"Interest Rate Shocks and Household Default: How Big are Credit Crunches"

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In recent work, Chatterjee, Corbae, Nakajima and Ríos-Rull (2001) poses a quantitative theory of unsecured credit with default. Households borrow to smooth marginal utility of consumption, and, on occasion, they default. The paper only considers steady-states and it shows that this theory can account for the volume of unsecured credit in U.S. data as well as for the large number of bankruptcy filings of the last few years.

In this paper I use a version of that model with aggregate shocks and time—varying endogenous credit constraints and default thresholds to explore the role of fluctuations in the real interest rate, like those in recent U.S. data, in shaping the number and size of bankruptcies. The model which is a fully fledged general equilibrium model where agents optimally choose whether to default and how much to borrow or lend, allows me to trace the effects over time of interest rate hikes, and measure the extent through which they can affect economic activity. This paper is a first step to ask questions about monetary policy and how its effects trickle down through the private sector via the creation or the easing of credit crunches. Access to cheap credit may reduce the level of bankruptcies but increase the volume of credit. Getting a quantitative assessment of exactly how large are these effects is the target of this work.

In addition, this paper has some technical contributions. It is the first paper where there are stochastic variations in bankruptcy rates, that determine the whole structure of interest rates. To do this is important to prevent the distribution of assets from affecting prices, that agents care for, and instead let it affect only aggregate quantities that agents do not care for. To do this, a necessary condition is to prevent profit variation over the cycle, something that can be achieved by a subtle manipulation of the timing of decisions.