

Profitability, Productivity and Growth

CFM-DP2021-15

Marek Ignaszak³ and Petr Sedláček^{1,2,4}

¹CEPR, ²CFM, ³Goethe University Frankfurt, ⁴University of Oxford

The high pace of worker, job and firm turnover in the US economy is often viewed as the by-product of productivity-enhancing reallocation. The notion of creative destruction, whereby relatively less productive jobs and businesses are replaced by more productive competitors, lies at the heart of modern endogenous growth theory. However, an increasing body of empirical evidence suggests that differences across firms, their survival chances and growth prospects, are predominantly driven by demand-side factors. In other words, the process of creative destruction is based on a broader view of profitability – one which considers not only the effects of productivity, but also demand variation. In this paper, we build a novel model of endogenous growth by heterogeneous firms which innovate and survive based on profitability. In particular, we break the tight link between productivity and profitability – present in existing models – by allowing for changes in customer demand for products produced by individual firms. Importantly, these demand changes are unrelated to firm-level productivity. We show analytically that demand growth at the firm-level affects aggregate economic growth by influencing firms' incentives to conduct R&D. Parametrizing the model to US Census firm data, we quantify that about 20 percent of aggregate growth is demand driven. Moreover, we show that the macroeconomic impact of growth policies, such as R&D subsidies, is fundamentally different in our framework compared to one in which firms base their decisions on productivity alone. Finally, we find support for our key model mechanism in firm-level micro data.