entirely hedge the real estate risk of their mortgage holdings, then the Downs plus the appropriate amount of Mortgages will be considered hedge positions and given a zero percent risk weight. Down Securities tied to an index unrelated to the real estate of existing Mortgage positions or in excess of a hedged position is given a 15% X multiplier percent risk weight.

Proposed changes to 12 CFR 249.20 (b)

12 CFR 249.20 (b) *Level 2A liquid assets.* An asset or a pair of assets is a level 2A liquid asset if the asset is liquid and readily marketable or is readily redeemable into such assets and is one of the following types of assets:

(1) A pair of securities redeemable into securities issued by, or unconditionally guaranteed as the timely payment of principal and interest by the U.S. Department of Treasury; or
(2) *the old (1) becomes the new (2)*
(3) *the old (2) becomes the new (3)*