

# Young firms in the U.S.

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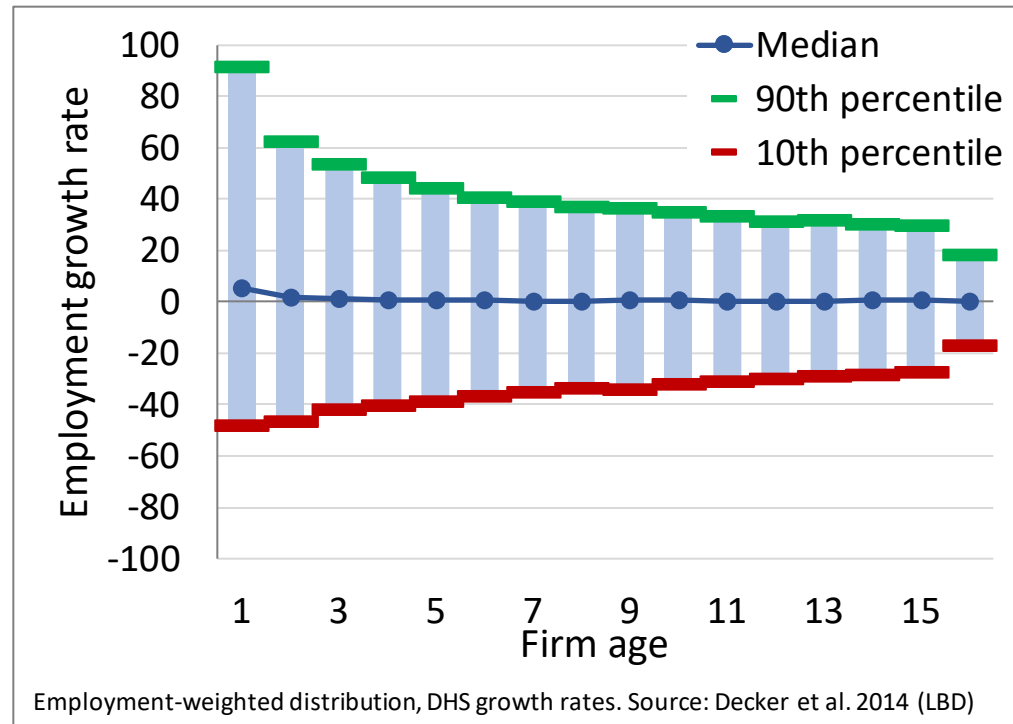
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# More than just hype: Entrepreneurs are critical

- New employer firms account for *15-20%* of job creation
  - Young firm growth is highly *skewed*
  - Young firms are highly responsive to economic conditions\*

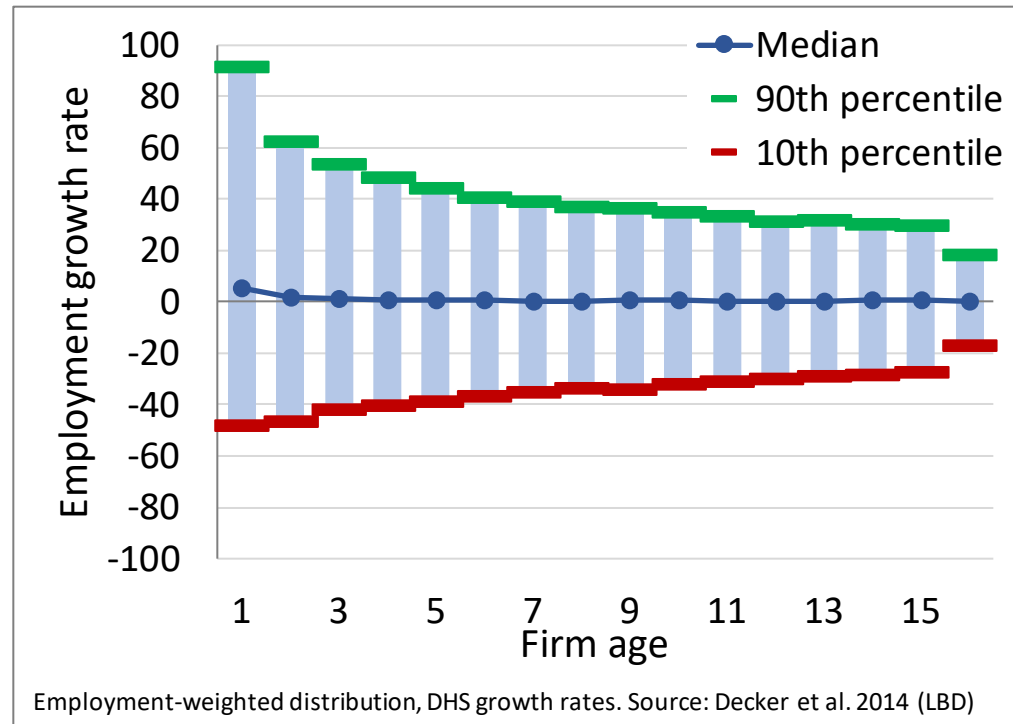


\* Adelino, Ma, & Robinson 2017; Curtis & Decker 2018; Decker, Upton, & McCollum 2017; Fort et al. 2013; Sedlacek & Sterk 2017

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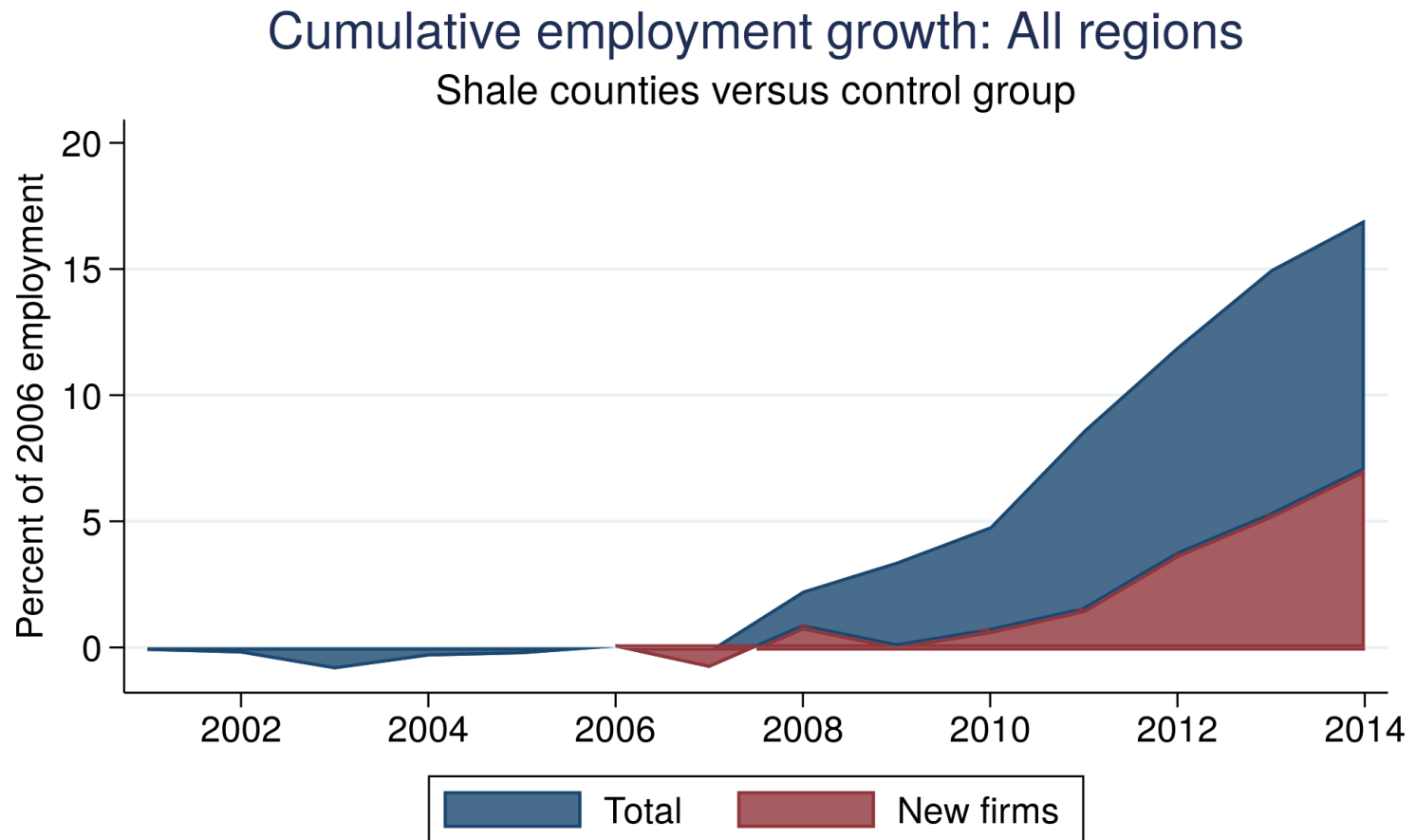
- Net entry accounts for  $\frac{1}{4}$  to  $\frac{1}{2}$  of productivity growth\*\*



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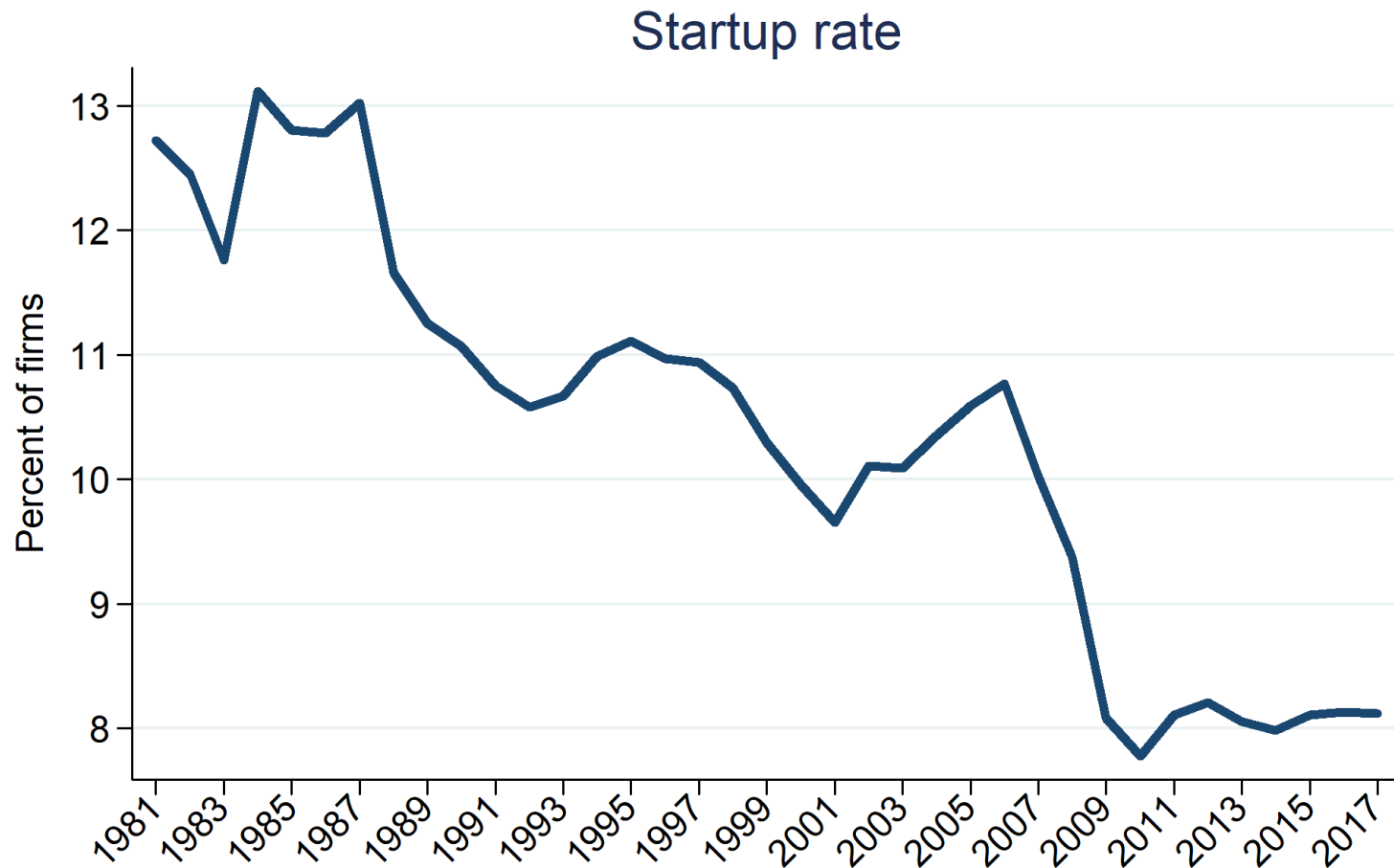
\*\* Decker et al. 2017; Foster, Haltiwanger, & Syverson 2008

# Example: Shale boom



Employment scaled by 2006 county employment. Shale counties defined by Energy Information Administration. Regression compares shale counties to propensity-matched control counties with year effects. New firms are firms born after 2006.  
Decker, McCollum, & Upton (2017) calculations from LBD.

# But startup rates have declined...

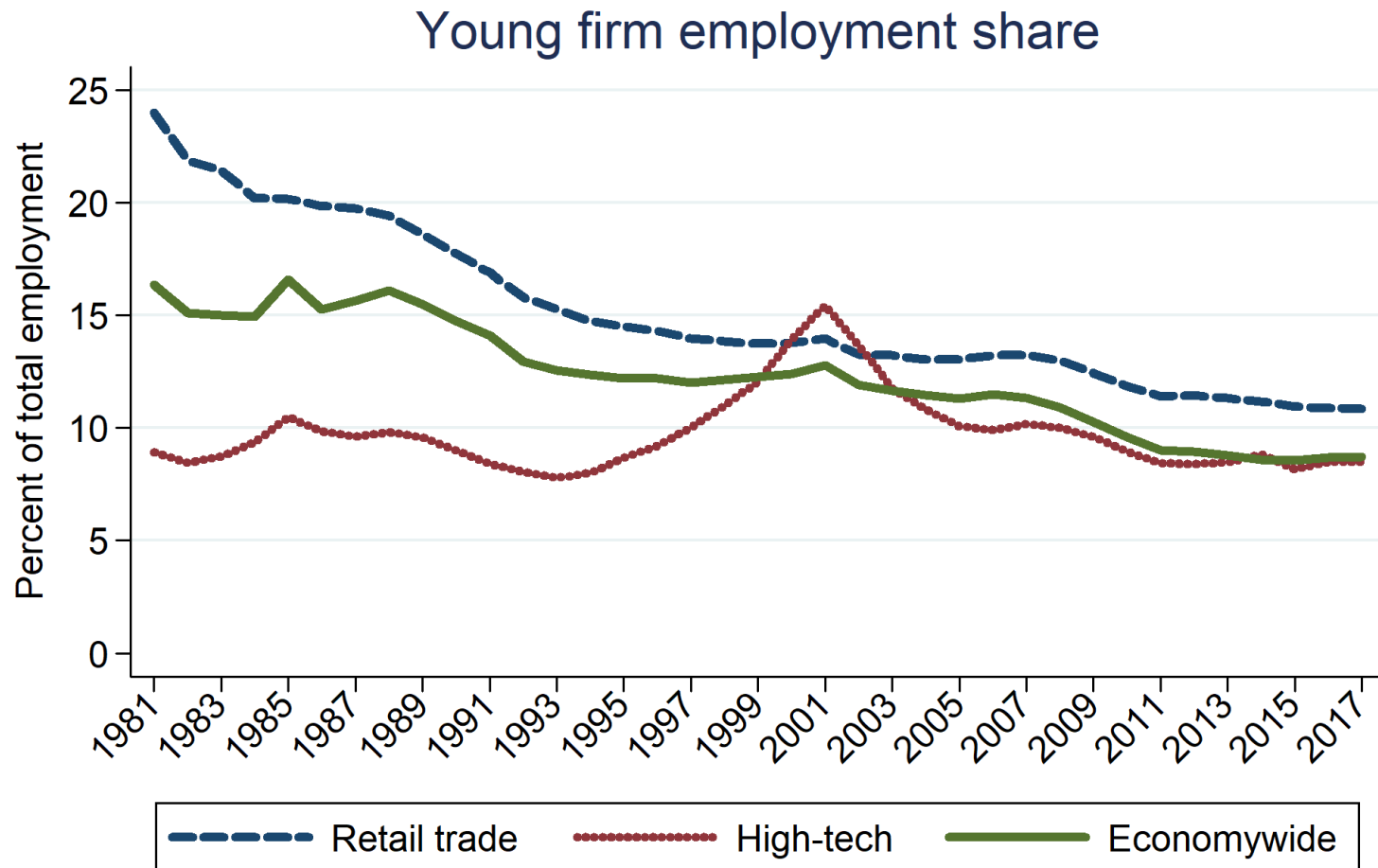


Y axis does not start at zero. Age 0 employer firms as a share of all firms.

Source: Census Bureau Business Dynamics Statistics (1981-2015).

Data for 2016-2017 are author estimates based on BLS Business Employment Dynamics.

# ...in all sectors since 2000...

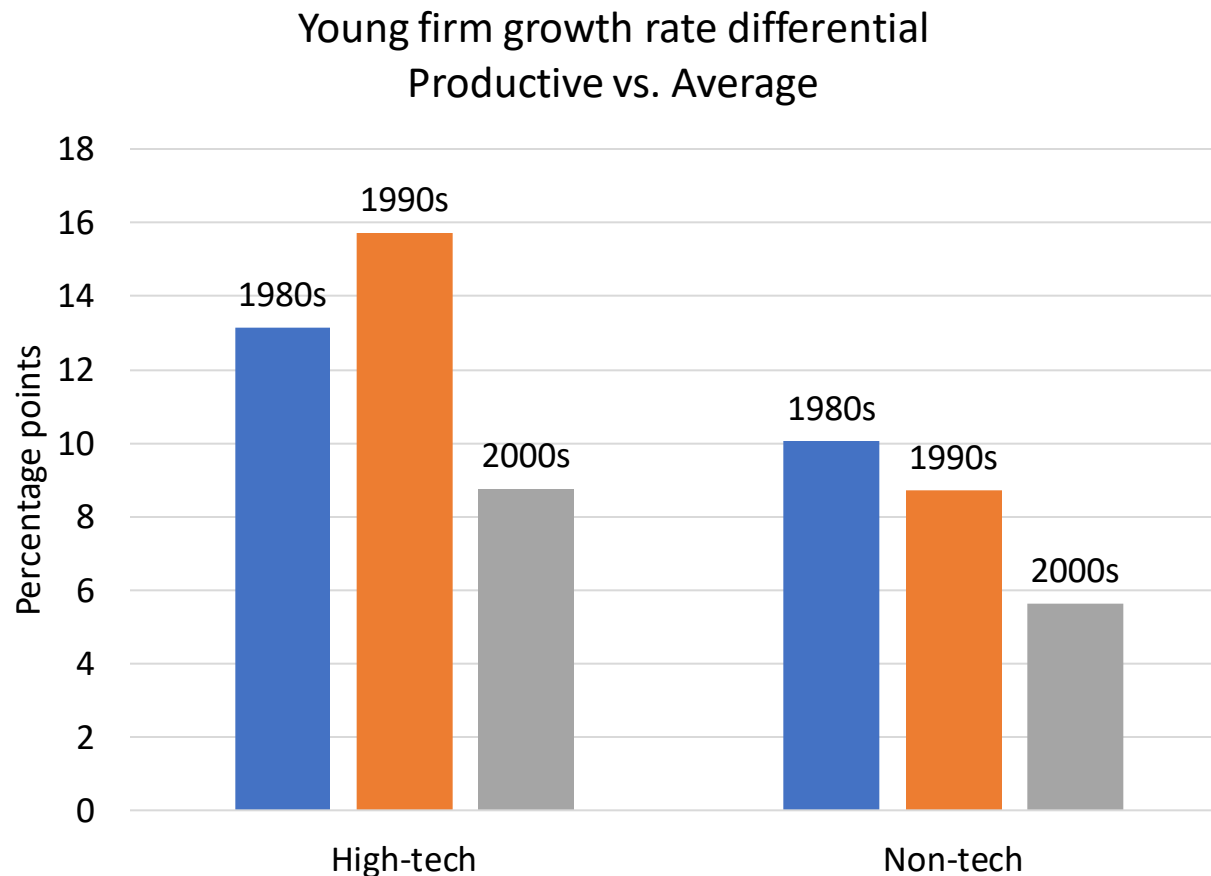


Young firms have age less than 5. High-tech defined as in Hecker (2005).

Source: Decker et al. (2018) LBD tabulations (1981-2013).

Data for 2014-2017 are author estimates based on BLS Business Employment Dynamics.

# ...and the productive startups grow less.



Manufacturing plants of firms age less than 5. Productive plants have revenue TFP 1 std dev above industry mean (about 1.5x mean productivity). Coefficients from regression of establishment DHS growth rate on industry-deviated TFPR (6-digit NAICS) and time, controlling for establishment size, business cycle conditions, and interactions. Similar results hold economywide 1996-2013 with output per worker productivity concept. Source: Decker et al. 2018.



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- In official employer data, young firm activity has declined
  - Pre-2000: retail consolidation
  - Post-2000
    - Pervasive decline including high-tech
    - Weaker *selection* and productivity responsiveness
    - Implies declining contribution to job creation and productivity growth  
(Alon et al. 2017, Decker et al. 2018)

# Declining entrepreneurship

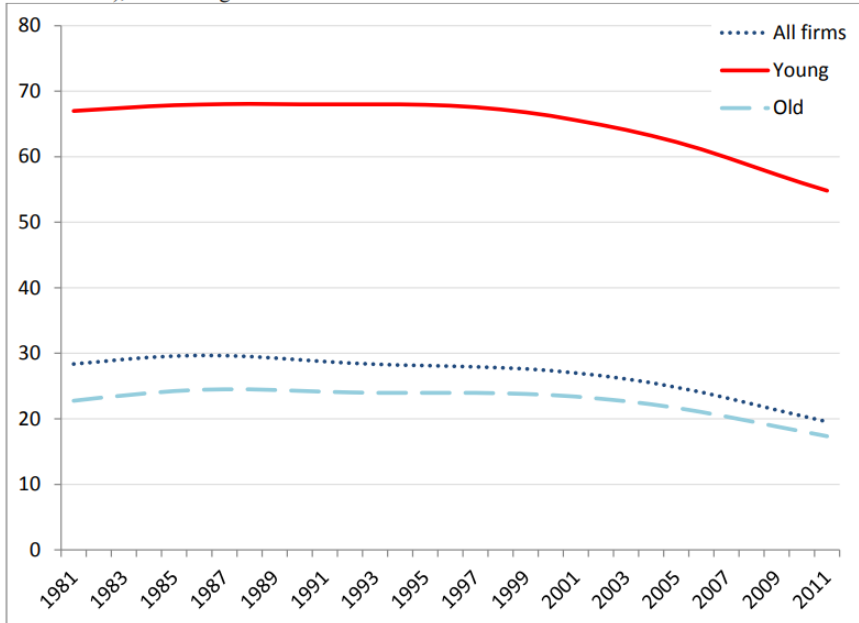
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(Alon et al. 2017, Decker et al. 2018)
- Still not fully understood
  - Slowed innovation? (Gordon 2016, Gort & Klepper 1982)
  - Demographics and labor force growth? (Karahan, Pugsley, & Sahin 2015)
  - Concentration and anti-competitive barriers to entry? (De Loecker & Eeckhout 2017)
  - Policy barriers to entry?
  - Other data, other patterns

Thanks

# Discussion slides

# Post-2000 decline in *high-growth* entrepreneurship

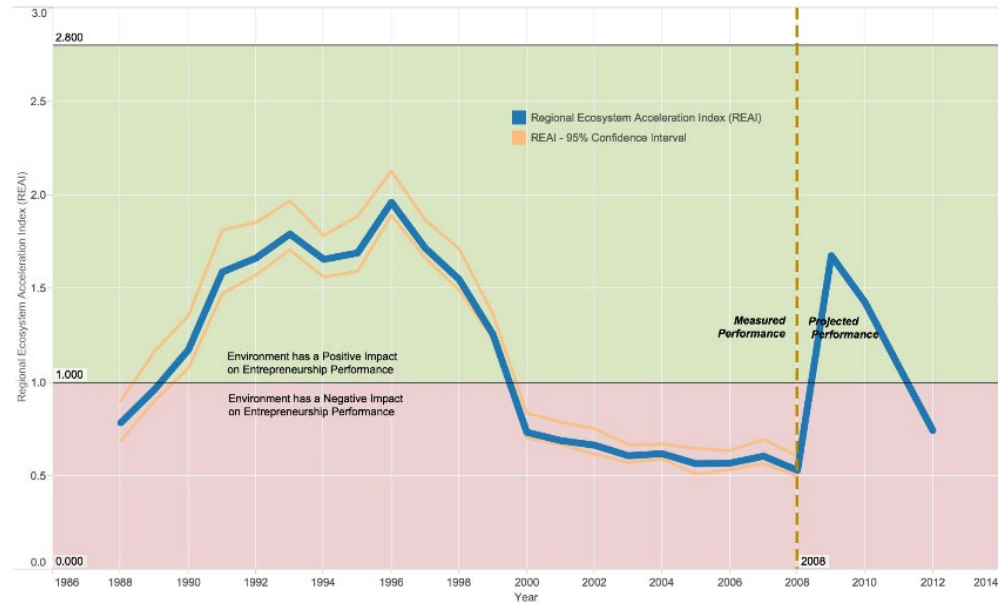
Figure 10. High-Growth Firms by Firm Age (90th Percentile of Employment-weighted Distribution), Continuing Firms



Note: The 90th percentile is based on the employment-weighted distribution of firm employment growth rates. Data are HP trends using parameter set to 100. Data include continuers only. Author calculations from the Longitudinal Business Database. See Figure A.5 in the web appendix for non-filtered data.

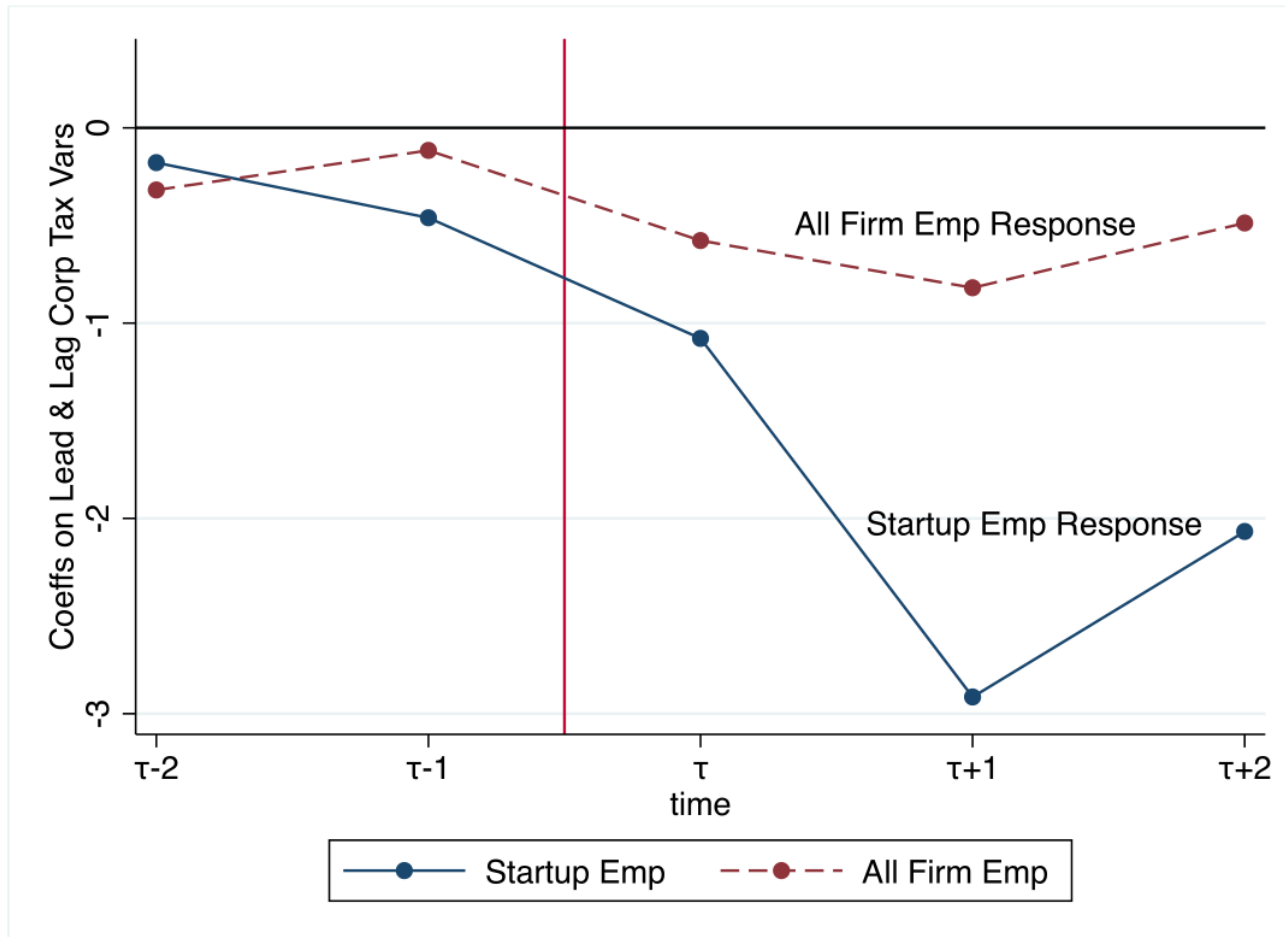
Source: Decker et al. (2016)

FIGURE 5  
Regional Ecosystem Acceleration Index (REAI)



Source: Guzman & Stern (2016)

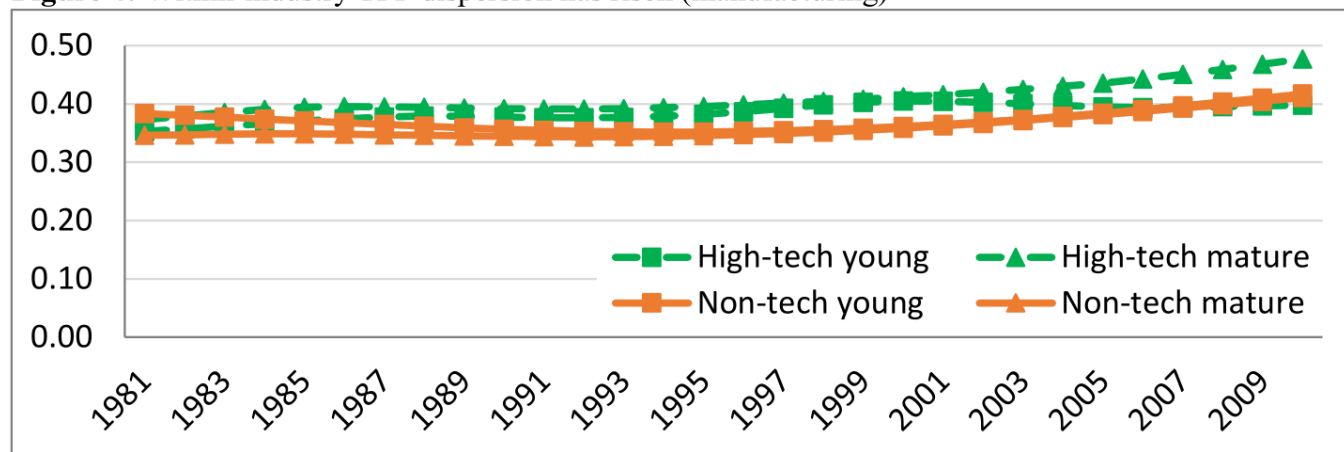
# Young firms are responsive to (state) tax rates



Source: Curtis & Decker 2018. Startups are age 0-1 in QWI. Change in county-level employment, after 1-percentage-point increase in corporate tax rate, relative to adjacent county across state border.

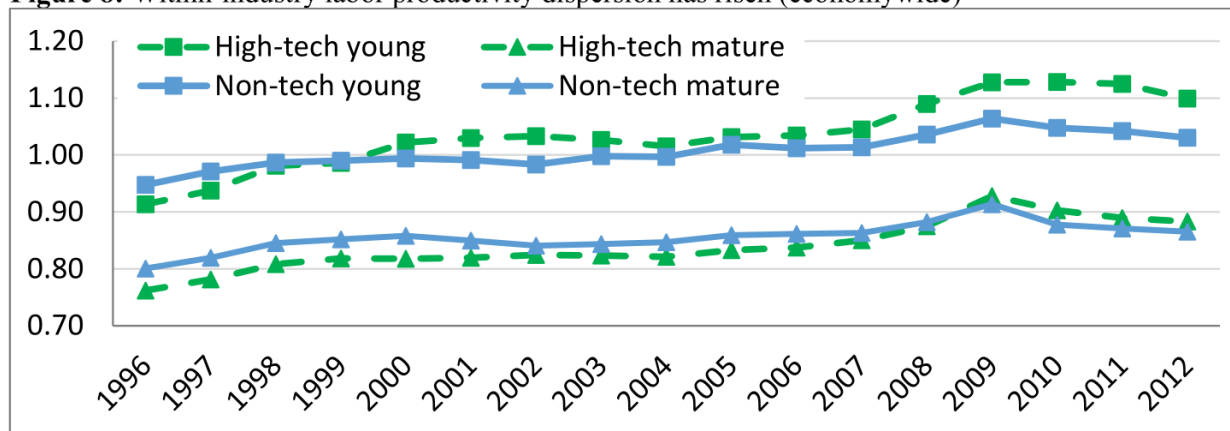
# Productivity dispersion

**Figure 4:** Within-industry TFP dispersion has risen (manufacturing)



Note: Y axis does not start at zero. Young firms have age less than 5. Standard deviation of within-detailed industry log TFPR. High-tech defined as in Hecker (2005). Author calculations from the LBD, the Annual Survey of Manufacturers (ASM), and the Census of Manufacturers (CM). HP Trends.

**Figure 8:** Within-industry labor productivity dispersion has risen (economywide)

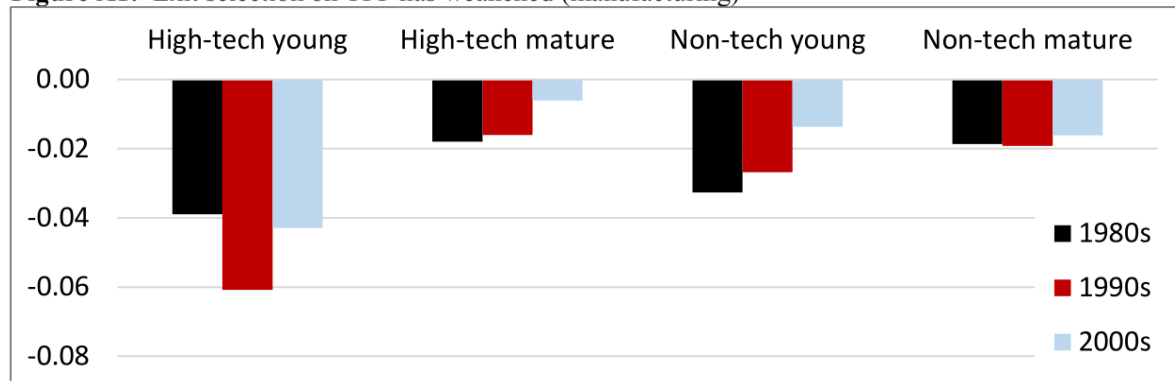


Note: Y axes do not begin at zero. Standard deviation of log labor productivity deviated from industry by year means. Young firms have age less than five. High-tech is defined as in Hecker (2005). Author calculations from the RE-LBD. Finance, Insurance and Real Estate (NAICS 52-53) omitted.



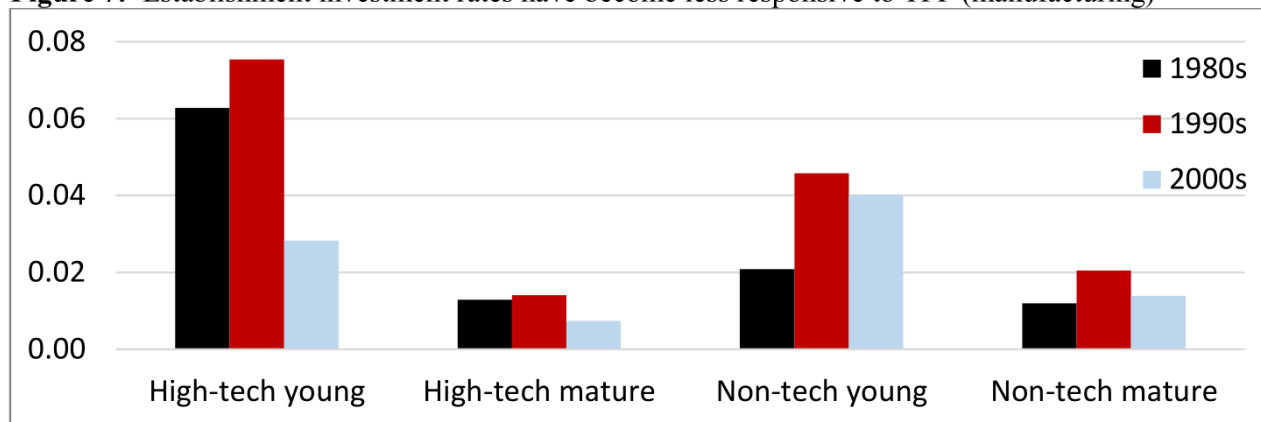
# Weaker selection: exit and investment

**Figure A1:** Exit selection on TFP has weakened (manufacturing)



Note: Young firms have age less than 5. High-tech is defined as in Hecker (2005). Exit probability of plant with TFPR one std. dev. above industry mean vs. industry mean. Author calculations from the Longitudinal Business Database, the Annual Survey of Manufacturers, and the Census of Manufacturers.

**Figure 7:** Establishment investment rates have become less responsive to TFP (manufacturing)



Note: Young firms have age less than 5. High-tech is defined as in Hecker (2005). Investment rate of plant with TFPR one std. dev. above industry mean vs. mean. Author calculations from the LBD, the ASM, and the CM.