Credit Supply Shocks and Household Defaults*

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Abstract

Are disruptions of the mortgage market a consequence of financial imbalances accumulated in the past? In this paper, we study the effects of positive and negative credit supply (CS) shocks on subsequent household defaults on debt over the last four decades in U.S. states. We apply sign restrictions within a VAR framework to isolate state-level CS shocks, and identify that 1984 and 2004 were the years of systemic, countrywide, *positive* CS shocks whereas 1989 and 2009 brought systemic *negative* shocks. Further, by employing a difference-in-differences framework, we find that both positive and negative CS shocks lead to greater household defaults in the future if they also increase mortgage-to-income ratios. We show that the CS shock-induced (i) shifts of employment between the tradable and non-tradable sectors, (ii) changes in household income and (iii) in house prices facilitate the accumulation of default risks. Our results indicate that positive CS shocks occurred in 1984 did not raise household defaults by more in more exposed states compared to less exposed states because the shocks increased both future income and mortgage debt, while not affecting mortgage-to-income ratios. In contrast, the 1989, 2004 and 2009 CS shocks increased mortgage-to-income ratios in subsequent years, thereby raising debt delinquencies and household defaults. These results provide further empirical evidence to theories of endogenous credit cycles.

Keywords: Household finance, Banking, Credit supply, Financial instability, Mortgage, Difference-in-differences, VARs, U.S. states, PSID, CEX.

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