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# The Effect of Refinancing Costs and Market Imperfections on the Optimal Call Strategy and the Pricing of Debt Contracts

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## Abstract

This article, which was originally written in 1986, develops a methodology for valuing mortgage-backed securities with refinancing costs. We solve simultaneously for the valuation of the mortgage-backed security (loan) and the borrower's refinancing strategy, pricing all coupon levels simultaneously. Because the borrower may refinance his or her loan and incur costs at many times in the future, the optimal refinancing decisions arise from an optimal dynamic strategy that reflects the costs of all potential future refinancings. Though the borrower faces multiple rounds of refinancing costs, the market value of the loan cannot exceed the call price plus a single round of refinancing costs.

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