Sophisticated Borrowing Constraints and Macroeconomic Dynamics*

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Abstract

Classic macro-finance models feature “hard" borrowing constraints, where creditors cut credit indiscriminately to maintain borrowing limits and financial acceleration ensues. We study “sophisticated" borrowing constraints featured in the debt contracts of U.S. nonfinancial firms. They use covenants to specify borrowing limits linked to operating earnings. Moreover, following covenant violation, creditors obtain control rights and improve firm performance by reducing agency problems, so earnings increase although borrowing and investment decrease. We construct a quantitative model with these key features. At the micro level, our model matches the patterns of firms' borrowing and investment in the data, in normal times and after covenant violation. At the macro level, our model produces less financial acceleration, consistent with the resilience of U.S. nonfinancial corporations during recessions.

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