





## Firms' precautionary savings and employment during a credit crisis

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Can the macroeconomic effects of credit supply shocks be large even in an economy in which the share of credit-constrained firms is small?

This paper addresses this question using a model with firm heterogeneity, in which the interaction between real and financial frictions gives rise to precautionary cash holdings.

Using UK firm-level balance sheet data, I show that firms hoarded cash relative to their assets during the last recession, and cash-intensive firms cut their workforces by less.

With a simple back of the envelope calculation, I show that the excess cash accumulated in 2009 would have drastically reduced the unemployment rate in the UK, if used to hire workers at the average wage.

A quantitative version of the model, disciplined by these firm-level data, generates similar dynamics in response to a tightening of firms' credit conditions. The simulated economy experiences a sizeable fall in aggregate employment and prolonged substitution from capital to cash. Credit-unconstrained firms may cut investment in capital and hiring for precautionary reasons, as this allows them to build up larger cash holdings. More cash alleviates the impact of a credit tightening and reduces the probability of hitting the constraint.

This precautionary channel accounts for most of the macroeconomic effects of a credit supply shock, and also crucially matters for the model ability to fit microeconomic features of the data.