## Debt Maturity, Default, and Investment under Rollover Risk and Solvency Concern

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## Abstract

We consider the effects of the endogenous interaction between rollover risk and solvency concern—generated by not only debt rollover but also by an assessment regarding the firm's solvency risk via a learning process over time—on the decisions of the firm about debt maturity, default, investment, and leverage policies. We distinguish between short-term liquidity uncertainty and long-term solvency uncertainty in order to clarify how the two sources of uncertainty affect such decisions of the firm. If debt maturity is exogenously determined, it is important to note that the effect of long-term solvency uncertainty on the investment policy—debt overhang—is opposite to that of short-term liquidity uncertainty. If debt maturity is endogenously determined, we show that the equilibrium debt maturity increases (decreases) with short-term liquidity (long-term solvency) uncertainty when the chosen debt maturity is sufficiently long, and that for any debt maturity the firm's incentives to default increase (decrease) with short-term liquidity (long-term solvency) uncertainty whereas the firm's incentives to invest decrease (increase) with short-term liquidity (longterm solvency) uncertainty.

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