Debt-Ridden Borrowers and Productivity Slowdown

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Abstract

Many authors argue that financial constraints have been tightened since the great recession in 2007–2009. To explain this, we construct a model in which borrowing constraints for firms are tightened as a result of mass default due to a bubble collapse. In Jermann and Quadrini (2012)'s model, a defaulted firm either goes back to a normal firm by (partial) repayment of the debt or is liquidated. We assume that there is an intermediate status: a "debt-ridden" firm, which is defined as a firm whose lender retains the right to liquidate them. The lender allows the debt-ridden firm to continue if it pays continuation fee. In our model debt forgiveness is infeasible: once a firm defaults on the debt, it is either liquidated or kept as a debt-ridden firm. The defaulter can never go back to a normal firm unless it repays all the unpaid debt. Prohibition of debt forgiveness can be justified as a collective choice of the society to expand the borrowing limit of normal firms.

It is shown that borrowing constraints are tighter for debt-ridden firms than for normal firms. This implies that emergence of a large mass of debt-ridden borrowers may be a cause of the "financial shocks" in the recent macroeconomic literature. Tightened borrowing constraints due to emergence of debt-ridden firms lowers the aggregate productivity. The negative effect on productivity can be permanent. In a version of the model with endogenous growth the growth rate of aggregate productivity becomes zero if the number of debt-ridden firms exceeds a certain threshold.

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