Issues in Mortgage and Housing Finance: GSE Reform Proposals

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Federal Reserve Bank of NY

The views expressed in this presentation are those of the speaker and not those of the Federal Reserve Bank of New York or the Federal Reserve System.
Several Proposed Bills Now Exist for GSE Reform

**Senate:**
- Corker / Warner
- Johnson / Crapo

**House:**
- Hensarling
- Waters

Contrast to a proposal by a few staff at FRBNY
FRBNY Staff Reports on Housing Finance Reform

Core Ideas:

• Government explicit guarantee

• Vintage-based reinsurance

• Financial market utility – lender cooperative
FRBNY Staff Report on Housing Finance Reform

Core Ideas:

• Government explicit guarantees
  Senate bills create an explicit guarantee
  House bills split on guarantee

• Vintage-based reinsurance
  Senate bills insure MBS rate investor but not guarantors

• Financial market utility – lender cooperative
  Corker/ Warner and Johnson / Crapo use coop for small lenders –
  many bond guarantors
  Waters adopts single lender coop

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Design Principles

• Keep what worked
  – Benefits of standardized securitization are meaningful
    • well understood mortgage products, TBA market liquidity
  – Economies of scale and scope $\rightarrow$ limited number of securitizers

• Alignment of public and private incentives is critical and requires:
  – restructuring of incentives across securitization chain

• More capital and more attention to regulatory arbitrage

• Simple tax may be preferable to past affordable housing targets
  – Senate bills include a 10 bp tax for affordable housing
FRBNY Staff Reports: Argue for a Government Backstop

• **Liquidity supports robustness**
  – Goal: the uninterrupted flow of credit to housing markets even in periods of market stress.

• **The government owns the tail risk**
  – Housing is crucial to both household and financial institution balance sheets.
  – If you can’t eliminate the risk, then you should reduce, manage, and price it.
  – Denial recreates implicit guarantees, moral hazard, and corrosive uncertainty.

• **The government should hold only and all the tail risk**
  – The private sector should bear the losses associated with the normal business cycle, regional downturns, idiosyncratic losses.
  – This implies the private sector prices the largest portion of the overall g-fee.
## Designing the Guarantee:

<table>
<thead>
<tr>
<th>Attachment Point</th>
<th>Important feature</th>
<th>Systemic shock</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Security-based</strong></td>
<td>Government bears idiosyncratic and regional risks unless higher capital ratios set</td>
<td>New capital not subject to legacy losses. Risk that credit investors pull-back in periods of stress</td>
</tr>
<tr>
<td><strong>Institution-based</strong></td>
<td>Moral hazard, erosion of market discipline.</td>
<td>Once trigger reached, new capital is not subject to legacy losses.</td>
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<tr>
<td><strong>Vintage-based</strong></td>
<td>Pooling across securities (and possibly issuers) eliminates idiosyncratic/regional risks</td>
<td>New capital not subject to legacy losses. Capacity to do new lending is better preserved – internal financing</td>
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Mutualizing Ownership of a Securitization Utility

Capital comes from:
1. "guarantee fees" (insurance premiums)
2. capital paid in up front by lenders

Credit losses shared in proportion to securitization activity.

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Capital Structure with Vintages

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Loan Performance Appears Stratified

- Stratification within 8-12 quarters of origination, supporting the vintage concept.
- Relevant for determining the triggers for tail loss insurance and capital release

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Stylized example: determining the G-fee for a Vintage

<table>
<thead>
<tr>
<th>No Reinsur</th>
<th>Basel III:</th>
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<tbody>
<tr>
<td>Capital Ratio</td>
<td>12%</td>
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<td>Assumed Return on Equity</td>
<td>10%</td>
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<td>Expected Losses</td>
<td>5 bps</td>
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<td>Tail Loss Rate</td>
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<td>Implied Guarantee Fee</td>
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G-Fee = Capital Charge + Admin Costs (10bps) + Expected Losses + Tail Loss Fee

Issues:

- Empirical work on appropriate sizing of loss rates (tail and expected), frequency
- Capital ratio is crucial for both financial stability and g-fee.
  - Historical simulations? Basel requirements? Other (e.g. FMUs)?
- ROE is critical: drives g-fees, incentives, industry dynamics, institutional structure.
  - Large variation in ROE, even within financial industry.

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**G-Fee** = **Capital Charge + Admin Costs (10bps) + Expected Losses + Tail Loss Fee**

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Purchase of gov’t reinsurance eliminates capital buffer & SIFI surcharge
Lowers annual fee by 28 bps (or 31%)
• Reinsurance fee = 10 bps

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Stylized example: determining the G-fee for a Vintage

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<th>Higher ROE</th>
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<td>6%</td>
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G-Fee = Capital Charge + Admin Costs (10bps) + Expected Losses + Tail Loss Fee

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Junior Bonds: Pros & Cons

• **Benefits of junior bonds**
  – Attract alternative sources of private capital.
  – Provide alternative source of pricing and market discipline for credit risk.

• **Caveats for junior bonds** – important for Corker/Warner & Johnson/Crapo
  – *Investment grade* bonds elicit less market discipline than *high-yield* or speculative-grade bonds.
  – Overreliance on risky bonds
    • Would decrease system robustness because investor appetite is procyclical
    • Would decrease “skin in the game” and risk misaligning incentives
  – Beware institutions “doubling down” on their exposures to credit risk through affiliates – this would increase procyclicality by increasing *effective concentration* and undermining the diversification of capital.
Designing Junior Bonds

• **Design features**
  – Make them sufficiently risky to incent due diligence.
  – High-quality book of business implies risky junior bonds of only a modest size.
  – Issuers and underwriters should retain some critical mass of credit risk to maintain incentives for high-quality underwriting.
  – Structures should be simple and transparent and issuance should be regular.
  – Cash should be paid up front to reduce the counterparty credit risk associated with derivatives and insurance contracts and maintain sufficient aggregate capital.

• **Impact on capital and pricing**
  – Small size implies modest impact on capital structure.
  – Speculative-grade yields may be only modestly less than a utility’s return on equity.
  – Therefore, the impact on the guarantee fee and mortgage rates would be modest.
  – The *structure and composition of ownership* affects the *total cost of capital*, and hence, both guarantee fees and mortgage rates.

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Why a Lender Cooperative?

- **Consistent with structure of other financial market utilities (FMUs)**
  - DTCC, CLS Group, ICE Trust

- **Academic literature indicates mutualization is appropriate for:**
  - Homogenous and sophisticated owners
    - Engaged directly and frequently with the cooperative’s business
    - Interests well aligned with respect to the cooperative’s mission
  - Party with less market power in a given transaction
    - In this case: the lender relative to the securitizer
    - A cooperative may mitigate monopolistic or oligopolistic dynamics by diffusing market power
Cooperatives: Pros & Cons

• **Advantages**
  – Vertical integration
    • Aligns incentives of lender and securitizer (unlike private securitization)
  – Weaker profit motive
    • Lower required/expected returns
    • Less risk taking
  – Narrow mission, conservative approach
    • Facilitates monitoring & risk management

• **Disadvantages**
  – More limited access to capital markets
  – Less innovation
  – Lower return on equity
  – Governance may be complicated by unsophisticated or diffuse membership
Reforming Representations & Warranties

• **Reps & warrants can prevent “free riders” and moral hazard**
  – Demutualizing effect
  – Lenders internalize consequences of own underwriting, but preserve “true sale”

• **Lessons learned**
  – Open-ended reps and warrants based on procedure, not credit performance:
    • Inefficient, if not ineffective, means of aligning lender and securitizer
      – Incent behavior similar to defensive medicine
    • May undermine coop’s incentive to monitor its members *ex ante*

• **Reps & warrants redesign**
  – Underlying principle: promote clear transfer of credit risk
  – Avoid costly *ex post* negotiations and litigation
  – *Ex ante* quality testing of underwriting standards and process
  – Limited duration of outstanding liability
Sources

“The Capital Structure and Governance of a Mortgage Securitization Utility”
• Patricia C. Mosser, Joseph Tracy, and Joshua Wright
• Federal Reserve Bank of New York Staff Report No. 644, October 2013.

“TBA Trading and Liquidity in the Agency MBS Market”
• James Vickery and Joshua Wright

“A Private Lender Cooperative Model for Residential Mortgage Finance”
• Toni Dechario, Patricia C. Mosser, Joseph Tracy, James Vickery, and Joshua Wright
• Federal Reserve Bank of New York Staff Report No. 466, August 2010.
  – http://www.newyorkfed.org/research/staff_reports/sr466.pdf

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Housing Cycles: Evidence from Mortgage Insurer Losses

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Loss-Absorbing Capital: Down Payments Matter

Cumulative Losses on High-Quality Fixed-Rate Non-Agency Mortgages Originated in 2006 by LTV Range

Note: cumulative losses as reported on fixed-rate non-agency loans originated in 2006 with FICO greater than or equal to 720, DTI less than or equal to 33, full documentation, owner-occupied, single-family detached. Sources: LoanPerformance, Deutsche Bank.

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Cooperative Governance: Best Practices

- Chair and 1/3 of the board should be independent from coop members
- Limit cooperatives’ managers’ participation on the board
- No constituency should hold more than 50% of the coop board seats

- Smaller members may benefit from:
  - Lower barriers to entry and reduction in volume-based guarantee fees
  - Divorcing voting rights from capital contributions
  - Cumulative voting

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