

# Business Dynamics and Contributions to Productivity Growth in the Netherlands

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This paper studies the contribution of small and/or young firms to the aggregate and sectoral TFP growth. Main results:

- ① Churn has declined, mostly due to a decline in entry rates.
- ② Strong heterogeneity (I):
  - In services, TFP growth comes from new entrants. New firms have a higher than average TFP, exiters lower
  - In manufacturing, TFP growth is driven mostly by incumbent. Entry and exit dynamics carry small impact on TFP growth
- ③ Strong heterogeneity (II):
  - For manufacturing, TFP growth of entrants is higher than that of incumbents: positive contribution to aggregate TFP growth.
  - In services industries, this is not the case.

Multiple Dutch datasets, two relevant features:

- Total labor input of the firm is obtained by matching firms and employees (NFO and Polisbus data)
- Reasons for entry and exit are known

Main methodological approach:

- Estimation of TFP with the control function approach. IV approach with value added as output variable, labour hours as labour input and intermediate inputs as control variable
- Melitz and Polanec (2015) decomposition of TFP growth

## Pros:

- The paper complements well the literature on *large* firms dynamics, see Gabaix (2011) and Carvalho and Grassi (2019) and on disappearing "gazelles", Pugsley, Sedlacek, and Sterk (2018)
- Neat and multi-dimensional approach
- Depth of the database, in particular regarding entry and exit dynamics

## Cons:

- Database is short and it contains the financial crisis. The trends about the decline in business dynamism in the US started around the eighties, see De Loecker and Eeckhout (2017) or Autor, Dorn, Katz, Patterson, and Van Reenen (2017)
- Cobb-Douglas assumption with time-invariant sectoral elasticities might be a strong assumption

- Why ex-ante heterogeneity in productivity for services with respect to manufacturing? Can you investigate between differences in scale, upfront investment, learning by doing, ICT, patents and intangible?
- Why is productivity of incumbents going down for services? Why mean-reverting path for new firms? This is absolute value, maybe some insights from the ranks?
- Which percentage of TFP growth comes from entry and exit dynamics? In figure 6, the contribution of surviving or entrants is never above 10%, is the covariance/reallocation term the missing piece?
- Miscellanea: notes at the end of the sentence, typos and number of figures missing, indexes  $s$  in firm-level variables

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- Pugsley, B. W., Sedlacek, P., & Sterk, V. (2018). The nature of firm growth.