

Technological Progress, Firm Selection, and Unemployment*

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Abstract

In the standard search-matching model, the effect of productivity growth on unemployment is quantitatively much smaller than that found in the data. This paper revisits this issue by considering the *selection effect*, through which an increase in (disembodied) technical progress induces firms with low productivity levels to exit and increases the average productivity. With the selection effect, one percentage point increase in the productivity growth rate decreases the unemployment rate by 0.38 percentage point, about 38 times as strong as the effect in the model without the selection effect.

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