

Alternative Structures for Investment in Credit and Operations in MBS Securitization

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Securitization as a vehicle for mortgage finance entails a wide spectrum of distinct functions and participants spanning the space from borrowers to investors. The government-sponsored enterprises (GSEs), such as Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation), participate in a broad set of activities in the securitization spectrum and charge roughly 55–60 basis points (bps) of annual fees currently on the relatively pristine mortgages being securitized. The fee characterized, not quite accurately, as guarantee fee (G-fee) is to facilitate or perform functions that may be broadly categorized along two distinct dimensions: 1) performing the role of investors and creating investment products to fund the loans and 2) conducting operations and creating infrastructure and business models that support the securitization chain and connect borrowers with investors. In this article, we examine the existing framework briefly and touch upon the changes taking place within the GSEs along both the dimensions.

The GSEs have begun the process of sharing with the private sector a significant proportion of the role of investing in mortgage credit by relinquishing approximately 10 bps–12 bps of the G-fees. However, a significant number of functions along with the remaining fees are still retained by the

GSEs. We examine some of the remaining functions and propose a few enhancements with regard to both dimensions of securitization where the GSEs may share both the investment and product creation role as well as the operational and infrastructure roles with a wide array of private sector participants. This would lead to durability, efficiency, and better transparency of mortgage finance through securitization. While recognizing the interests of a whole spectrum of interested parties in housing finance starting from borrowers all the way through those who ultimately provide funding for the loans, we shall focus here on issues that would create a better incentive structure for loan funding.

One of the key challenges that the GSEs face in attracting private capital for mortgage credit is to create a framework that would provide a robust base of capital through an economic cycle. Investment in credit may be very pro-cyclical as has been seen in the recent economic cycle where a housing downturn forced the government to step in through the GSEs to fill a vacuum left by the capital markets and mortgage insurers. In addition to the investment role, the GSEs assume an overwhelming portion of the infrastructure and operational role in securitization. These too may also be open for competition, and we shall examine one specific role of post-securitization credit risk management that

the GSEs completely dominate and that is vital for private capital to participate in credit investment.

We will outline the existing securitization framework for the GSEs and some proposed changes to the model. We then describe two alternative forms of credit risk investment via “front-end” business models in which private capital deployment for assuming mortgage credit risk may take place contemporaneously with the securitization performed by the GSEs. We also look at the GSEs’ credit risk management operational role. The last section provides a summary and conclusion.

EXISTING FRAMEWORK AND PROPOSED ENHANCEMENTS

The process of creating securities from mortgage loans is dictated by the segmentation of different classes of investors ranging from those interested in strictly interest rate products to those preferring primarily credit products. The risk appetite and investment time-frames of investors have led to further innovation in investment vehicles, such as REMICs (real estate mortgage investment conduits) and structured credit products. The separation of interest-rate risk from credit risk inherent in mortgage loans has been traditionally performed in the capital markets using private label securities (PLS) as well as through the two GSEs and mortgage insurance (MI) companies, and such government agencies as the FHA/VA/USDA and Government National Mortgage Association (commonly, Ginnie Mae).

The 2008 financial crisis has created an impetus to overhaul the housing finance framework, especially with regard to reducing the lopsided burden of credit risk on the GSEs. This may be achieved through the revival of the PLS market and through various forms of risk-sharing arrangements that the enterprises have been executing as well as new frameworks undergoing industrywide discussion. In addition to the various contractual and legal issues that the mortgage industry is grappling with to revive PLS issuance, there are serious concerns about the demand and liquidity of interest-rate products in the form of AAA securities that are created to fund approximately 90%–95% of the principal amounts of mortgage loans. Mortgage-backed securities (MBS) issued by the GSEs and Ginnie Mae have a distinct liquidity advantage due to standardized products and the government guarantee that inhibits demand for

bespoke AAA PLS bonds. In their risk-sharing efforts to attract private capital for credit risk investment, the GSEs have mostly relied on “back-end” transactions where they conduct securitization after assuming all the credit risk on pools of mortgage loans and then over time shed some credit risk as a “hedging” activity. This is accomplished via structured product sales in capital markets or through insurance transactions with MIs or diversified insurance companies. This form of risk sharing maintains the centrality of GSEs in the securitization process and puts other players at a competitive disadvantage, thus adding to the difficulty of funding AAA PLS tranches.

As policy makers and the GSEs explore a framework for issuance of a common mortgage security, free of mortgage credit risk to be traded in a forward TBA market, we propose a framework for the private sector to invest more heavily in mortgage credit and to create instruments suitable for delivery into the TBA market. Such participation would take place at the “front end,” simultaneously with the securitization performed by the GSEs or their alternatives in a future framework. This process may involve the participation of insurance and reinsurance companies that would effectively create a forward market for mortgage credit to complement the existing forward TBA market for mortgage funding. The process may also rely on various capital markets products that could fund mortgage credit exposure up-front and help create products free of interest-rate risk for TBA delivery. Based on the types of participants and markets, and the hierarchical position of the GSEs in mortgage credit investment and disposition, there are four basic mechanisms in the securitizations framework as outlined in the Exhibit 1 with examples and potential deals. We will explore these structures in some detail in this article.

In addition to enhancing the framework for sharing credit risk that the GSEs have initiated, we also look at the entire operational framework that they currently control in the securitization spectrum. The role of securitization performed by the GSEs from an operational perspective may be divided into four major categories:

1. Setting of standards for products and players in primary markets, which are mostly outlined in the seller and servicer guides.
2. Sourcing, acquisition, and aggregation of loans prior to securitization.

EXHIBIT 1

Basic Mechanisms in Securitization Framework

Market	Back-End Risk Transfer after GSE Securitization	GSE Role	Front-End Risk Assumption by Players Contemporaneous with GSE Securitization
Capital Markets	Freddie Mac's STACR transaction and Fannie Mae's Connecticut Avenue Securities (CAS) transaction or potential future credit-linked notes (CLN) issued by GSEs		Securitization trusts created by lenders/aggregators and third parties to issue CLNs against loan collateral during GSE securitization
Insurance	Deep MI coverage on securitized loans (Fannie Mae's National Mortgage Insurance Corp. deal and Freddie Mac's Arch MI deal)		Deep MI coverage on flow business (e.g., Mortgage Bankers' Association proposal, creation of forward credit market)

3. The mechanics of securitization, which includes security issuance, disclosure, master servicing, and bond administration.
4. Post-securitization credit risk management operations, which may be part of the trustee and master servicer roles.

The GSEs have already embarked on an overhaul of the third role—securitization operations—through their joint venture to build the common securitization platform (CSP). The first function, the standard setting role, is also under review for further enhancement, some of it in the form of enhancing a contractual and disclosure framework (CDF). In this article, we take a closer look at the second function of sourcing and aggregation for TBA securitization in an enhanced risk-sharing framework that relies on up-front disposition of credit risk. We will also elaborate on the last function outlined earlier—the credit risk operations role—with an eye toward creating a competitive framework for the GSEs to develop an independent business as well as to explore the prospects for other players entering this space.

The GSEs currently charge 55 bps–60 bps of G-fees to perform two broad functions: 1) assuming the credit risk of mortgages to create TBA-eligible interest rate product and 2) performing all the securitization operations outlined in the previous paragraph. The risk-sharing transactions that have been executed so far have transferred a significant portion of the credit risk on the referenced mortgage pools to private investors at the cost of 10 bps–12 bps to the GSEs while the GSEs continue to retain a small first-loss piece, some basis risk, and

catastrophic risk. As we explore the various segments of securitization operations, we would encourage future work to quantify the cost of each operation to explore the feasibility of various functions as independent businesses open for competition to improve efficiency.

CREDIT-RISK-SHARING ALTERNATIVES

The two primary alternative mechanisms for investment in credit risk are as follows:

1. An operating company that provides a guarantee to security holders for a certain class of securities that are created—for example, guarantees from the GSEs, insurance from mortgage insurers and diversified insurers/reinsurers, or collateralized recourse from lenders and third parties.
2. Capital market structured products, either synthetic or cash, where a significant portion of the maximum potential losses are funded upfront—for example PLS transactions for residential mortgage-backed securities (RMBS) and credit default swaps on mortgage reference pools.

The first mechanism for investment in credit risk is facilitated by regulated companies, whereas the capital markets option relies on both regulated and unregulated entities.

Both the insurance-based models and the capital markets products for risk sharing come with inherent strengths and weaknesses. As an example, the insurance model embodies counterparty risk but offers

better monitoring and control of leverage regarding the insurance in force. In contrast, capital market products provide up-front fully funded mechanisms to support credit risk, but the participation of various unregulated entities leads to uncontrolled leverage and significant variation in the amount of equity capital deployed against credit risk. The prevailing market appetite for credit risk may determine the amount of equity capital deployed as a result of leverage, and changing appetites may lead to significant volatility of capital supply. In view of the different strengths and weaknesses of the two competing mechanisms of credit risk sharing, the two GSEs have been executing multiple types of risk-sharing transactions. A durable and robust equity capital base for mortgage credit risk may be achieved by diversifying the investor base through both mechanisms. However, it is vital to provide long-term prospective investors with incentives that they will not be “priced out” in volatile periods when opportunistic investments with a short-term horizon crowd the markets.

Insights from Ongoing Transactions for Long-Term Viability of Credit Funding

Recent experimentation in risk sharing by the GSEs has provided a rich source of information for a comparison of the two models, insurance and structured credit. We begin by examining the yield from investment in the two types of products as shown in the transaction details. Fannie Mae's National Mortgage Insurance Corp. (NMI) transaction in October 2013 yielded 11 basis points of loan balance or approximately \$6 million annual premium to the insurer on a maximum stop loss of approximately \$92 million on approximately \$5.1 billion of mortgage loans (covering loss from 0.2% to 2.0% of loan balance). The risk in force was for average loan LTVs of 75% going down to LTVs of 50%. Hence, the risk in force would be approximately \$1.7 billion. The stop loss approximately matched the minimum capital requirement of 5.6% of risk in force for NMI (maximum 15:1 leverage ratio). This implied a yield of approximately 6% on the transaction.

Freddie Mac's first Structured Agency Credit Risk (STACR) transaction in August 2013 provided an initial comparison with the MI deal. The senior mezzanine M1 tranche with a coupon of LIBOR + 340 bps could be leveraged with repo using a haircut of 20%

(5:1 leverage) with a LIBOR + 150 bps financing rate. The excess coupon from leverage was $4 \times (340 - 150)$ or 760 bps. Hence, the total leveraged yield on the M1 tranche was LIBOR + 11% when the note was issued at an unlevered yield of 3.4% over LIBOR. Similarly, the leveraged excess coupon on the subordinate mezzanine M2 tranche, using a 3:1 leverage and a LIBOR + 200 bps financing rate was $2 \times (715 - 200)$ or 1030 bps, yielding approximately LIBOR + 17.5% when the note was issued at 7.15% over LIBOR. The combined yield after leverage for the M1 and M2 notes was approximately 14% over LIBOR. This may be compared with the unlevered yield of 6% for the NMI transaction. The all-in cost of risk transfer for covered losses from 0.3% through 3.0% of the first-loss piece on the collateral pool using the two tranches was approximately 14 bps from the collateral pool.

In essence, the 1.8% loss coverage in the MI transaction for 11 bps fee could be compared with the 2.7% loss coverage in the STACR deal for 14 bps of equivalent fee.

The NMI transaction may not be the equilibrium bid for such contracts. Moreover, it has been clearly demonstrated over time that subsequent STACR deals and Fannie Mae's CAS deals with their evolving prices and leverage also defy any long-term equilibrium. The second STACR deal in April 2014 covered losses from 0.3% through 4.5% of the first-loss piece using three tranches, M1 priced at LIBOR + 85 bps, M2 priced at LIBOR + 160 bps, and M3 priced at LIBOR + 360 bps with an all-in yield of LIBOR + 271 bps. The price paid on the entire pool of loans that was insured amounted to 11 bps of equivalent fees. The cost for this transaction was lower than the first STACR deal but with an additional coverage from 3.0% to 4.5% of a second-loss piece.

With repo funding rate of LIBOR + 100 bps–120 bps for the M1 and M2 tranches, respectively, those tranches could not be leveraged any further. Even with 3:1 leverage on the M3 tranche, the overall yield from the risk sharing could not be more than LIBOR + 6% as was characterized by the first NMI insurance transaction. In light of the evolution of pricing and demand for mortgage credit, we need to explore a durable model for the future that would rely on a long-term dedicated pool of capital to support mortgage securitization. From the perspective of counter-cyclicality of investor demand with regard to economic cycles, it would be prudent to

ensure the proliferation of both means of risk sharing in the long run.

A significant piece of information from these transactions is the evolution of pricing for mortgage credit. Credit loss coverage from 0.3% through 4.5% in the April 2014 STACR transaction cost Freddie Mac roughly 11 bps in G-fees going to the note holders. Freddie still retains some basis risk due to loss severity, the first-loss piece of 0.3% and the catastrophic risk beyond 4.5% loss. In light of the 55–60 basis points of G-fee received on the loan pool, let us examine the various ways those fees are used. Assuming a duration of 5–6 years for the loan collateral, the first-loss piece of 0.3% would cost roughly 5 bps–7 bps. Assuming a price of roughly 10 bps for the basis risk and catastrophic risk, the total credit-risk-related cost for guaranteeing the pass-through securities would be 26 bps–28 bps (11 bps for credit transfer, 5 bps–7 bps to transfer the first-loss piece, and 10 bps for catastrophic and basis risk). This would leave approximate 30 bps from the gross G-fee charged for all other securitization operations and general and administrative expenses. Currently, the GSEs have to pay the Treasury 10 bps on the loans that are guaranteed as part of the temporary payroll tax reduction act. Even after subtracting that 10 bps, the GSEs are left with roughly 20 bps for all other functions. One function we will examine in this article will be the post-securitization credit management operation; we will encourage the industry to assign a cost and a price for performing that function currently embedded in the GSEs.

An Insurance-Based Approach to Ensure Long-Term Capital Commitment for Mortgage Credit

There appears to be considerable interest on having an investor base of insurance/reinsurance companies and private equity firms enter the mortgage credit business as a long-term investment strategy. The volatility of the capital-markets-based products, however, poses a serious challenge to such investors, who may not be able to deploy their capital effectively in times when the capital markets provide an aggressive bid. These investors may be more willing to commit their capital if they can be assured of a long-term flow contract to generate a reasonable return on investment in mortgage credit while the capital markets products rise and recede with economic cycles. One way to accomplish the goal of

getting long-term commitment is through insurance contracts at the front-end of securitization where individual insurers or private capital in any other form are deployed to take the first-loss piece of risk as a forward commitment over a significant period of time for a predetermined price, with the parameters of the mortgages constituting the flow into securitization being clearly defined. We elaborate on the concept further in the following discussion.

The idea of a long-term commitment of capital for investing in mortgage credit is not very different from the GSE or MI model, but the form of capital and the type of competition is what makes the real difference. The GSEs with their guarantee framework and the mortgage insurers with the loan-level primary insurance had in essence created a forward market for mortgage credit. The underlying loans composing the collateral for mortgage securities have been enhanced by credit insurance or guarantee based on broad qualifying criteria before the guarantors or the insurers have had access to details of loans that actually closed. This has created a liquid market for funding those loans in the form of MBS that have traded as TBA. Here, we are proposing diversified financial institutions rather than mono-line companies as the insurers. This also allows a wide spectrum of new participants and competition.

In this framework, a forward credit market is created by using a platform prior to securitization of loans by the GSEs. Individual insurers/reinsurers and other participants, or a group of such financial institutions taking a pro-rata share of business based on their capital contribution in a joint venture, willing to invest in mortgage credit, would guarantee predetermined volumes of loans “flowing” to the GSEs for securitization into the TBA. This would take place in a long-term contract with long-term pricing and capital commitment using strict underwriting guidelines for loan delivery. Unlike cases of mortgage insurers rescinding loan coverage in the past, there would be no such provision, and the guarantors/insurers would adhere to the GSEs’ decisions on representation and warranty and other legal/contractual terms. The guarantee would come in the form of a first-loss piece, for example, the first 3% to 5% of actual loss on the collateral pool or predetermined severity and delinquency-based loss, as used in STACR and CAS transactions. The guarantee would be backed by some collateral posted up-front, capital requirements for the insurers/reinsurers and other entities, as well as

overall counterparty risk analysis performed on the participants.

The real benefit of this type of set up is a forward market for credit and long-term capital commitment from investors that would lead to liquidity in all phases of an economic cycle. The guarantors may then deploy reinsurance or capital markets products to lay off a portion of their risk to collateralize the transactions. Capital markets would provide a sort of opportunistic hedging mechanism. The challenges lie in assessing the collateral requirements and counterparty strength of individual participants or groups in the form of joint ventures that subscribe to different regulatory regimes. The GSEs would still bear the catastrophic tail risk until policy makers arrive at a decision on the government's role in mortgage finance. In addition, private capital would also rely on the GSEs for securitization operations, including the post-securitization credit risk management that would influence the eventual loss on the guarantee.

A Lender/Aggregator-Based Approach for Mortgage Credit Using Collateralized Recourse

A model similar to the one deployed by the GSEs in their back-end credit-risk-sharing transactions, such as STACR and CAS, but using the operational capabilities and security distribution infrastructure of a wide set of participants could be a front-end collateralized recourse transaction. In this model, lenders or aggregators would set up a trust as a special purpose vehicle (SPV) to aggregate loans and sell structured credit products in the form of notes to the capital markets against the loan collateral. The proceeds of the notes would then be used to act as collateral against credit loss when the loans are passed on to the GSEs for securitization.

One of the key features of the back-end credit transfer transactions being conducted via STACR and CAS deals by the GSEs is the centralized framework of loans being acquired after GSE due diligence regarding credit and other features and securitized for funding through TBA. In this model, all credit risk of the loans is borne temporarily by the GSEs, and subsequently portions of the risk are disposed through capital markets transactions or insurance contracts over a period of a few months. The entire operational infrastructure of on-boarding of credit risk and the eventual disposition

of the risk resides in the two GSEs. Various financial institutions, such as lenders, aggregators, and security dealers, possess the capability to perform these functions and significantly reduce the credit risk of pools of loans prior to their securitization, or contemporaneously with securitization, and use the GSEs primarily as a vehicle for funding through TBA and for some basis and catastrophic risks. Policy makers will eventually decide the role of the GSEs, but in the interim, this proposed framework may attract a number of participants to share the operational burden of analyzing, aggregating, and disposing of credit risk through the most efficient means. One key advantage over private-label securities issuance that the lenders/aggregators would have is execution through TBA. In addition to reducing the government's exposure to credit risk via the GSEs, a wider participation in front-end operations for credit risk sharing will reduce the GSEs operational burden.

In the existing framework of TBA execution, lenders and aggregators deliver loans directly to the GSEs. In the proposed framework, the loans would be delivered to a trust. The trust would retain a portion of the loan pool's coupon and sell the pool to the GSE for securitization through TBA. The MBS thus created would be delivered back to the lender/aggregator just as in a regular guarantor-swap arrangement. The trust would then issue a credit-linked note (CLN) referencing the pool of loans initially delivered into the trust whose performance would be tied to credit-related loss in the loan pool. For example, the CLN could be issued against the first 5% of loss on the loan pool with a promised coupon payment on the notes on the remaining principal balance of the note. Any realized or predetermined loss based on delinquency and loss severity, as the contract may specify, would reduce the principal of the CLN. The proceeds from the sale of the CLN would remain in the trust and be invested in risk-free instruments. The coupon payment on the CLN would come from the returns from the investment of the sale proceeds as well as from the slice of aggregated pool coupon retained by the trust before the loans are sold to the GSE for securitization. Losses suffered on the loan pool delivered to the GSE for securitization through TBA would be covered up to a cap—in the previous example, the covered loss would be up to 5%—and the CLN holders would experience a declining principal balance according to the credit-related loss. Hence, the GSE would have a “collateralized recourse” to the trust against credit loss

on the securitized loan pool up to the cap and would retain only the catastrophic risk beyond the cap and some basis risks. This would be a fully funded credit protection for the GSE.

POST-SECURITIZATION CREDIT RISK MANAGEMENT OPERATIONS

One key requirement for third-party risk sharing of mortgage credit risk is a robust framework for managing the credit risk of mortgages after securitization and an efficient loss mitigation operation looking out for the interest of credit risk holders as loans go delinquent. In the agency security model, the GSE serves as the primary credit-risk investor and also performs the role of post-securitization credit management. In the PLS framework, the credit investors are the subordinate-piece buyers and the role of credit risk management is performed primarily by the servicers with oversight from a master servicer and a trustee mostly in the role of a bond administrator. As loans go delinquent and while the loss mitigation actions occur, those loans remain in the collateral pool in the PLS-issuing trust. In agency securities, the GSE acts as the master servicer and the trustee/bond administrator and supervises or performs loss-mitigation actions when loans go delinquent and are pulled out of the pools. Hence, in the GSE securitization model, there is more complete alignment of interest between credit-related investment and credit-risk management. As we migrate to a framework where third parties participate in front-end credit risk investment for agency type of securitization, the role of the GSE as agents or the investors as the principals in credit-risk management assumes significant importance. The front-end investors may continue to rely on the post-securitization operations performed by the GSEs, but a more transparent and binding contractual framework between the GSEs and the investors would be sought. As we showed in the simple arithmetic of the current G-fees, the GSEs charge for securitization, there remains approximately a 20 bp annual fee for all operations/G&A after considering all credit and government-related charges. One question for the future of the housing finance framework would be to explore if this post-securitization operation is a viable standalone business. If so, then are there other viable competitors to the GSEs who can perform this function cost effectively and to the satisfaction of credit and interest rate products investors?

The various functions that would fall under the post-securitization role broadly comprise the trustee, the master servicing, and the credit management/loss mitigation roles. The role of trustee begins with managing the certification and document custody of mortgage notes. The trustee also performs the role of bond administrator while directing the release of funds from the custodial account to the mortgage bond holders and assumes fiduciary responsibility in making disclosures in the form of monthly reports to the investors.

The role of master servicer is to supervise various servicer functions starting with monitoring the monthly principle and income (P&I) payments from the servicers to the securitization trust and aggregate payments from different servicers to be forwarded to the bond administrator. The master servicer reviews the daily/monthly reporting by servicers on loan activity and conducts reviews on data accuracy and reasonableness. Cash management is another critical role on the monthly remittances. There is a lag between the payments received from the servicers and the payments made out to the bond holders. The master servicer makes short-term investments from the cash received until payments are made out to bond holders. If the loans go delinquent, the master servicer reviews and processes loss-mitigation requests from the servicers. Based on servicers' performance, the master servicers may initiate and process servicing transfers. Loans not compliant with the representations and warranties from the lenders/sellers are put back after review by the master servicer.

The GSEs in their current role as master servicers and trustees perform many functions directly tied to loss mitigation, both prior to and after delinquency, that have not been very clearly defined in past PLS issuances. These functions begin with post-securitization surveillance and servicing-quality assurance. The GSEs oversee delinquency prevention means, such as imposition of late charges, partial payments, and collections. They monitor workout hierarchies and forbearance and payment plans on delinquent loans. As delinquency transitions beyond a threshold, the GSEs conduct foreclosure-prevention activities while examining borrower eligibility for loan modification, second-lien modification, short sales, or deeds-in-lieu of foreclosure. After exhausting the alternatives, a loan may proceed to foreclosure. The GSEs in their credit-management role initiate and conduct foreclosure proceedings, eviction processes, and the maintenance and management

of properties. Eventually, the role of the risk manager ends with the disposition of the REO and disbursement of proceeds to various involved parties.

All of these outlined functions are crucial from the perspective of all investors in mortgage securities but especially for the credit investors as we move to third-party, front-end investors in agency securitization. A cost-efficient operation that instills confidence in the principal/agent framework of investing in and managing credit risk needs further examination in the context of both current GSE operations and the prospect of future entrants.

SUMMARY AND CONCLUSION

We have outlined in this article a framework for leveraging the current GSE securitization infrastructure for attracting a variety of private investors to share the credit risk of mortgages and provide a robust source of capital for mortgage credit that would survive through an economic cycle. The model relies on investment in long-term-insurance types of contracts as well as capital market executions with differential volumes flowing through the two channels at different points in time based on investor preferences. Capital markets thrive on innovation and opportunistic trades to maximize returns across multiple types of products. Going through an economic cycle, investor preferences change dramatically and over-reliance on the capital markets for mortgage credit may lead to periods of dysfunction in housing finance. Insurance-based products, in contrast, have a longer-term view of capital investment, but they may not be competitive in times of aggressive capital markets bids. Credit availability for mortgage funding is best accomplished by developing both sources of mortgage capital.

We have explored here two distinct frameworks of credit-related investment for mortgages that would complement each other in changing economic cycles by

providing long-term returns on capital commitment via an insurance model while also leveraging opportunistic trades in the capital markets. Capital flow into mortgage credit will be spurred by competing price and process efficiencies in the two frameworks. Opening up competition for front-end participation within the two avenues of mortgage credit investment by various financial and insurance firms to reduce the credit burden of the GSEs would spur more private investment. Private institutions could exercise more control over risk-sharing transactions as compared with the current back-end avenues of risk sharing concentrated in the GSE model. The markets would continue to benefit from the GSE securitization framework that has afforded significant liquidity of funding, while at the same time the GSEs would undergo a reduction in the operational burden of acquisition and disposition of credit risk in the current framework.

Because a wider participation of the investor base is contingent on a robust principal/agent framework of 1) investment in credit instruments and 2) management of credit, by two separate entities, we have also examined the post-securitization credit risk management operations of the GSEs and posed the question of creating a competitive business model out of this operation. In addition, we have provided some quantitative insights from the ongoing risk-sharing activities of the GSEs in light of their overall operations in securitization and the guarantee fees that they charge.

ENDNOTE

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