Comments on "Credit Risk Transfer and the Pricing of Mortgage Default Risk" by Edward Golding and Deborah Lucas

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Summary

- **Research Focus**: Develop analytic framework to evaluate (1) the information content of CRT securities and (2) their cost efficiency as risk transfer tool.

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- **Key Insights**:
  - A well designed CRT can provide valuable risk price signals.
  - CRT securities may be expensive and provide opaque signal (complex and illiquid).
  - Correlation with BB OAS index raises question about information content.
  - GSEs not using CRTs to set guarantee fees.
  - GSEs face significant CRT issuance costs

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    - Have to foreclose on the collateral.
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- Private label (and CRE) use security structure (senior/subordinate) to pass both risks to investors.

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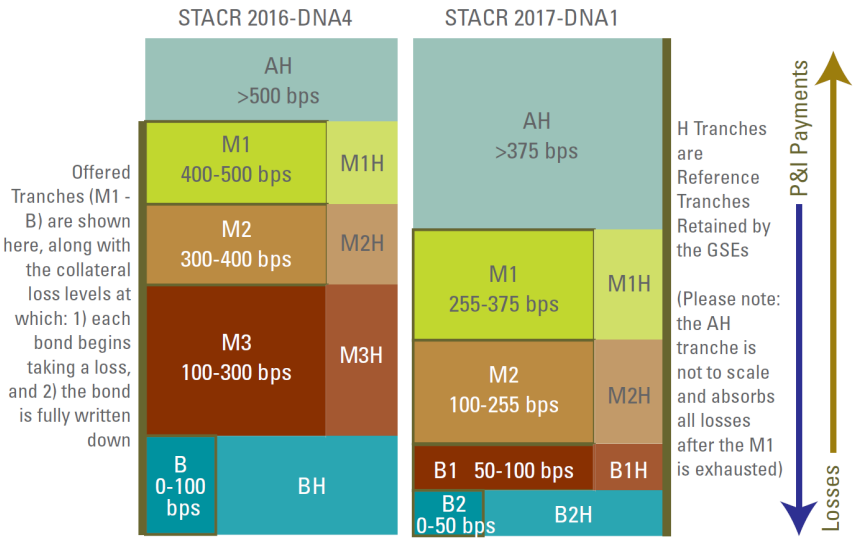
- How do CRTs work?
  - CRTs are unsecured debt obligations of GSEs.
  - Return tied to performance of underlying reference pool of mortgages.
    - ★ CRT balance written down based on underlying reference mortgage principal (top down).
    - ★ Mortgage losses are allocated from the bottom-up.
    - ★ CRTs exposed to both credit loss and interest rate (prepayment) risk.

Figure 2 STACR Deal Structures 2016-DNA4 vs. 2017-DNA1



Source: Wells Fargo Securities

Source: "An Overview of Credit Risk Transfers", Brandywine Global Investment Management, LLC (`https://brandywineglobal.com/PDF/534128692.pdf`)

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- Reports secondary marketing trading data.
  - Find significant issuance costs
  - Reflects low trading volume
- Creates CRT valuation model to project expected returns.
  - Top tranches have almost no default risk exposure, but have high yields.
  - Suggests potential structural inefficiency in CRT design?

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- Stochastic processes $\longrightarrow$ default, recovery, prepayment.
  - Consider introducing correlation between prepayment and default risks.
- Would like more detail on model/suggestions for future refinement:
  - Calibrate model to specific reference pools
  - Calculate risk premiums for non-standard mortgage pools (the greatest risk)
  - Consider advanced simulation techniques, such as weighted Monte Carlo estimators, see e.g. Glasserman and Yu (*Operations Research*, 2005).

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- What are implications of CRT for total GSE risk exposure?
  - Note, easiest to price mortgages are in CRT pools, high risk stuff not included!

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- Endogeneity during pandemic: did spreads widen because F/F stopped CRT issuance (market signal) or did F/F stop CRT because market pulled back (spreads widened).
- Final comment: what are the effects of CRTs on GSE incentives to minimize losses given default?

Summary

- A very interesting study on an important issue.
- Introduces a framework for evaluating CRT effectiveness.
- Raises very interesting questions about how GSEs should manage credit risk.
- I look forward to reading the next version.

Thank You!