

Credit Constraints and Productivity

Philippe Aghion

(Banque de France and LSE)

Antonin Bergeaud

(Banque de France and PSE)

Gilbert Cette

(Banque de France and AMSE)

Remy Lecat

(Banque de France and AMSE)

Helene Maghin

(Banque de France)

In this paper, we use a large dataset of French firms, from balance sheet information augmented with information about their credit rating, to show the two counteracting effects that low financial constraints have on innovation and growth at the aggregate level. On the one hand they make it easier for good innovators to further innovate while on the other hand they allow for less efficient incumbent firms to remain on the market thereby discouraging entry and the expansion of more efficient innovators. The first channel corresponds to an innovation one and the second to a factor allocation one (through cleansing mechanisms). Our contribution stems from the combination of those two effects that have so far largely been studied on their own. On an aggregate level, we find an overall concave effect of credit constraints on growth and offer an explanation for the dynamics behind the low constraints and low growth that we observe at the country level. We further confirm these results by exploiting an unexpected and unanticipated reduction of the minimum credit rating required for firm credits to be accepted as collateral by banks in their refinancing operations as a credit constraint shock. The current low productivity growth in the developed countries could be at least partly explained by a bad allocation of factors from low credit constraints and low interest rates, which would dominate an easier financing of innovation.