Option-Based Credit Spreads

2015 FIRST PRIZE

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Theoretically, corporate debt is economically equivalent to safe debt minus a put option on the firm's assets. We empirically show that indeed portfolios of long Treasuries and short traded put options ("pseudo bonds") closely match the properties of traded corporate bonds. Pseudo bonds display a credit spread puzzle that is stronger at short horizons, unexplained by standard risk factors, and unlikely to be solely due to illiquidity. Our option-based approach offers a novel, model-free benchmark for credit risk analysis, which we use to run empirical experiments on credit spread biases, the impact of asset uncertainty, and bank-related rollover risk.

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