# The ‘cleansing effect’ of recessions: Inefficient firms fail, average productivity goes up

During the Great Recession, the percentage of US establishments going bankrupt increased from 11.8 per cent to 13.5 per cent. Similar increases in business failures have been observed in other countries hit by the recession. The conventional view is that the increase in the exit rate (when firms fail and thus exit the market) raises average productivity, because the recession allows resources to be reallocated from failing firms to surviving ones that are more productive. But does this ‘cleansing effect’ of recessions hold when companies face financial constraints?

This question is particularly relevant for the Great Recession, when companies faced tightening financial constraints that cut their capacity to finance investment and limited their ability to survive. These financial constraints may have hit hard high-productivity firms, which are likely to have bigger investment opportunities and are therefore likely to borrow more.

In a recent article we find that taking into account financial constraints does not reverse the conventional cleansing-effect view that recessions raise average productivity. We show that a recession leads to an increase in average firm-level productivity even in the presence of credit frictions. But the intensity of the cleansing effect is lower in the aftermath of a financial shock.

The idea of the cleansing effect of recessions goes back to Joseph Schumpeter, who saw recessions “not simply as evils, which we might attempt to suppress, but – perhaps undesirable – forms of something which has to be done, namely, adjustment to previous economic change.”

To study how this mechanism may be modified when companies face credit frictions, we built a model of firm dynamics where firms decide each period whether to continue their activity or exit the market according to the state of the economy. Our model was calibrated to match the observed exit rate, the productivity distribution and the level of credit frictions in the US economy.

**The findings**

The model indicates that credit frictions modify the selection of firms that fail. In particular, if high-productivity firms face financial duress they may cease operations. However, the bankruptcies of some high-productivity companies don’t eliminate the average rise in productivity after a recession (the cleansing effect.) That’s because, predominantly, the shock raises the failure rate of low-productivity firms. Credit crunches don’t eliminate, but change the magnitude of, the cleansing effect. In other words, when the economic downturn is driven by tightening financial conditions, the intensity of the cleansing effect is lower.

These findings have significant implications for the analysis of the costs of recessions. Our work emphasises the fact that not all financially distressed firms are unproductive. An accurate assessment of the nature of the shock – as well as the productivity of distressed firms – appears to be key to fully evaluate the costs of recessions. Our research suggests that recessions driven by financial crises are likely to be more costly than “regular” recessions, since the intensity of the cleansing effect is lower.

**Long-run aggregate productivity**

The selection of exiting firms is likely to have an impact not only on short-run but also on long-run aggregate productivity. We are exploring this additional dimension in an ongoing research project. We believe that it is crucial to explicitly account for the uncertainty in firms’ growth potential to better understand the effects of reallocation on long-run aggregate productivity.

Firm-level data show that productivity is not constant over the firm’s life cycle. Young firms typically have lower productivity and more volatile productivity growth than older firms. We interpret these facts as resulting from learning, both from the firm and from the market. Young firms learn how to operate and how to adjust to market conditions while the market learns about the quality of the firms’ products.

As a result of learning, young firms have higher volatility in measured sales and productivity. In turn, this higher volatility leads to higher financial costs, making young – and potentially high-growth firms – more vulnerable to the recession. Taking into account this inherent uncertainty will contribute to having a more comprehensive understanding of the effect of financial shocks on the selection of exiting firms.

The long-run consequences on average productivity could also depend upon the moment in the firm’s life cycle at which the selection takes place. Because of the uncertainty surrounding the productivity potential of young firms, their current profitability may not be a good indicator of their growth potential. The decision to stay or exit the market should therefore not take place too early in the firm’s life cycle. We expect that policies designed to increase the survival rate of young firms — especially at ages where the contemporaneous profitability is a poor proxy of their future productivity growth — could therefore raise the long-run aggregate productivity growth.

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*Notes:*

- *This blog post is based on the authors’ paper Credit Frictions and the Cleansing Effect of Recessions, Economic Journal (2017), vol. 127, issue 602, 1153-1187.*
- *The post gives the views of its author, not the position of LSE Business Review or the London School of Economics.*
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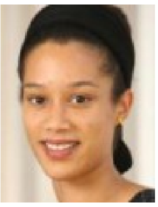

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