Debt-Ridden Borrowers and Productivity Slowdown [*]

(Incomplete and preliminary)

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Abstract

It is known that economic growth slows down for extended periods after a financial crisis, and now there is a growing concern that "secular stagnation" may follow the Great Recession of 2007–2009. We construct a model in which a one-time buildup of debt can depress the economy persistently. We explicitly consider the debt dynamics in which the initial debt is large and is repaid in multiple or infinite periods. Productive firms are subject to a borrowing constraint and repay debt within finite periods when the initial debt is small whereas when the initial debt hits a certain threshold they fall into the "debt-ridden" state where they can pay only interest and the amount of debt and inefficiency of production stay at the same level permanently. In the general equilibrium with endogenous growth, emergence of debt-ridden firms tightens borrowing constraints not only for themselves but also for normal firms. This implies that the mass emergence of debt-ridden firms may manifest itself as the "financial shocks" discussed in recent macroeconomic literature. Tightening of aggregate borrowing constraints lowers the aggregate productivity and deteriorates the labor wedge, leading to a persistent recession. This model implies that debt reduction for overly indebted agents may restore economic growth quickly in the aftermath of financial crises.

Keywords: Endogenous borrowing constraint, financial shocks, labor wedge, secular stagnation.

JEL Classification numbers: E30, G01, O40.

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