



Macroeconomic-Driven Prepayment Risk and the Valuation of Mortgage-Backed Securities

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The authors model the implied prepayment function for mortgage backed securities (MBS) and find that prepayment rates are driven not only by interest rates, but by two macroeconomic factors (turnover and rate response) related to macroeconomic activity such as the unemployment rate, consumption growth, housing values, credit availability, and market uncertainty. Evidence of a significant prepayment risk premium for MBS prices emerges based on the finding that model implied prepayments substantially exceed actual prepayments. Interestingly, the risk premium is due almost entirely to compensation for turnover risk among borrowers.

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