Housing market cycles, productivity growth, and household debt*

Job market paper
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Abstract

Housing market crashes are associated with household deleveraging and a very persistent decline in economic activity in an unbalanced panel of 50 countries. The persistence of the output response is driven by a slowdown in productivity growth and capital accumulation and is increasing in the amount of preexisting household debt. To interpret these stylized facts, I construct a two-agent (borrower-saver) dynamic general equilibrium model with occasionally binding collateral constraint tied to housing equity. Productivity grows endogenously in the model through forward-looking innovation investment. When the preexisting level of debt is sufficiently high, negative housing demand shocks cause collateral constraint to bind and trigger deleveraging. Endogenous slowdown in TFP growth emerges as one of the adjustment margins during this process, prolonging the real effects of a crisis. The initial shock is amplified by a negative feedback loop between deleveraging, borrowers' housing wealth and growth. I use the calibrated model to draw implications for macroeconomic policy during episodes of deleveraging.

JEL Codes: E32, E44, G01, O42, R21

Keywords: Business Cycles; Endogenous Growth; Financial Crises; Housing; Collateral Constraints; Occasionally Binding Constraints.

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