On the Interaction Between Interest Rate and Productivity

Gilbert Cette
Bank of France and AMSE
gilbert.cette@banque-france.fr

Remy Lecat
Bank of France and AMSE

Antonin Bergeaud
Bank of France and PSE

The productivity slowdown observed in all advanced economies since the 1970s is much correlated with a slowdown in interest rates. To look more precisely at these co-movements, we take two approaches. First we use country level macro data on both productivity and interest rates to test whether there exist a cyclical relationship between the two quantities. Second we develop a Schumpeterian model of growth and financial constraint that predicts an inverted U link between credit access and productivity, namely because of a reduction of creative destruction when interest rates are low (cleansing effect). We then use firm level information augmented with detailed data on new credits to test these predictions. Our empirical results, both using macro and micro data confirm the cyclical relationship between productivity growth and interest rates, and suggest that in absence of technological shock, most advanced economies will be stuck in a low productivity low interest rate trap.