Flood risk has historically resulted in poorer performance for both individual mortgages and mortgage-backed securities.

The distribution of risks for residential real estate, including flood risk, depends largely on how these risks are allocated across individual mortgages and within mortgage-backed securities (MBS). This paper is the first to document how flood risks relate not only to individual mortgage performance and underwriting, but also how flood risks correlate to MBS performance and structure. Across residential mortgages we find that defaults are concentrated among the most flood-prone properties and this risk is somewhat offset by larger down payments and slightly higher mortgage rates. Even when mortgages are combined into MBS's, we show that average mortgage default within MBS's increases with average flood risk and that higher flood risk is primarily offset by increased credit protection or subordination; a one unit increase in flood risk is associated with a 2.6 percent increase in subordination. Ultimately, our analysis suggests that flood risk is reflected in mortgage-level performance and pricing and is partially, but not fully, accounted for in MBS deal-level performance and structure.

JEL classifications: Q54, R3, D89, G12

Article Citations


Related Research


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Flood Risk Exposures and Mortgage-Backed Security Asset Performance and Risk Sharing