

Explaining the Growth Decline in the US

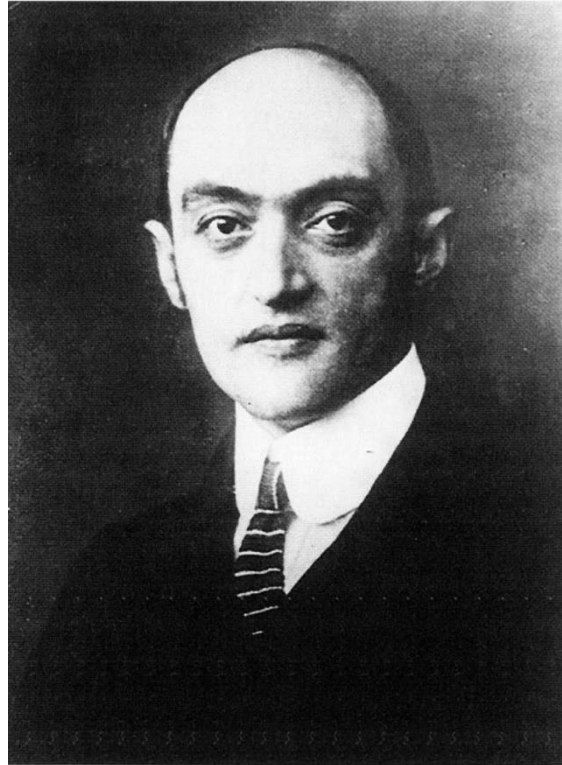
INFER

Philippe Aghion

Peter Howitt

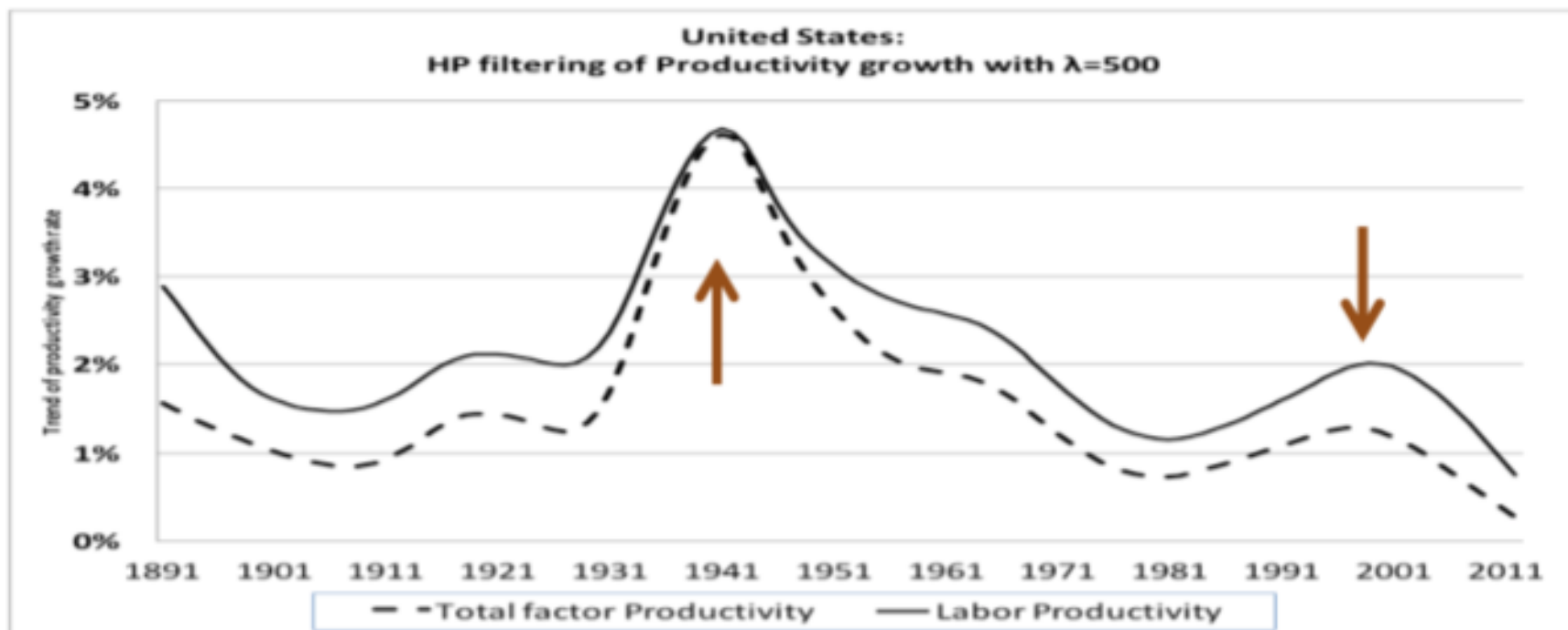


Joseph Schumpeter



Schumpeterian growth theory

- Long-run growth driven by innovations
- Innovations result from entrepreneurial activities motivated by prospect of innovation rents
- Creative destruction: new innovations displace old technologies



Source: Bergeaud, Cette and Lecat (2016) Long term productivity project - www.longtermproductivity.com

- Robert Gordon proposed that the age of great innovations is past (fruit tree metaphor)

Candidate explanations

- Ideas harder to find
- Measurement
- Reallocation
- Super-star firms

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A THEORY OF FALLING GROWTH AND RISING RENTS

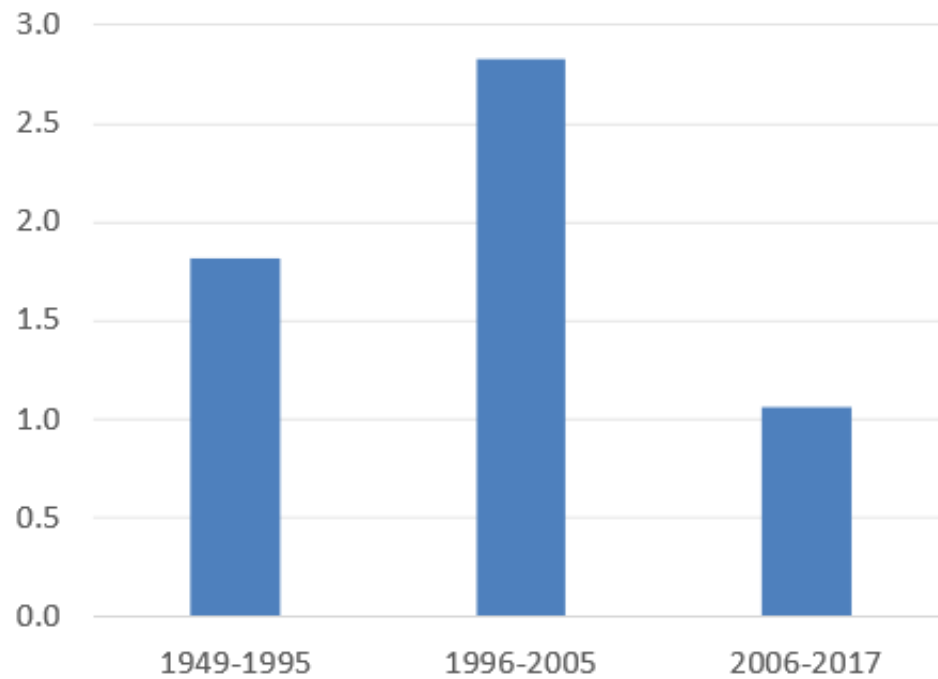
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MOTIVATION

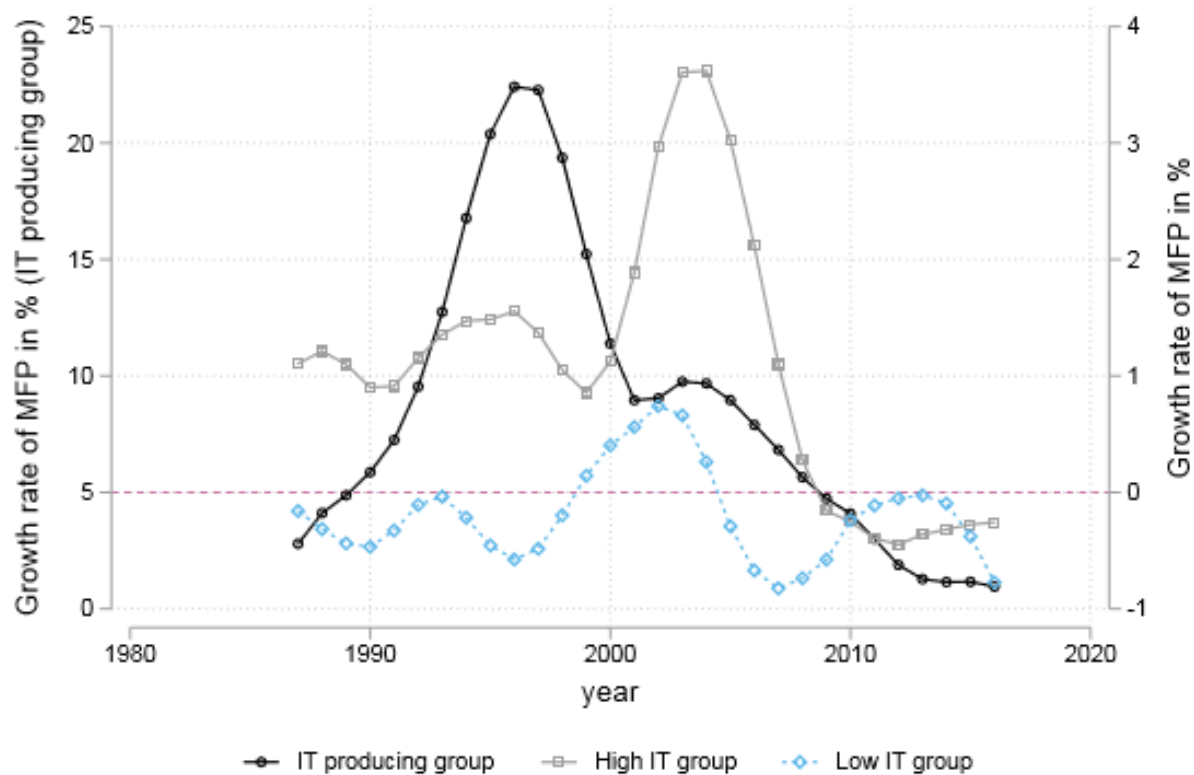
The U.S. economy over the past 30+ years is characterized by the following patterns:

1. Falling “long run” growth (after a burst of growth)
2. Falling labor share (due to composition)
3. Rising concentration

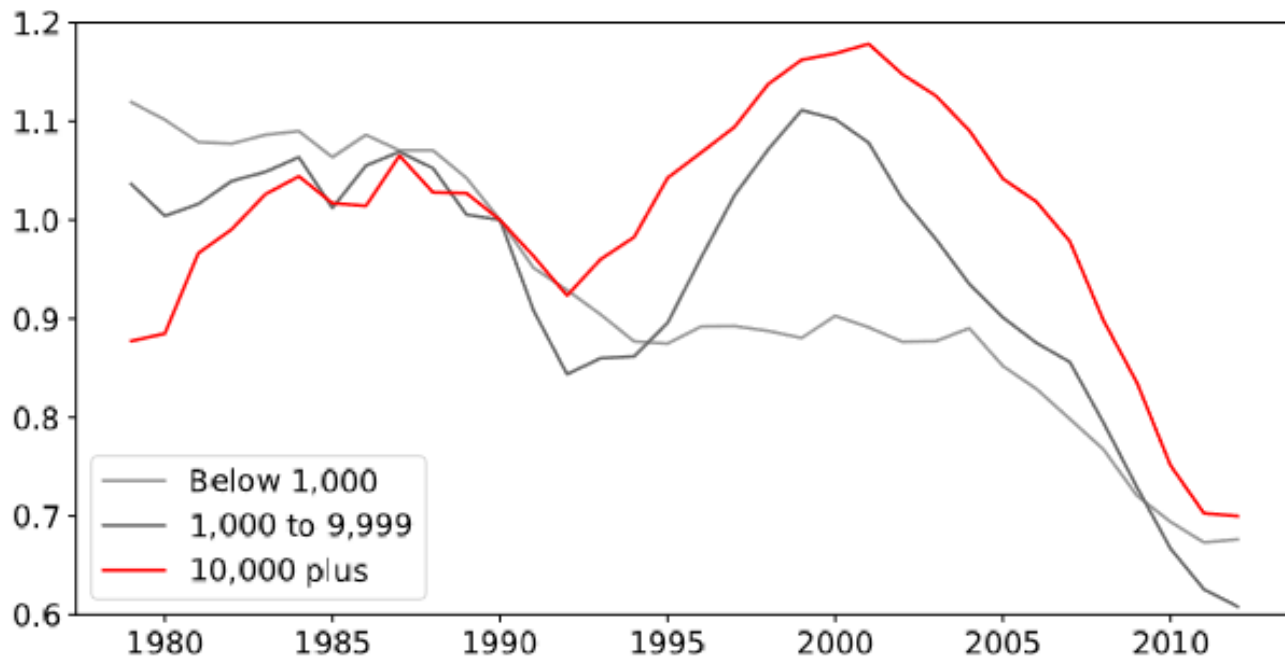
RISE AND DECLINE IN TFP GROWTH



TFP GROWTH BY IT INTENSITY

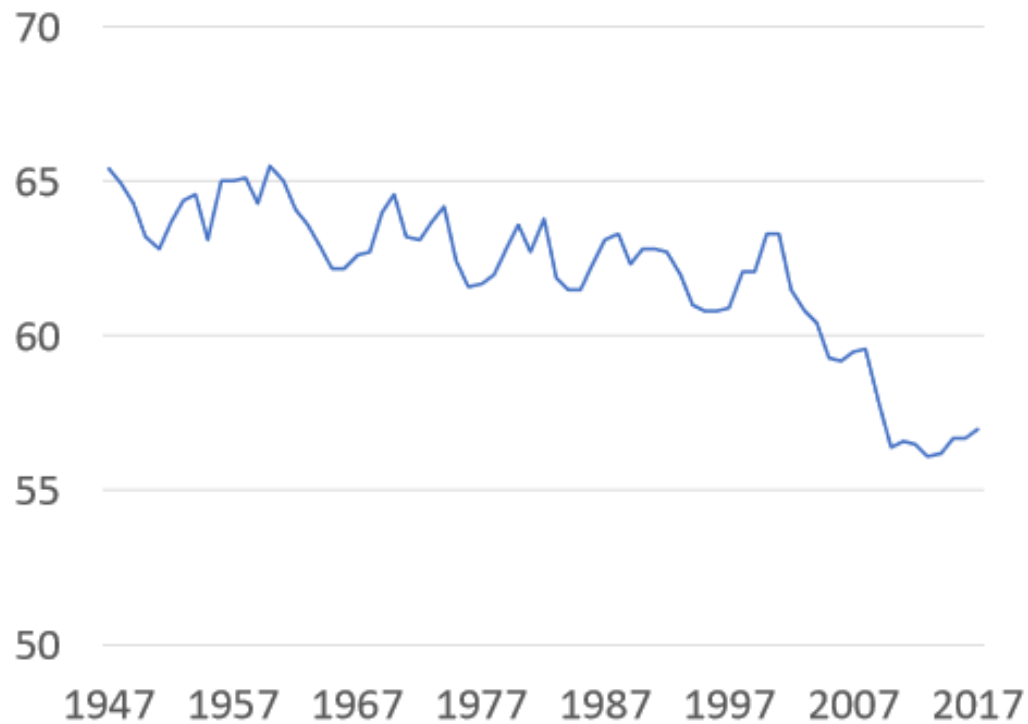


Rise and decline in employment-weighted plant entry rate



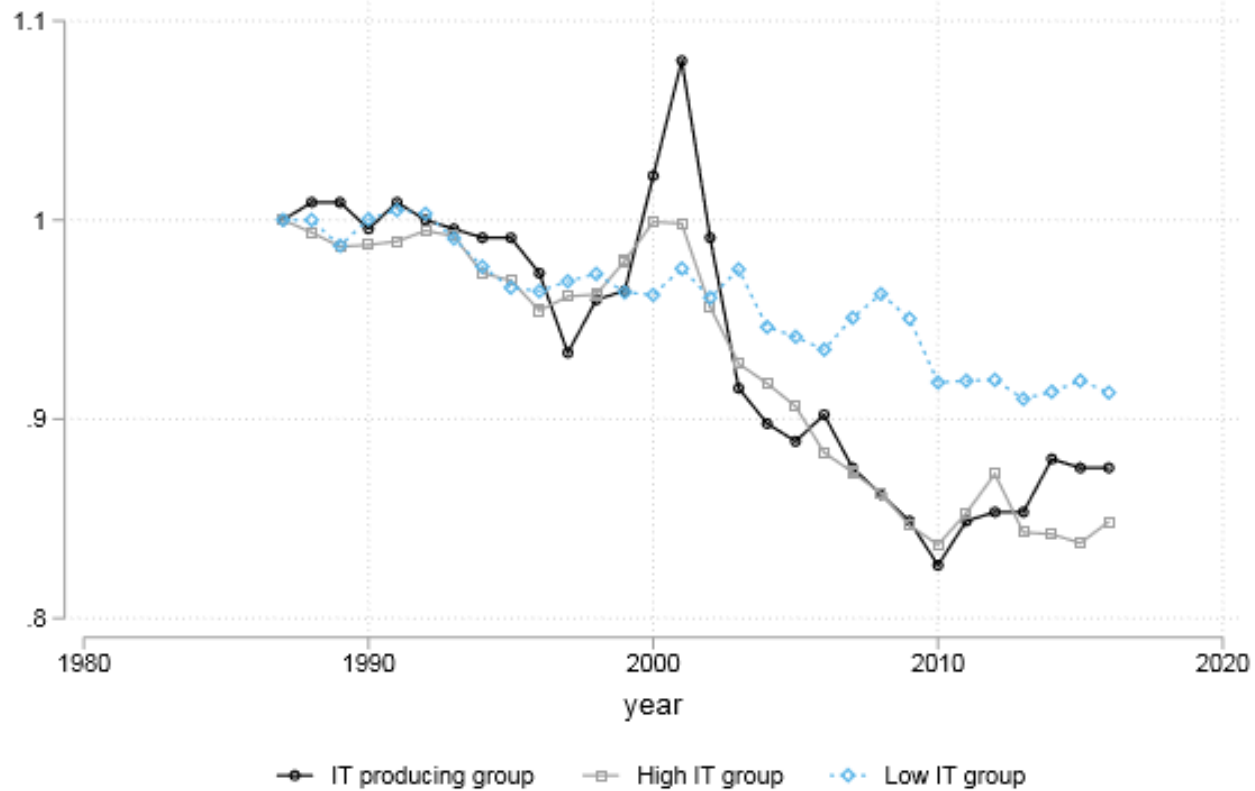
Source: U.S. Census Bureau's *Business Dynamics Statistics*. Job creation by birth over total employment by firm size bins. 5-year centered moving average.

FALLING LABOR INCOME SHARE



Source: BLS

LABOR SHARE BY IT INTENSITY

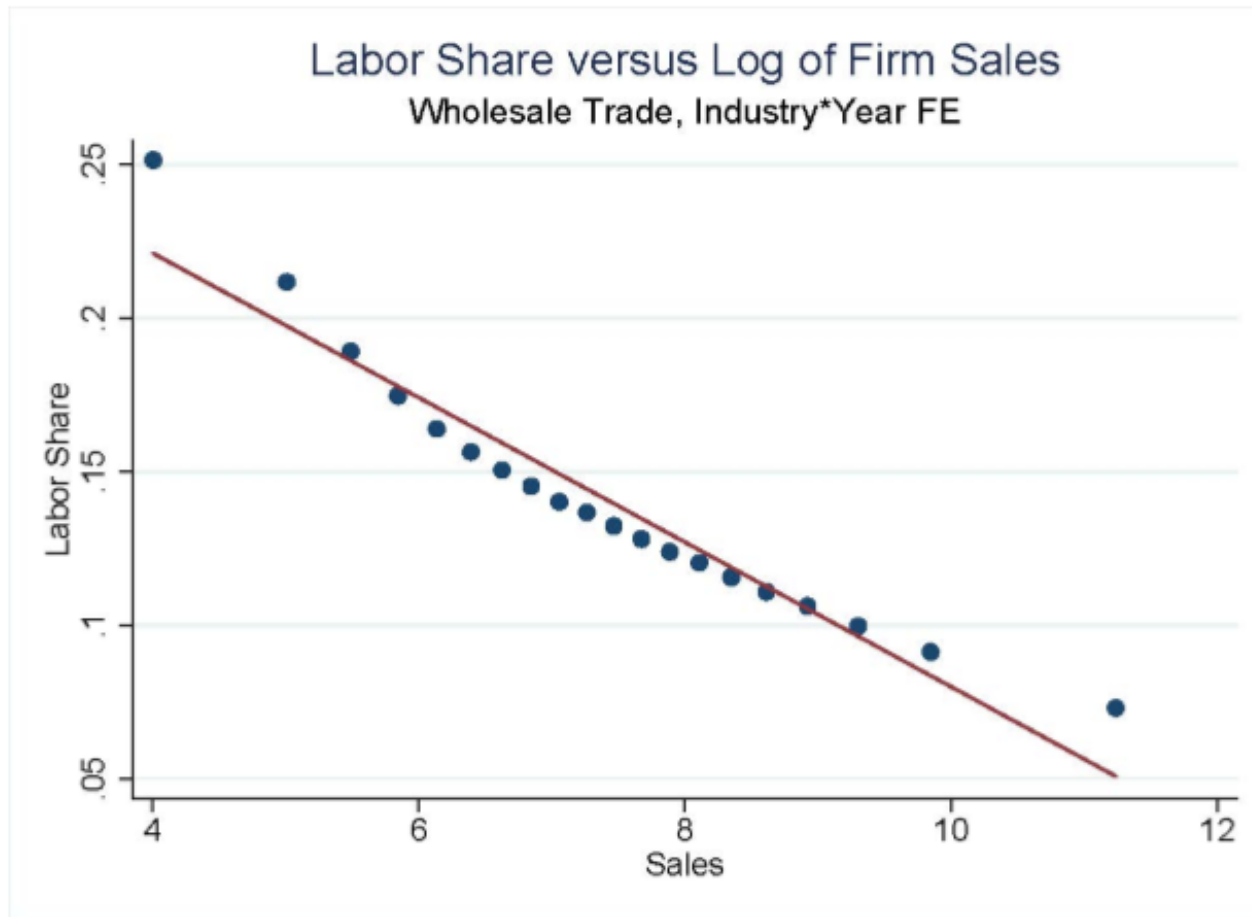


DECLINING LABOR SHARE (MOSTLY DUE TO COMPOSITION)

Cumulative change over specified period (ppt)

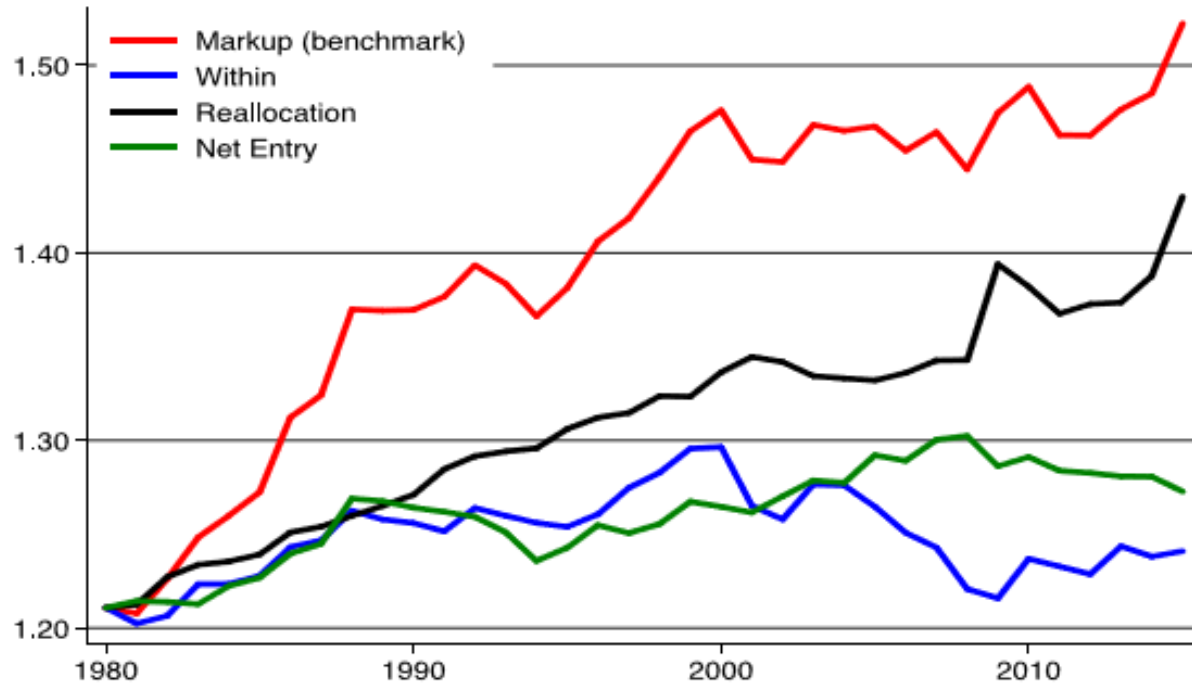
	1982–2012				92–12	92–07
	MFG	RET	WHO	SRV	FIN	UTL
$\Delta \frac{\text{Payroll}}{\text{Sales}}$	-7.01	-0.79	0.19	-0.19	3.25	-1.89
within	-1.19	3.74	4.01	2.43	6.29	0.58
between	-4.97	-4.03	-4.38	-0.44	-3.62	-2.39

Firm Size and Labor Share



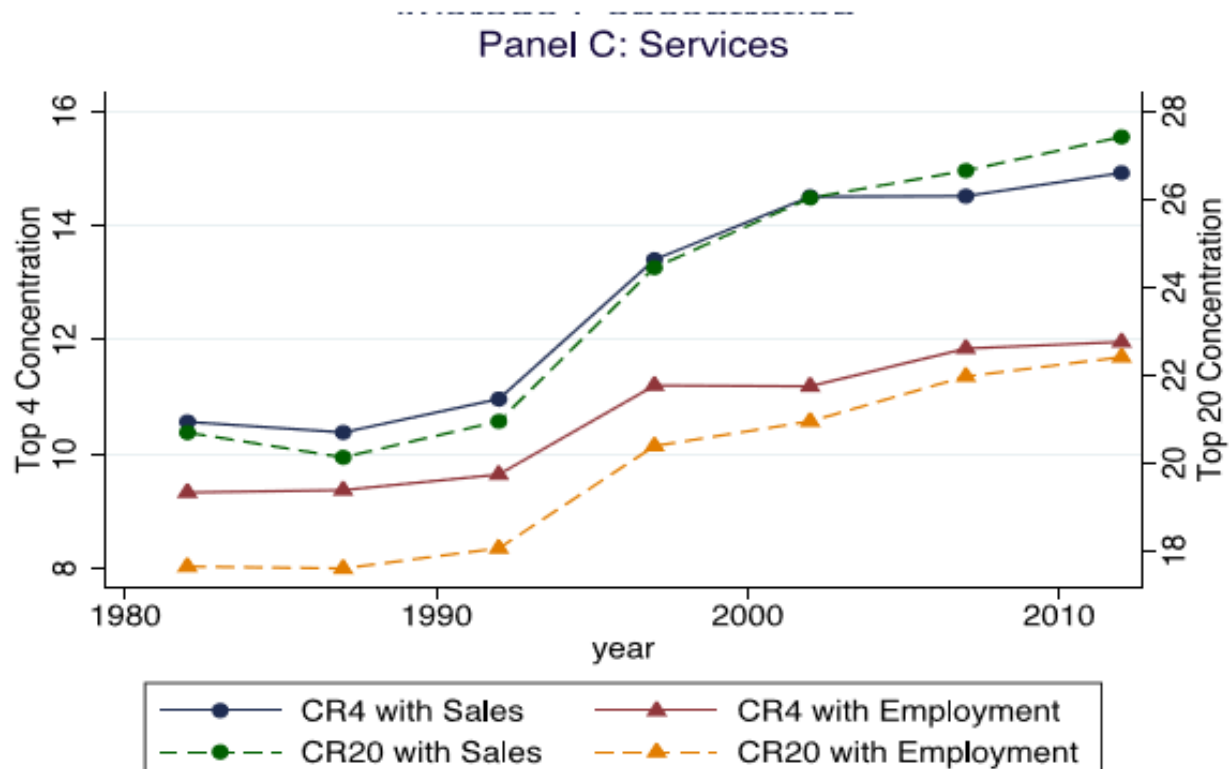
Source: Autor et al. (2019), Figure 5.

WITHIN FIRM MARKUPS



Source: De Loecker, Eeckhout and Unger (2018).

RISING CONCENTRATION IN SERVICES



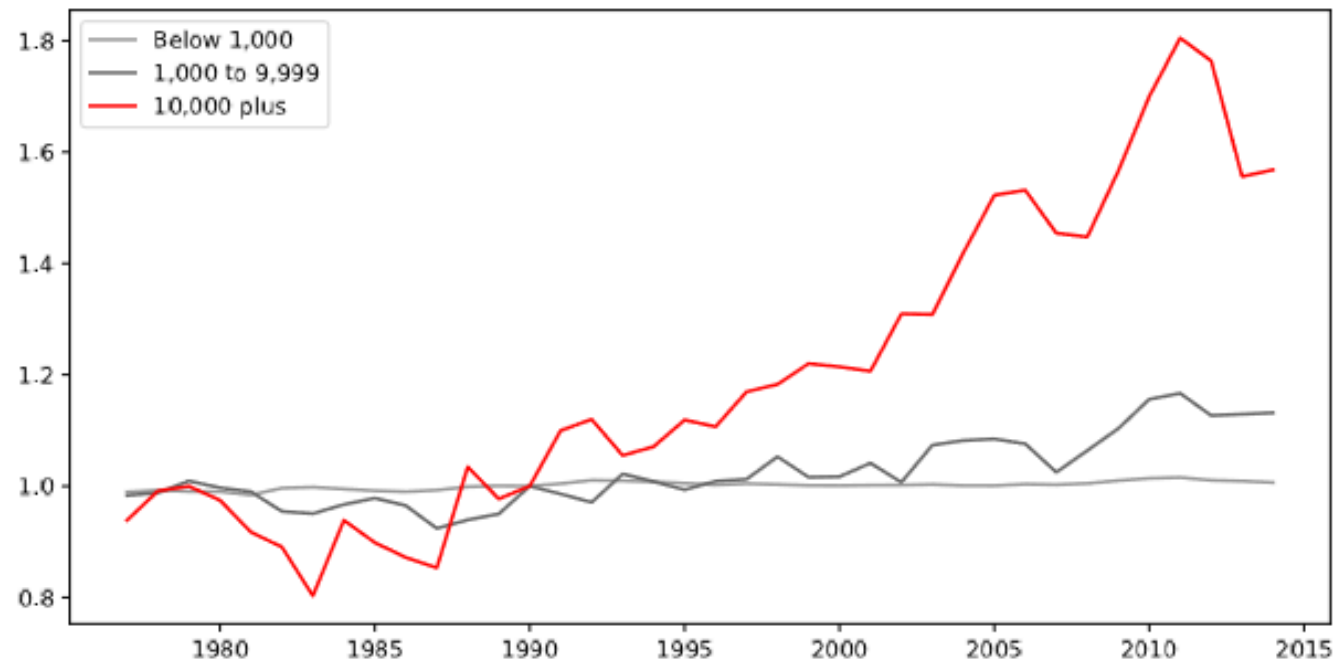
Rising National Concentration

Cumulative change over specified period (ppt)

	MFG	1982–2012		SRV	92–12	92–07
		RET	WHO		FIN	UTL
Δ Top 4 firms sales share	4.2	15.0	2.4	4.2	8.4	5.7
Δ Top 20 firms sales share	4.8	16.2	6.0	6.0	14.4	3.6

Autor et al. 2017 Table 1. Sales-weighted across 4-digit industries.

Rising Establishments per Firm



Source: U.S. Census Bureau's *Business Dynamics Statistics*

Our story

- IT revolution induces a downward shift in the convex overhead cost of running n lines
- Super-star firms will expand at the expense of non-super star firms
- R&D investment and entry by non-super-star firms will be partly discouraged



Conclusion

- Super-star story appears to best fit the evidence
- More optimistic story as it suggests a role for policy in stopping the growth decline
 - Rethink M&A policy (Gilbert)
 - Ease data access
 - Break up policy?

Conclusion

- Need to adapt institutions to technological revolutions!