

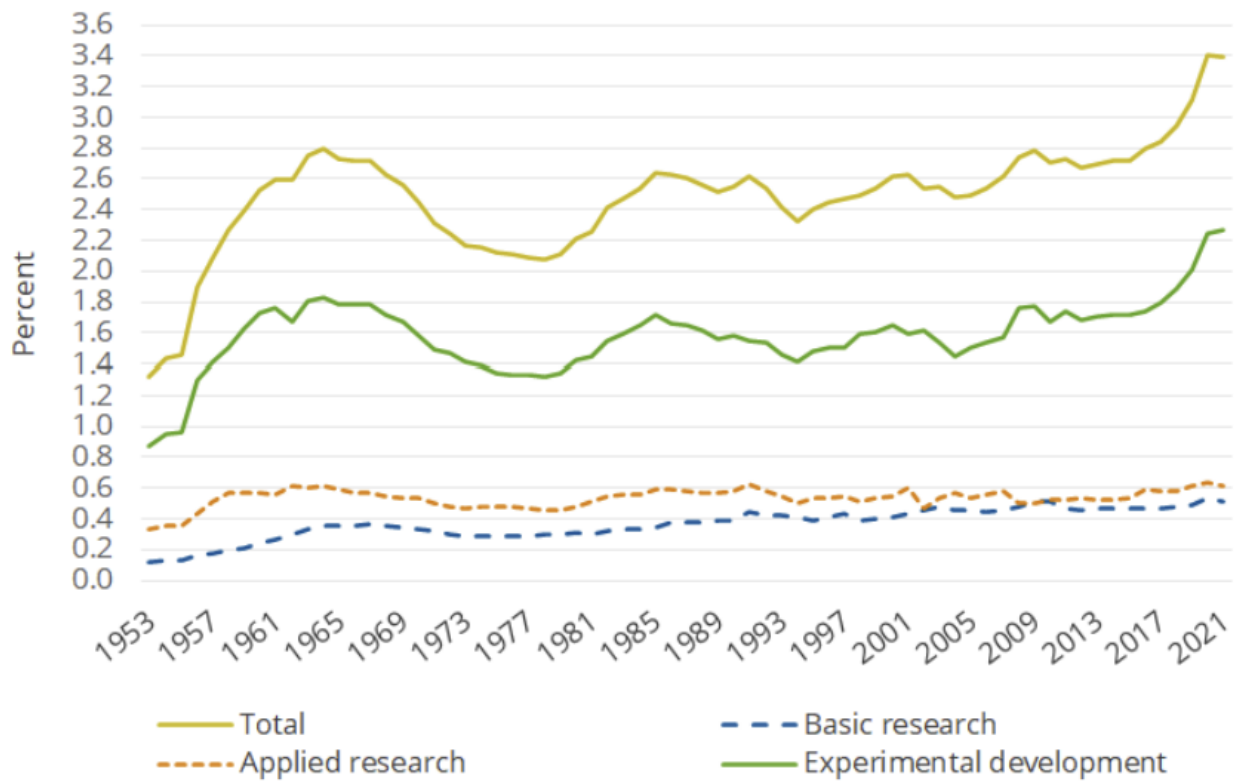
# **Economic Renaissance: Unleashing Business Dynamism for Economic Growth**

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University of Chicago

***World Bank***  
***22 January 2024***

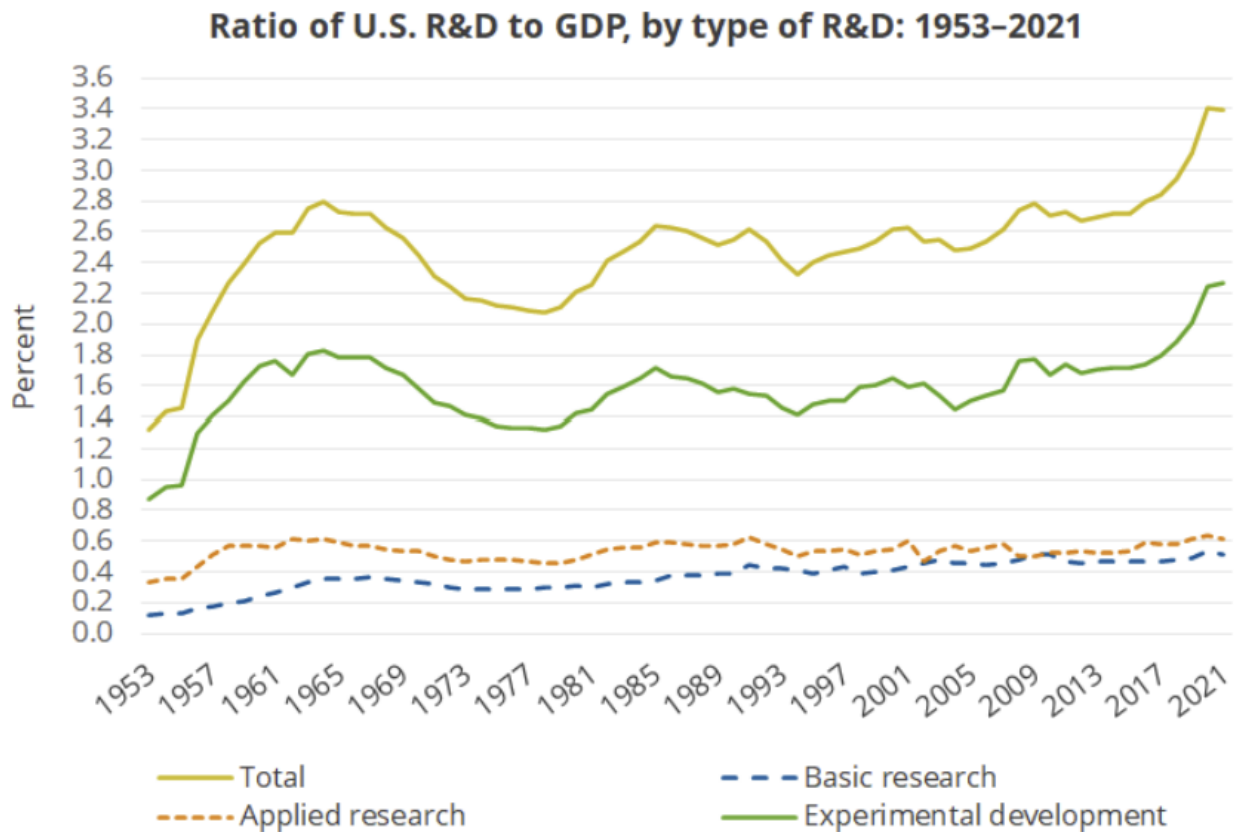
# R&D/GDP Has Increased

Ratio of U.S. R&D to GDP, by type of R&D: 1953-2021



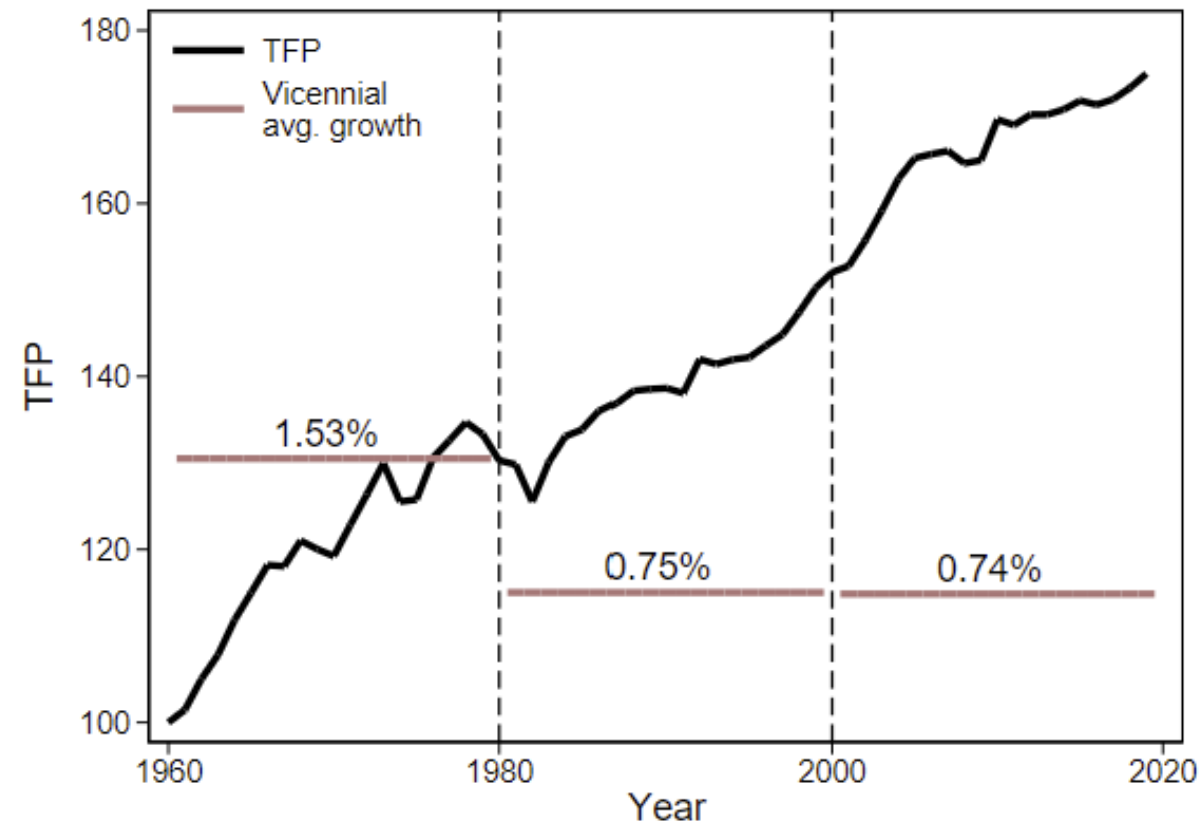
Source: NSF

# R&D/GDP Has Increased



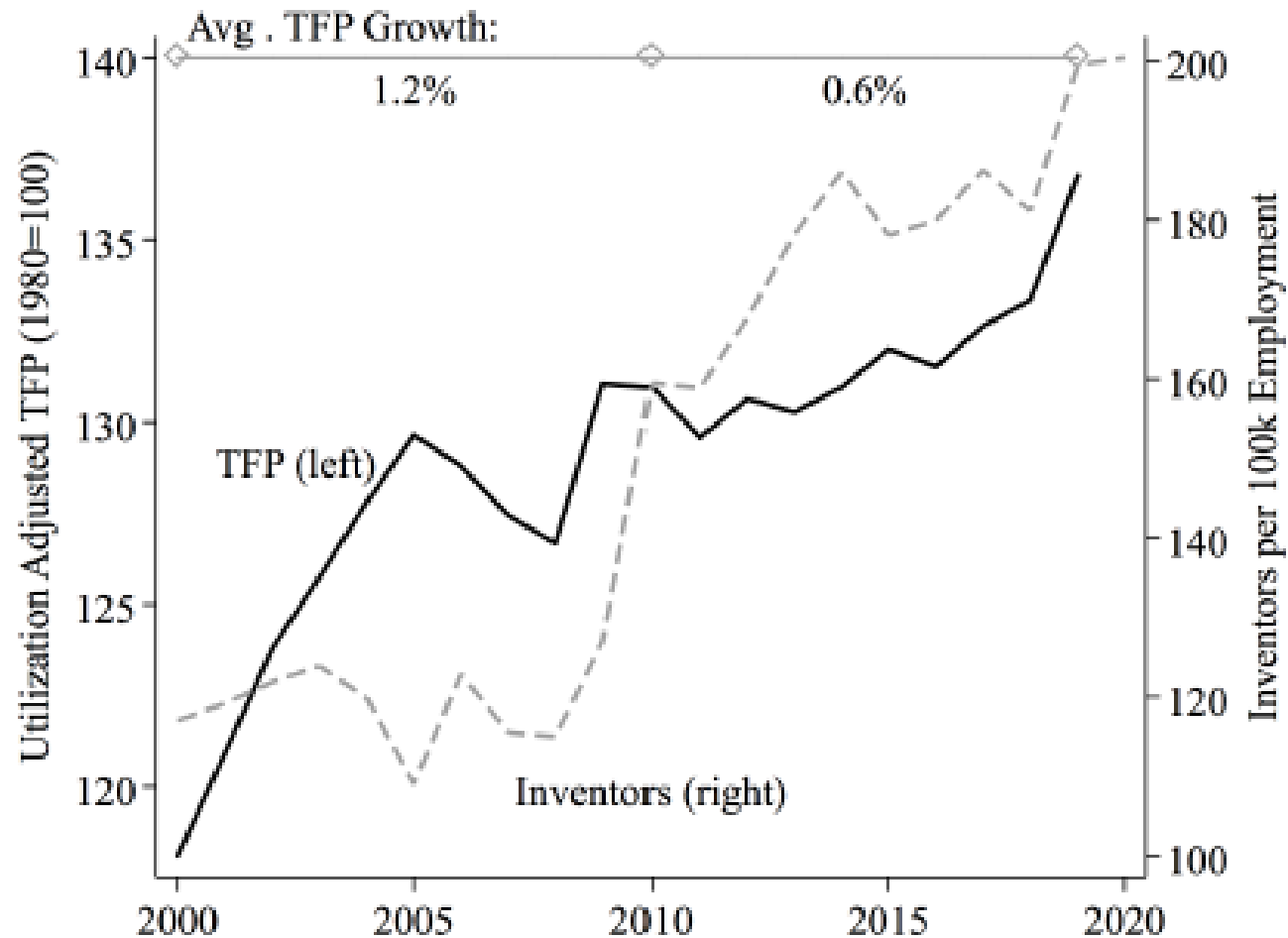
Source: NSF

# TFP (Growth) Slow Down



Source: BLS+FRED

# Yet Productivity Growth Has Slowed Down



**(A) TFP & INVENTORS**

Source: Akcigit and Goldschlag (2023)

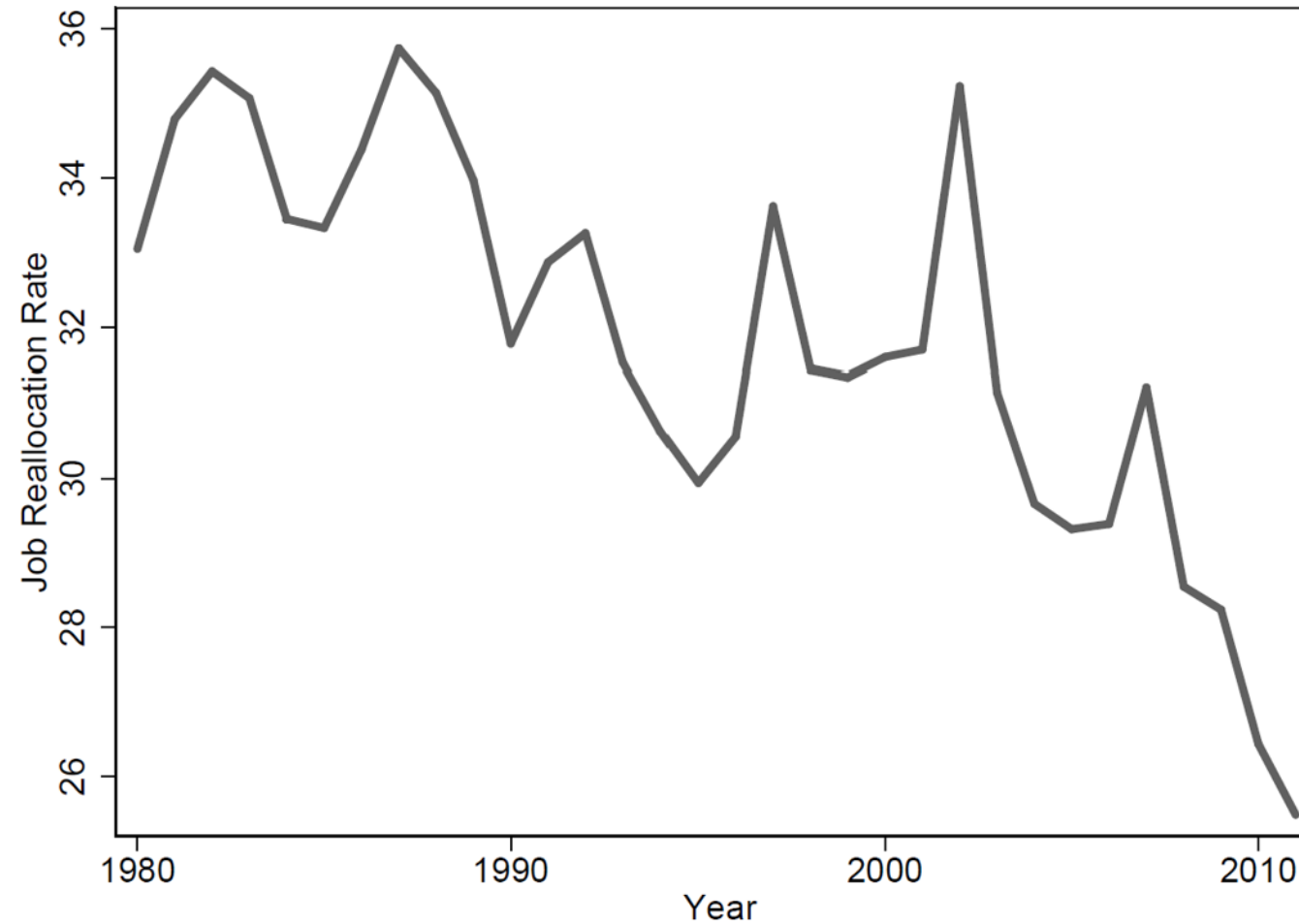
Data: US Census Bureau

# How to Diagnose the Problem?

- Basic growth theory says: More R&D, more dynamism, more growth!
- Need to go to micro-level analysis.
- In the US, 50%-75% of growth comes from **reallocation!**
- How does **business dynamism** look like in the US?

# Job reallocation has slowed down.

Figure: GROSS JOB REALLOCATION



Source: Decker, Haltiwanger, Jarmin, and Miranda (2016a).

# Job Reallocation Rate

- Why did it slow down? Is it good or bad?
- Reallocation can happen due to:
  - 1) new entry
  - 2) Incumbent expansion

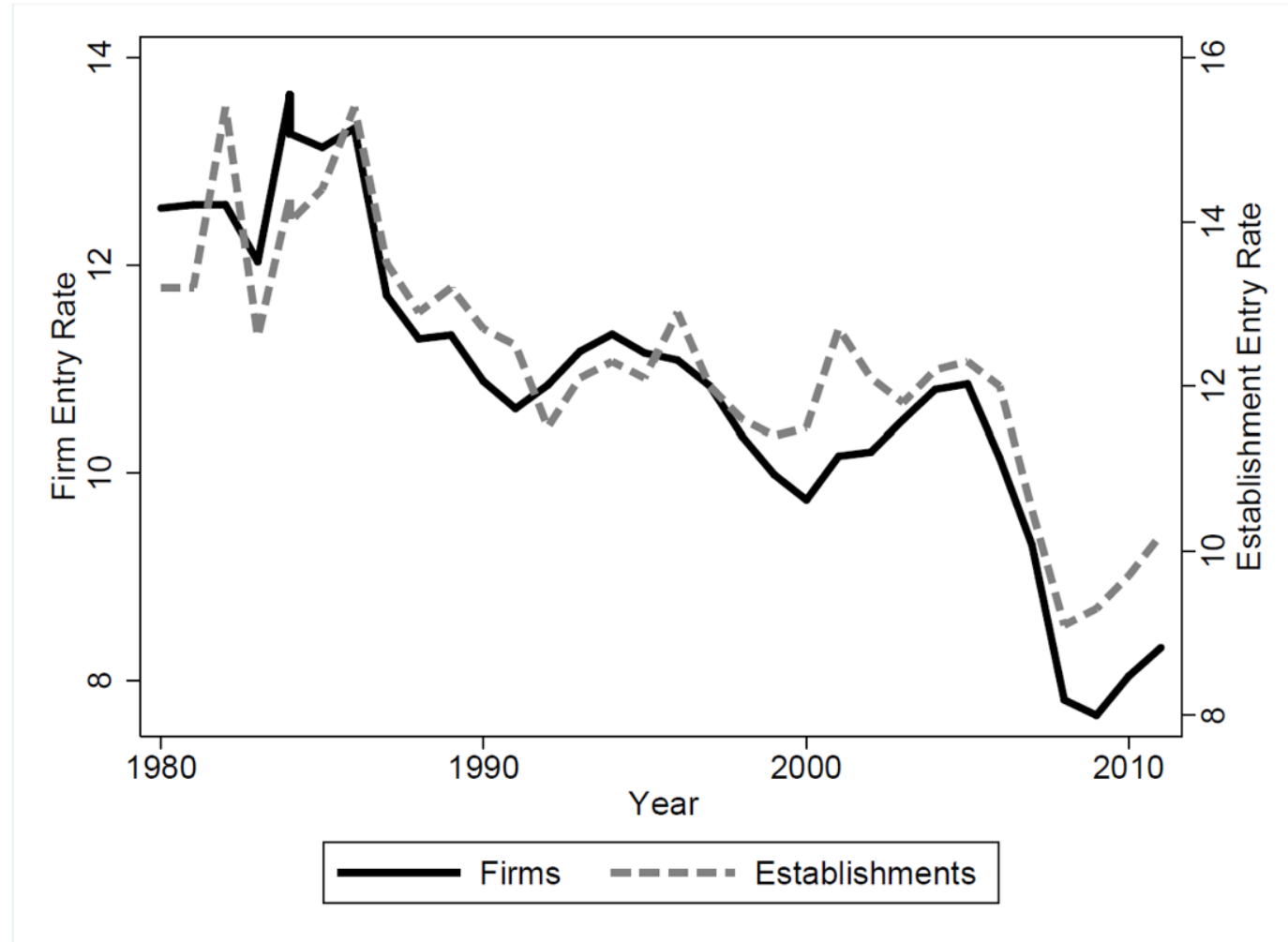
# 10-Step Vital Sign Check!

1. Changes in market shares of leaders
2. Changes in market power (markups)
3. Changes in profits (not same with markups)
4. Changes in labor share
5. Link between market share and labor share
6. Changes in productivity dynamics (are changes driven by productivity?)
7. Changes in entry
8. Changes in young firm activity
9. Changes in job reallocation
10. Changes in growth rate distribution



# Firm entry rate has declined.

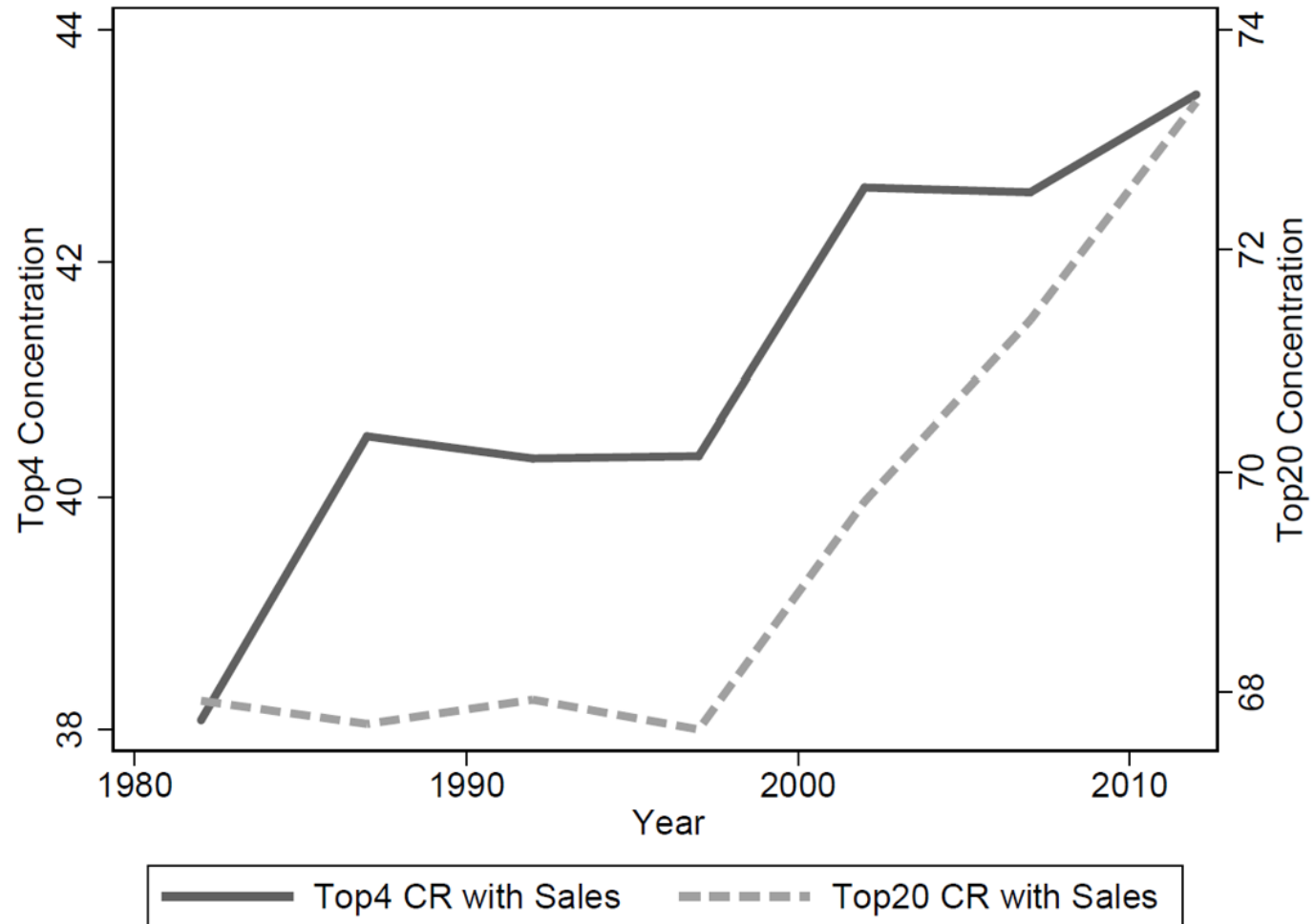
Figure: FIRM AND ESTABLISHMENT ENTRY RATES IN THE UNITED STATES



Source: Authors' calculations from BDS database [see also Decker, Haltiwanger, Jarmin, and Miranda (2016a)].

# Market concentration has risen.

Figure: MARKET CONCENTRATION IN MANUFACTURING



Source: Autor, Dorn, Katz, Patterson, and Van Reenen

# Productivity gap b/n leaders and followers widened.

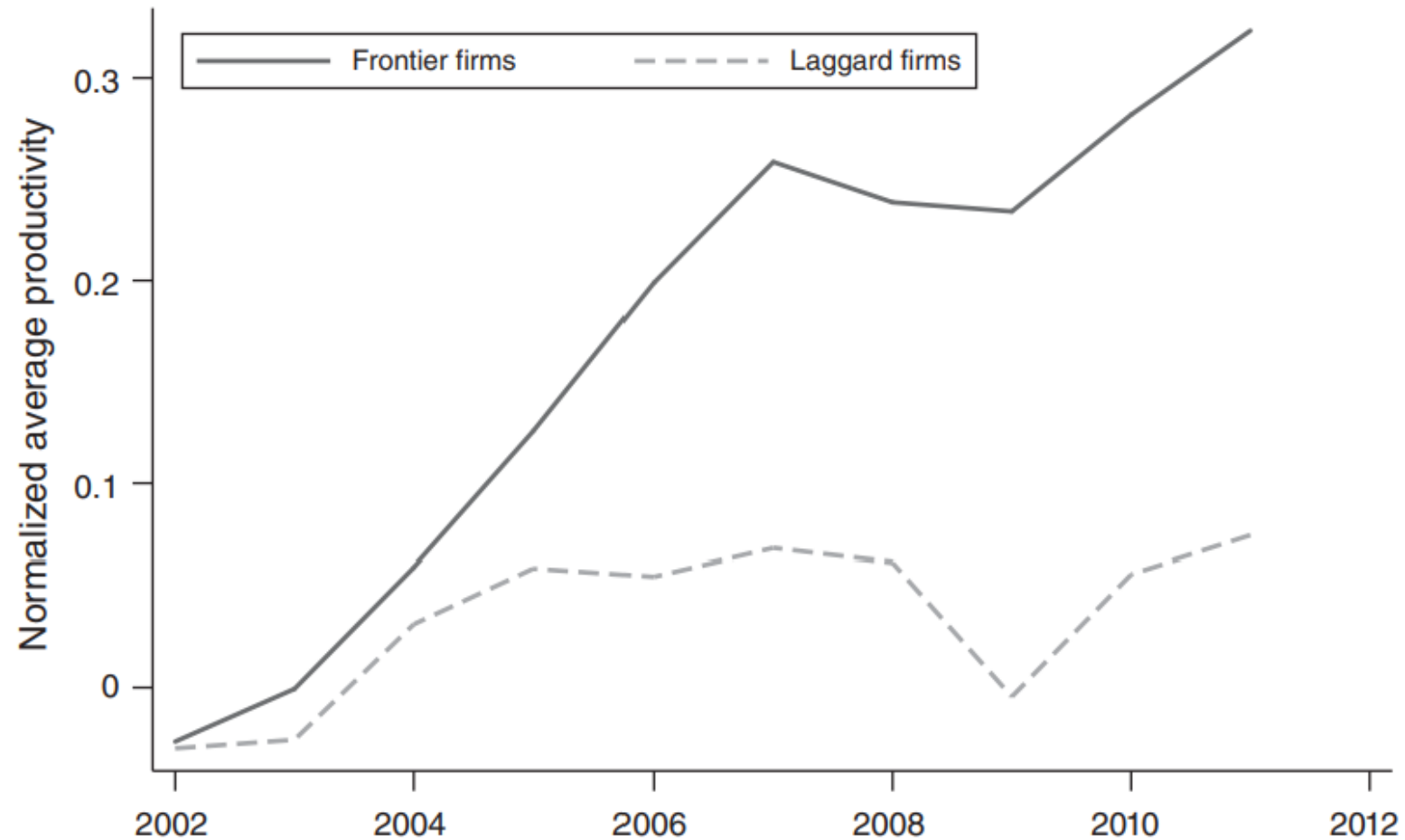


FIGURE 6. LABOR PRODUCTIVITY OF FRONTIER AND LAGGARD FIRMS

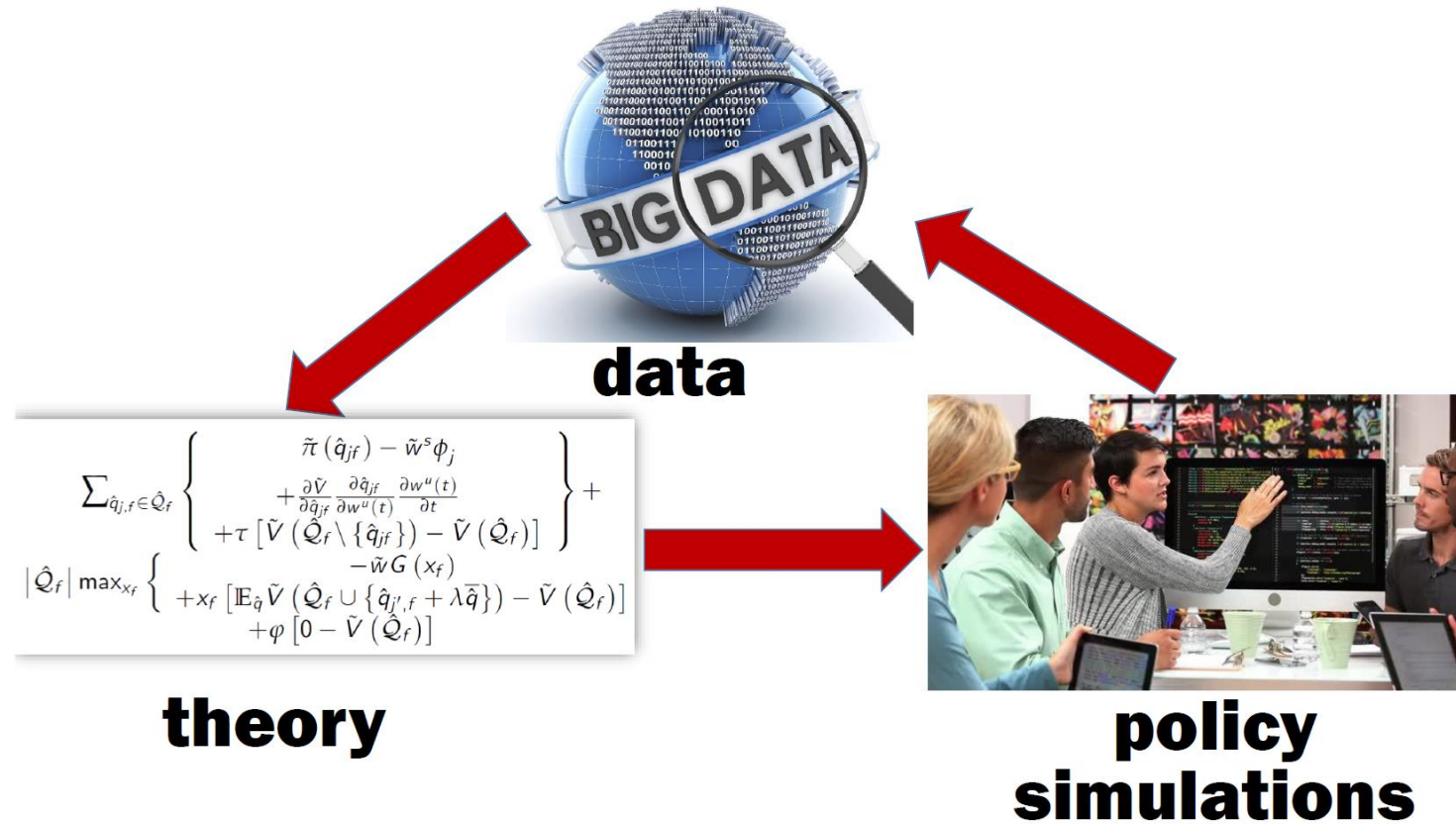
*Note:* Labor productivity is defined as real value added per worker.

*Source:* Andrews, Criscuolo, and Gal (2016)

- The US economy has experienced a decline in its business dynamism since 1980:
  1. *Market concentration has risen.*
  2. *Average markups have increased.*
  3. *Average profits have increased.*
  4. *The labor share of output has gone down.*
  5. *Market concentration and the labor share are negatively associated.*
  6. *The labor productivity gap between frontier and laggard firms has widened.*
  7. *Firm entry rate has declined.*
  8. *The share of young firms in economic activity has declined.*
  9. *Job reallocation has slowed down.*
  10. *The dispersion of firm growth has decreased.*

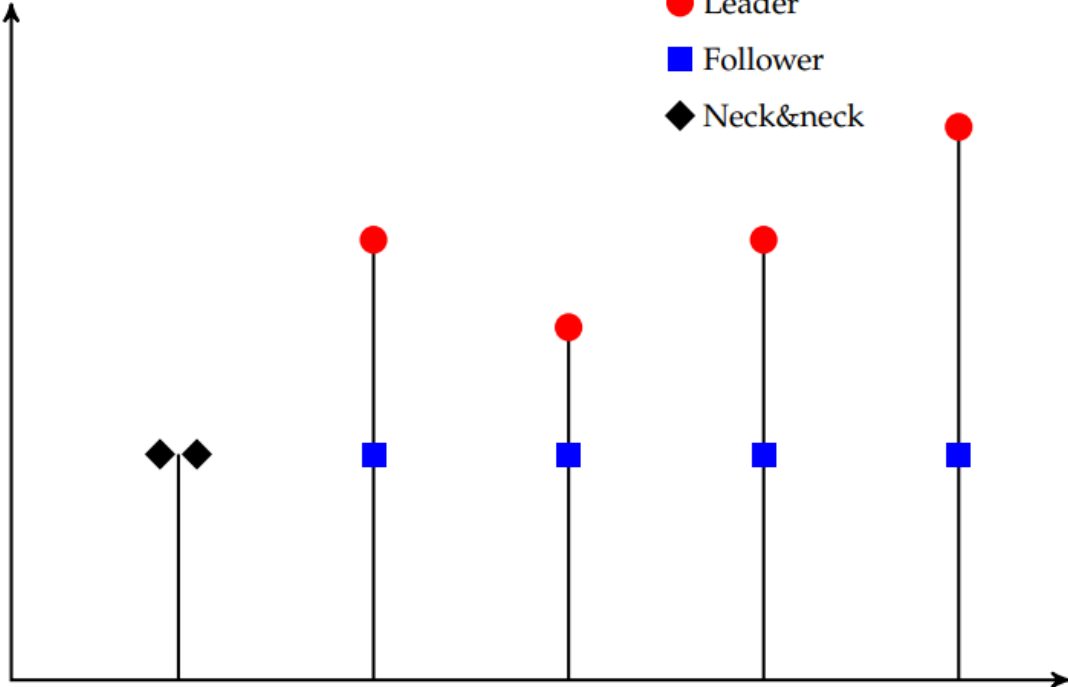
Source: Akcigit and Ates (2023, JPE)

# Need a Dialogue Between Theory and Data



*quality, q*

- Leader
- Follower
- ◆ Neck&neck



line 1

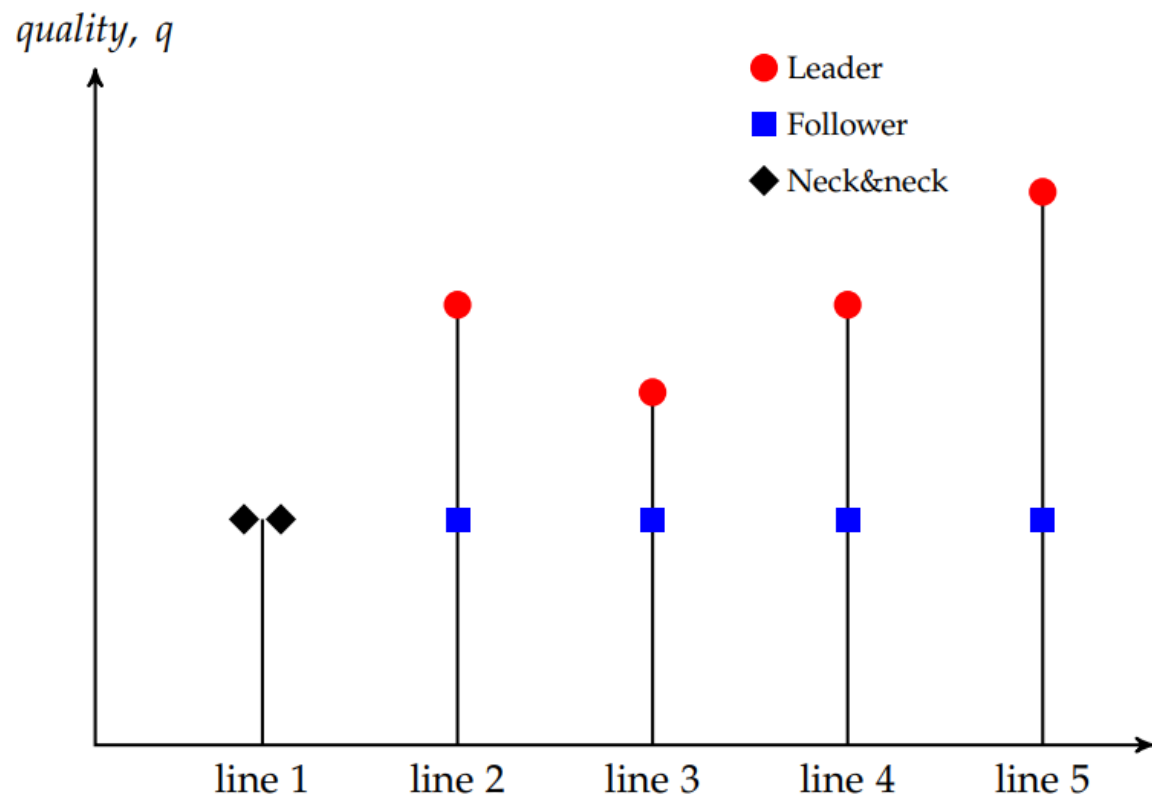
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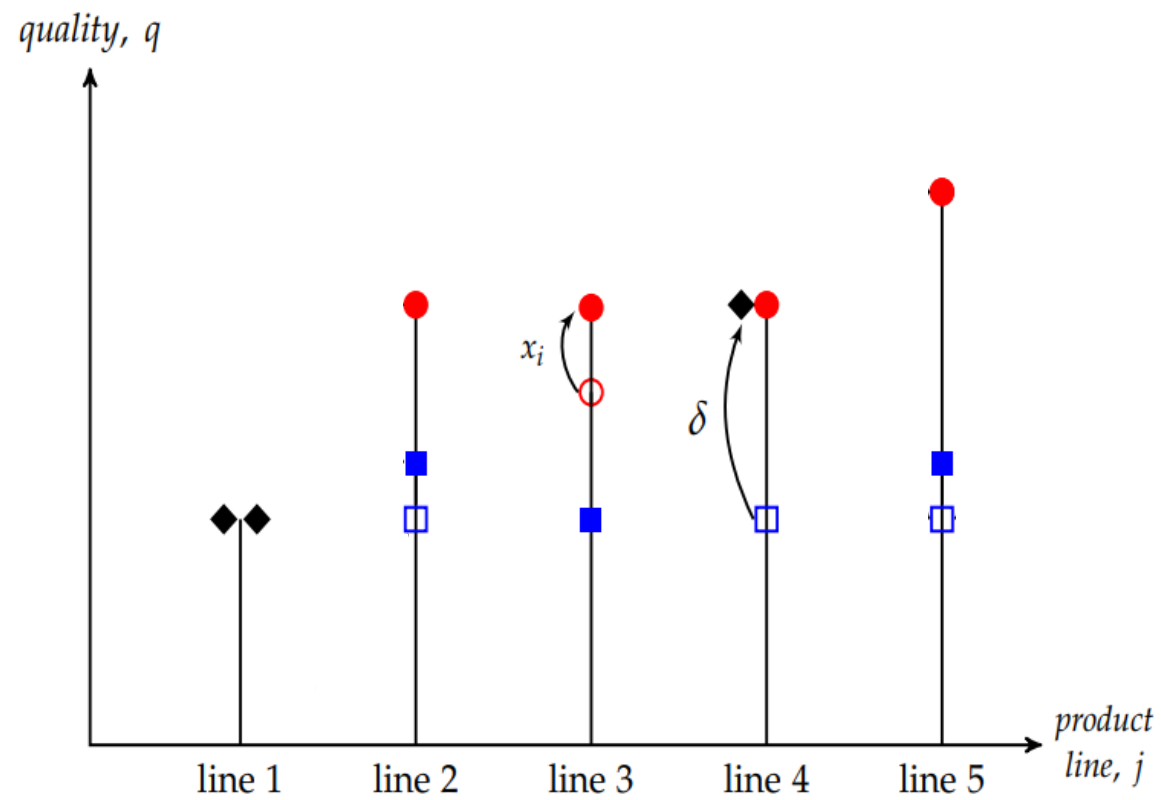
line 4

line 5

A) Product lines



A) Product lines



B) Entry, exit, and leadership

# Diagnosing the Symptoms

Table: Qualitative experiment results

	Data	Lower corporate tax	Higher R&D subsidies	Higher entry cost	Lower knowledge diffusion	Declining interest rate	Ideas getting harder	Weaker worker power
Concentration	↑							
Markups	↑							
Profit share	↑							
Labor share	↓							
Frontier vs. laggard gap	↑							
Entry	↓							
Young firms' empl. share	↓							
Gross job reallocation	↓							
Dispersion of firm growth	↓							

*Robust to alternative mechanisms / specifications!*

Source: Akcigit and Ates (2023, JPE)



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# Final Diagnosis of the US Economy

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	Data	Lower corporate tax	Higher R&D subsidies	Higher entry cost	Lower knowledge diffusion	Declining interest rate	Ideas getting harder	Weaker worker power
Concentration	↑	↔	↔	↔	↑	↔	↓	↔
Markups	↑	↔	↔	↔	↑	↔	↓	↑
Profit share	↑	↔	↓	↔	↑	↓	↓	↑
Labor share	↓	↔	↑	↔	↓	↑	↑	↓
Frontier vs. laggard gap	↑	↔	↔	↔	↑	↔	↔	↑
Entry	↓	↑	↔	↓	↓	↑	↓	↑
Young firms' empl. share	↓	↔	↓	↓	↓	↔	↓	↔
Gross job reallocation	↓	↑	↑	↔	↓	↑	↓	↑
Dispersion of firm growth	↓	↓	↓	↑	↓	↓	↑	↓

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# Final Diagnosis of the US Economy

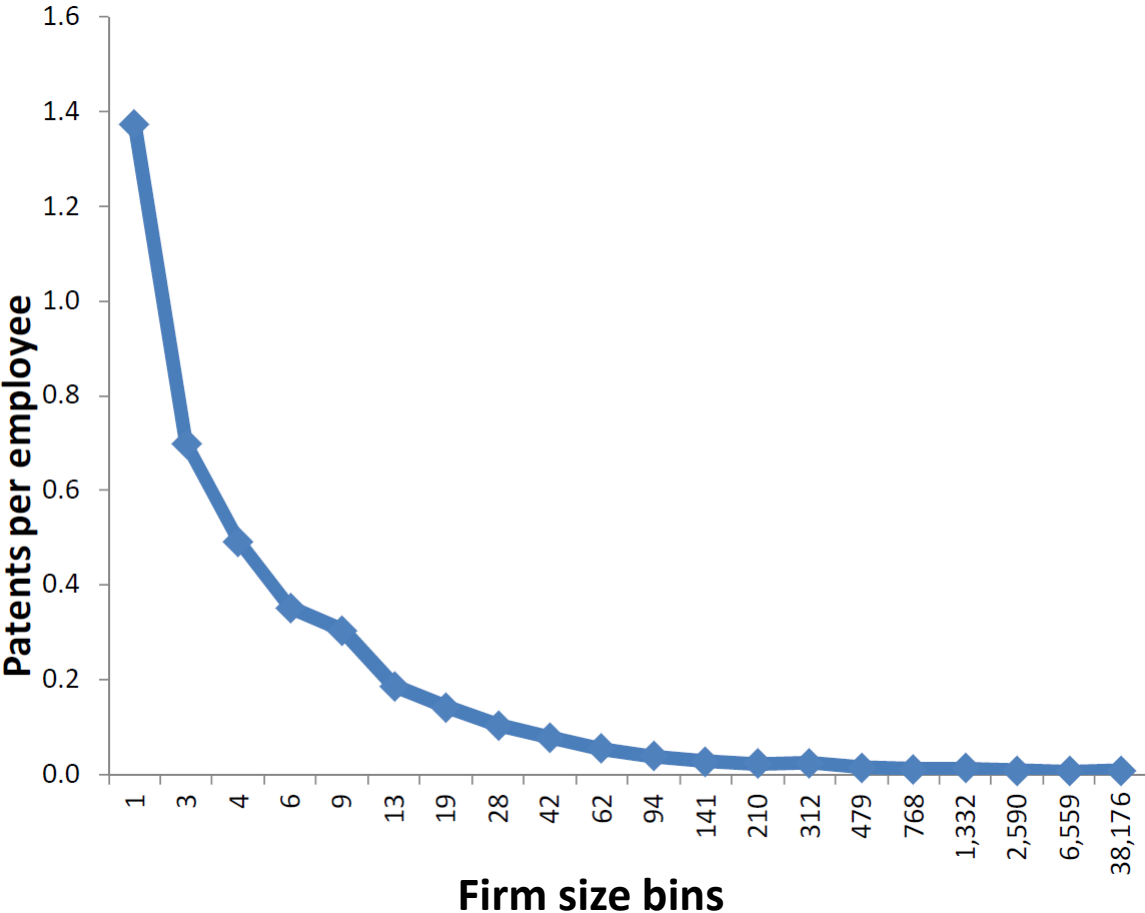
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Labor share	↓	↔	↑	↔	↓	↑	↑	↓
Frontier vs. laggard gap	↑	↔	↔	↔	↑	↔	↔	↑
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Young firms' empl. share	↓	↔	↓	↓	↓	↔	↓	↔
Gross job reallocation	↓	↑	↑	↔	↓	↑	↓	↑
Dispersion of firm growth	↓	↓	↓	↑	↓	↓	↑	↓

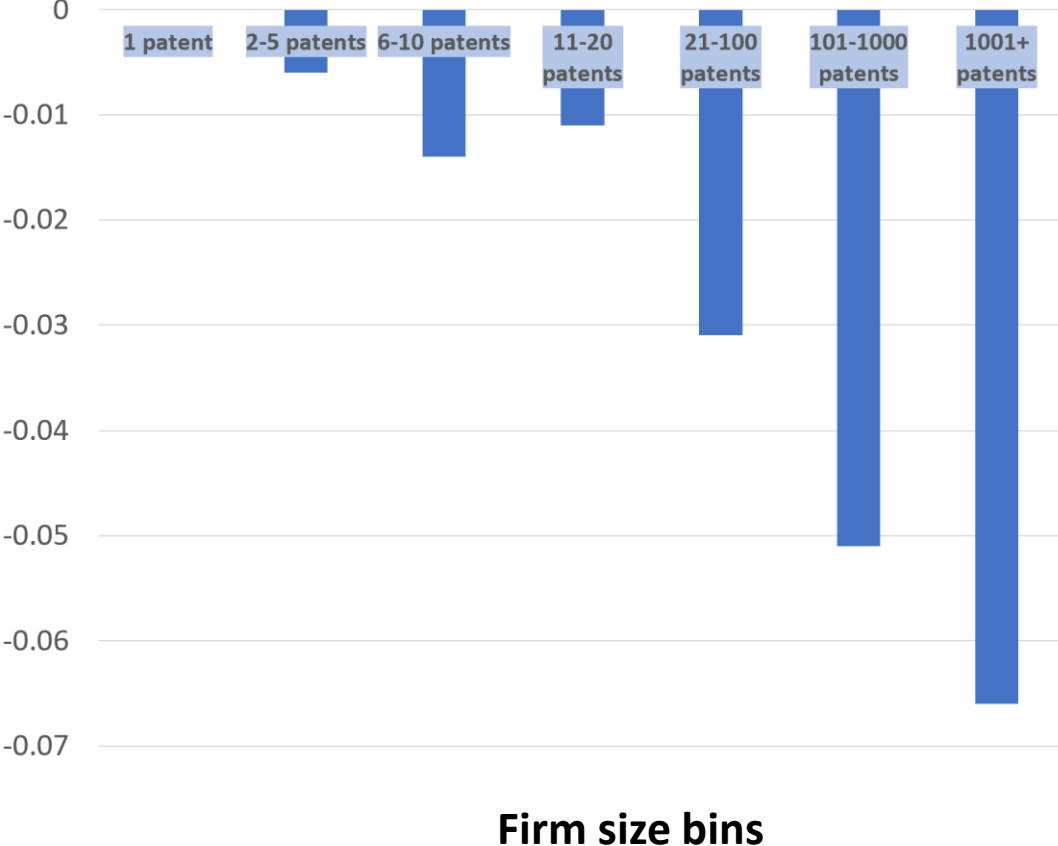
*Robust to alternative mechanisms / specifications!*

# Role of Different Sized Firms for Innovation

**Figure: Innovation Intensity by Firm Size**



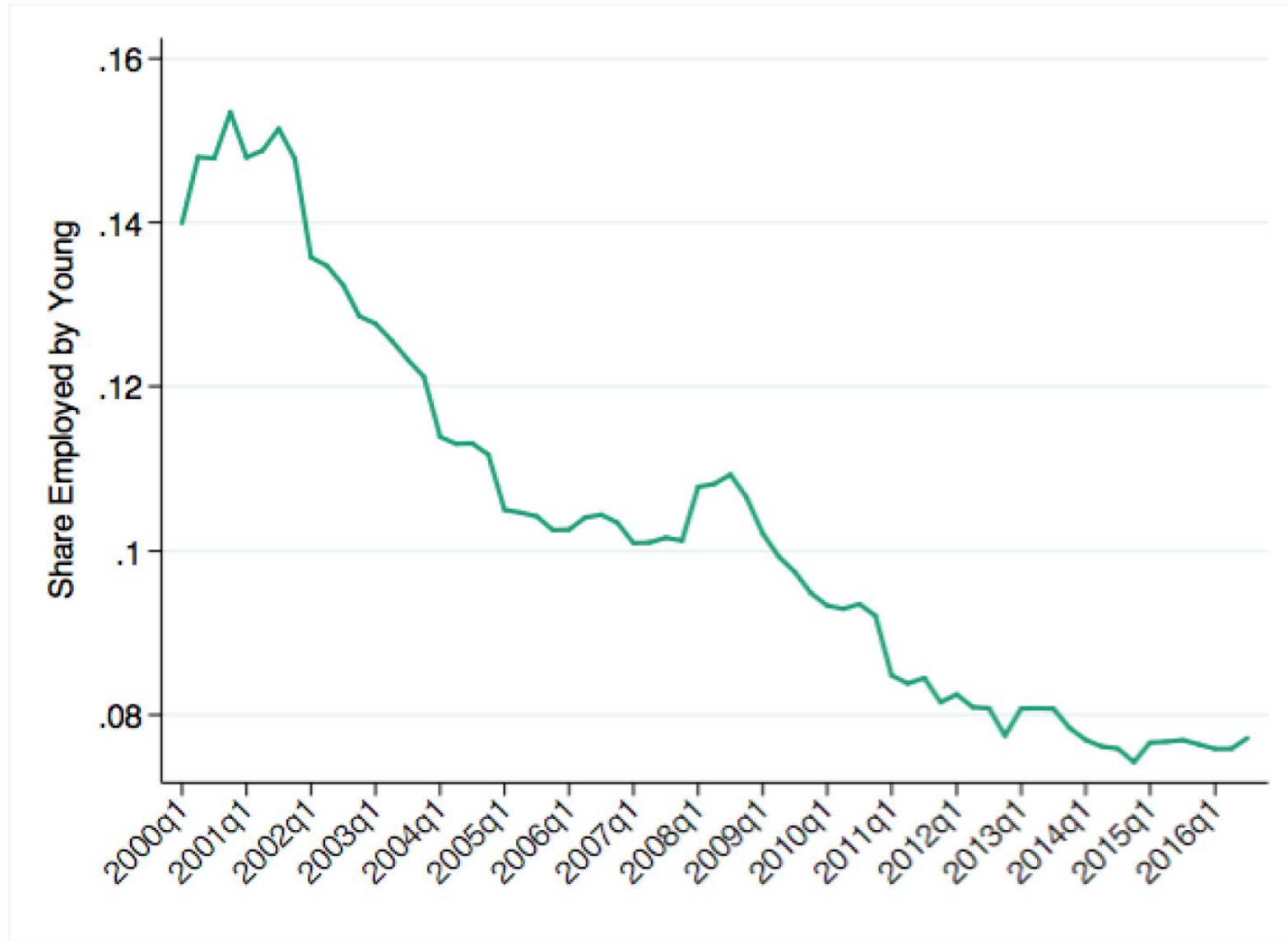
**Figure: Fraction of Major Innovations by Firm Size**



Source: Akcigit and Kerr (2018, JPE)

Data: US Census Bureau

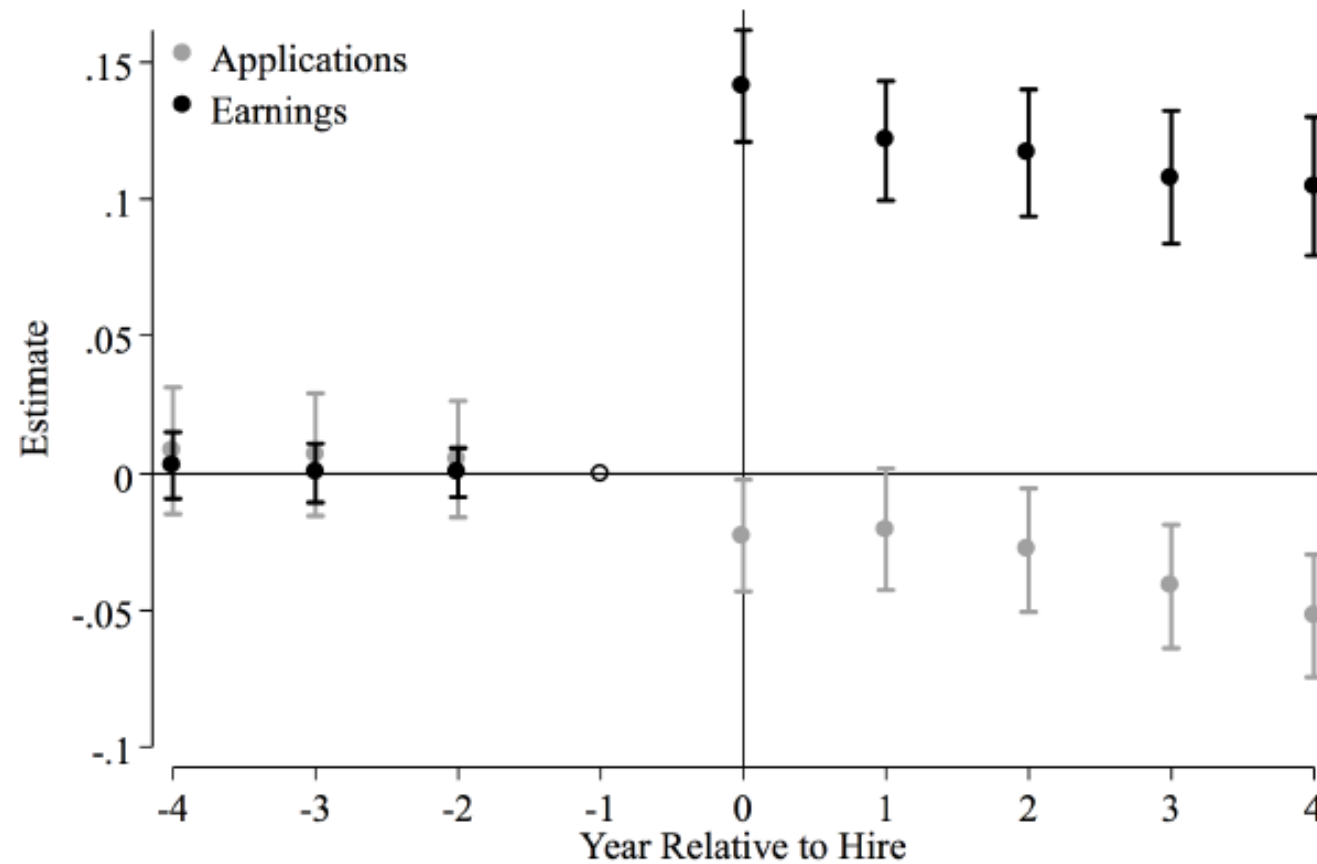
# Share of Inventors at Young Firms



Source: Akcigit and Goldschlag (2022)

# Event Study: J2J Transition

FIGURE 4: YOUNG AND INCUMBENT INVENTOR HIRES

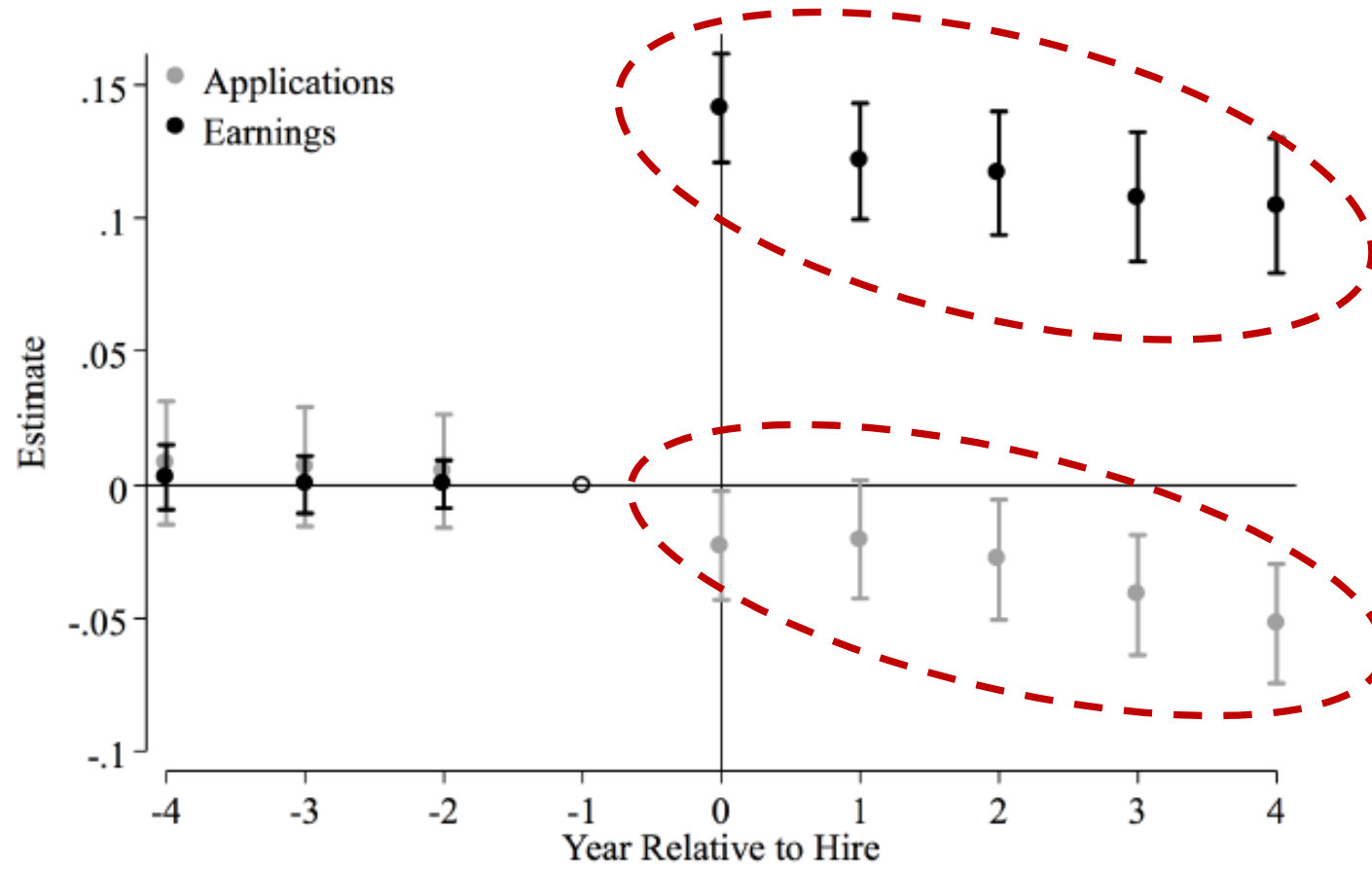


Source: Akcigit and Goldschlag (2023)

Data: US Census Bureau

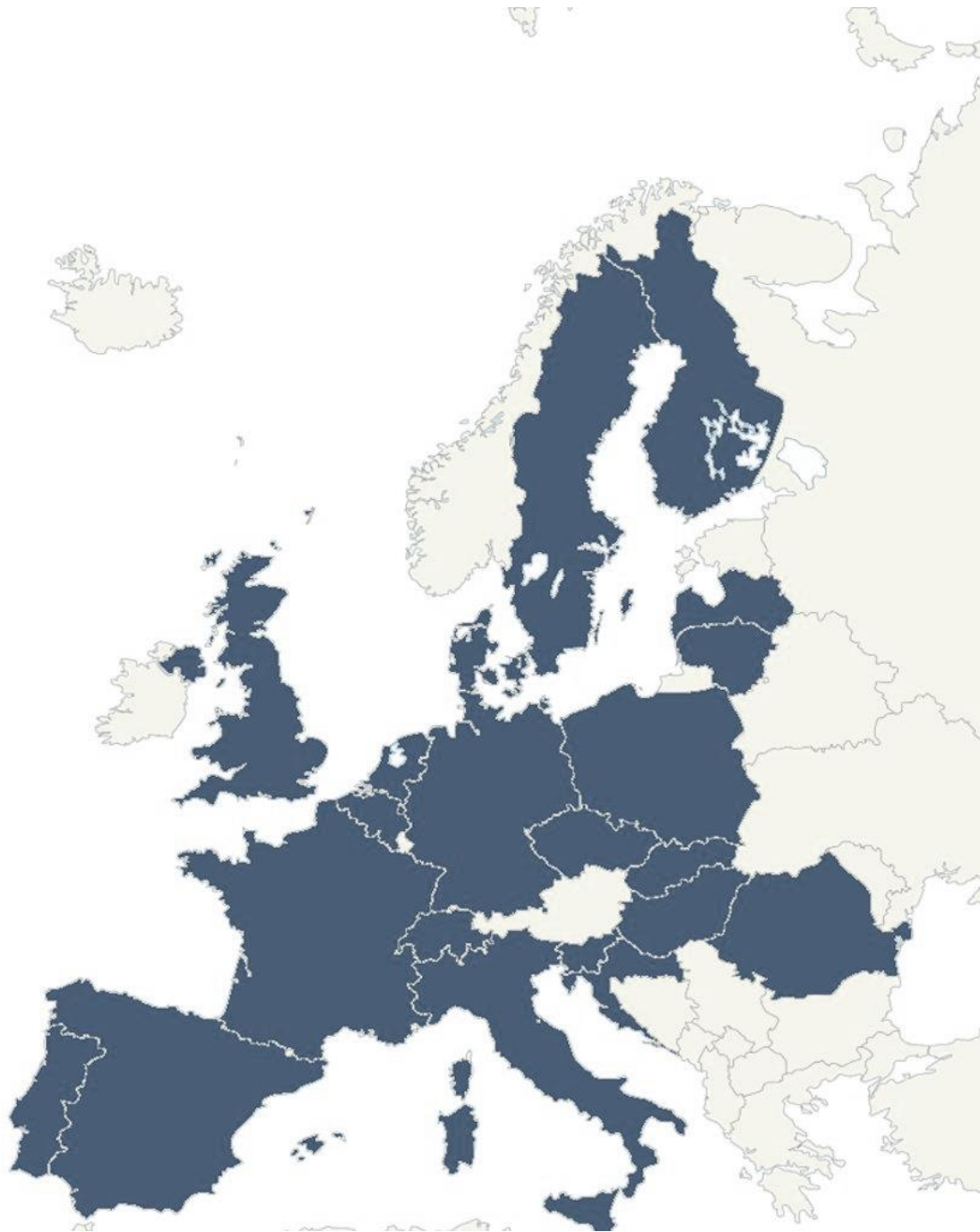
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FIGURE 4: YOUNG AND INCUMBENT INVENTOR HIRES



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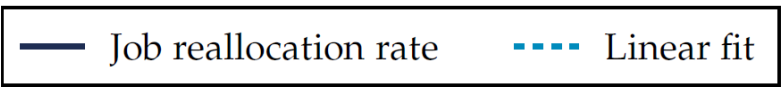
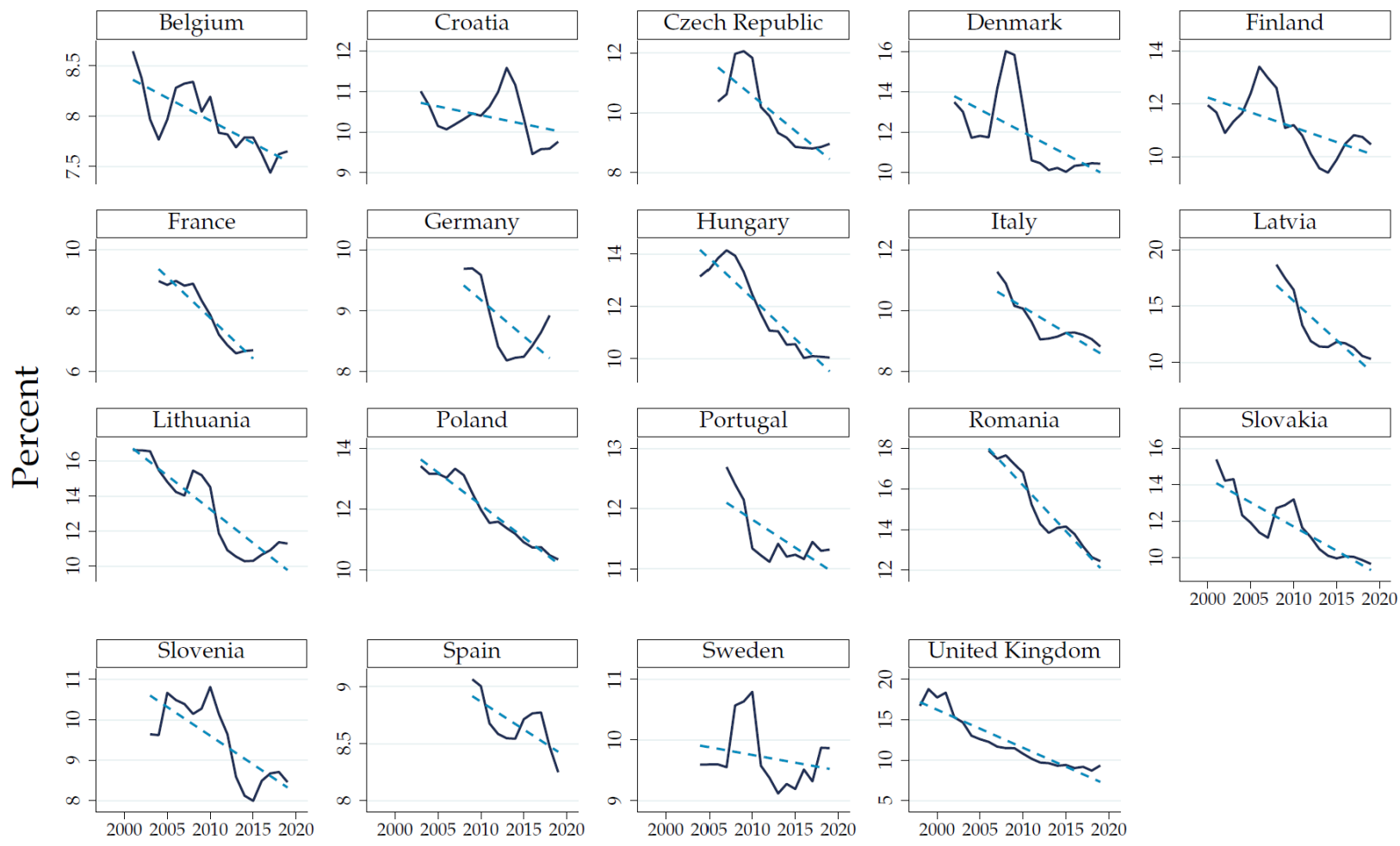
Data: US Census Bureau



**What About Europe?**



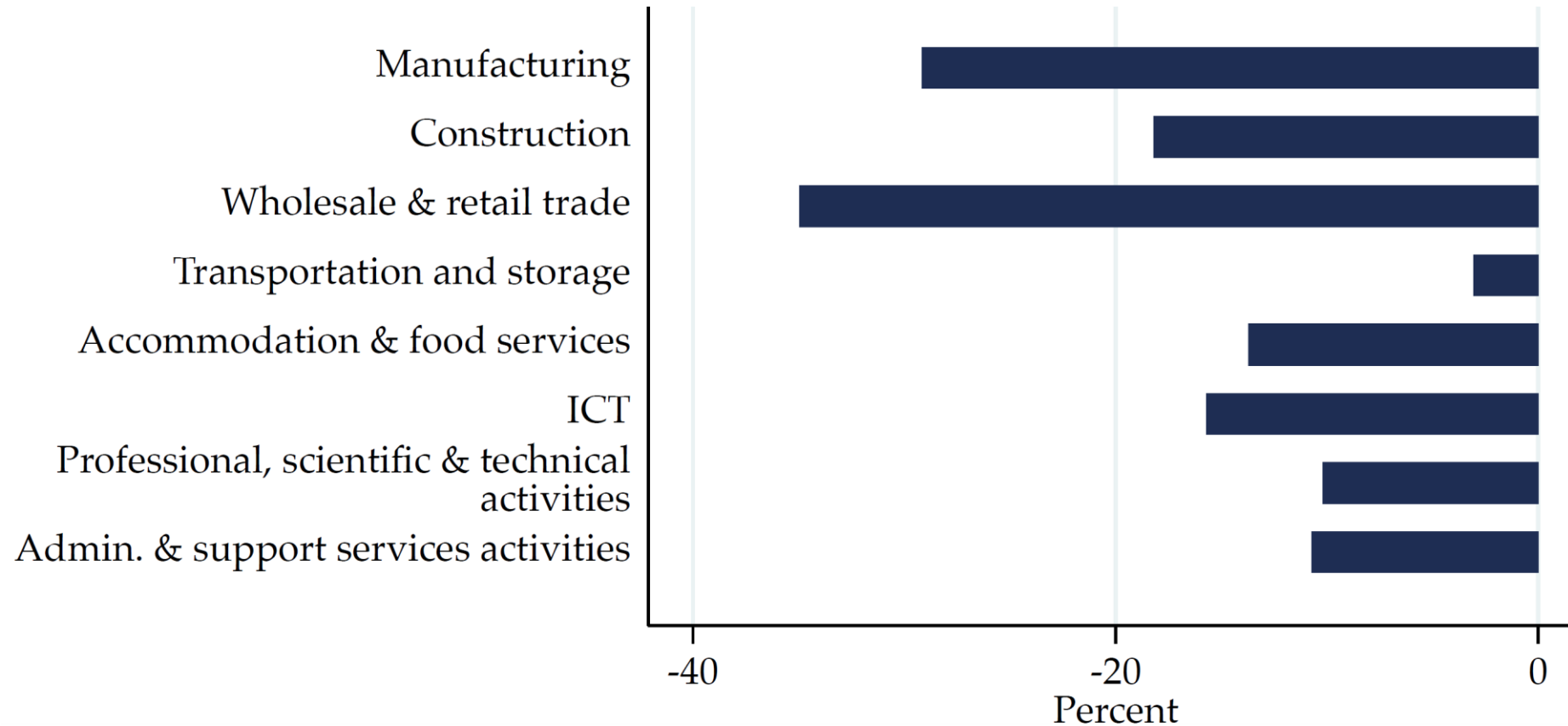
# Job Reallocation Rate in Europe



Source: Biondi, Inferrera, Mertens, and Miranda (2023)

Data: CompNet

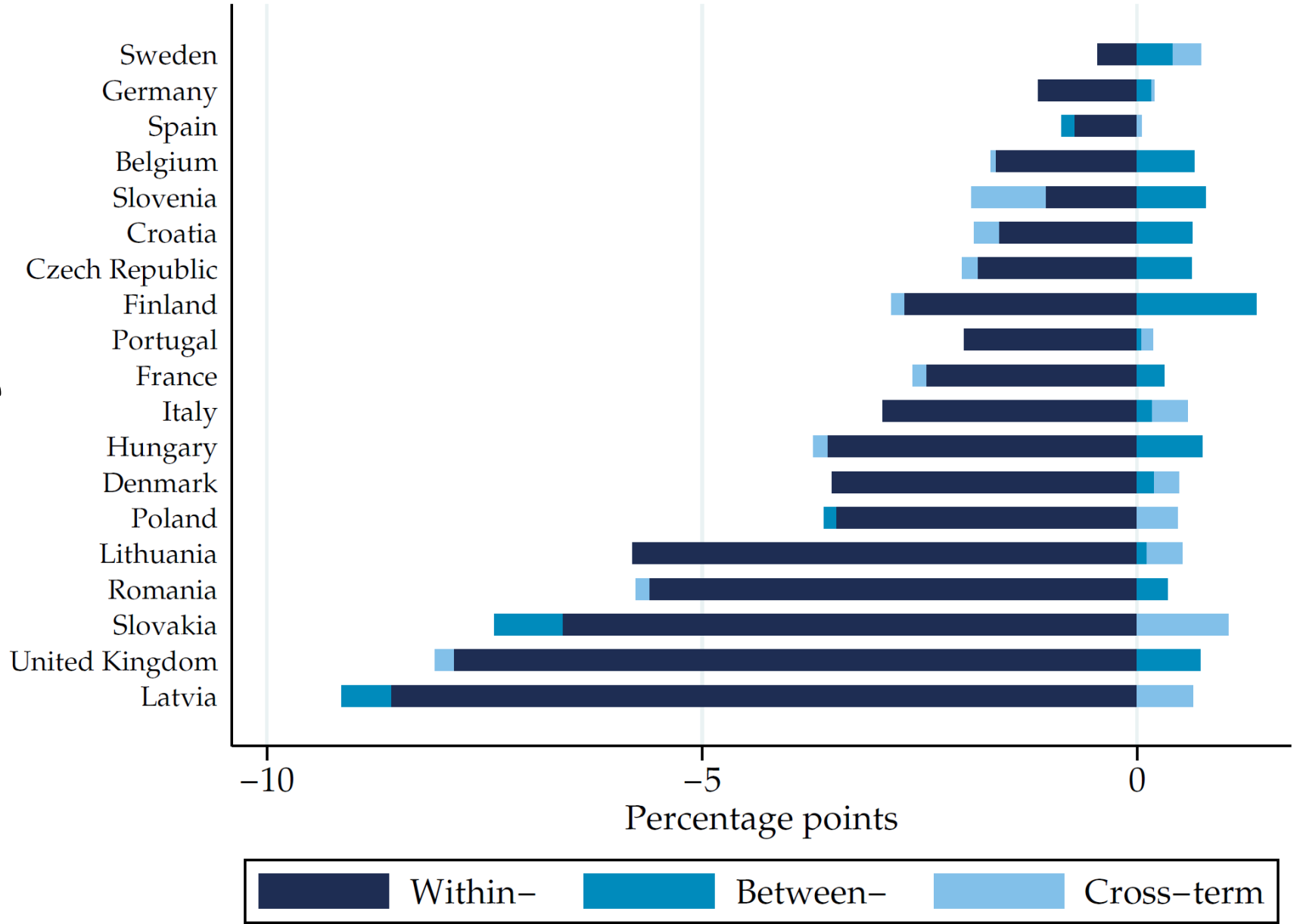
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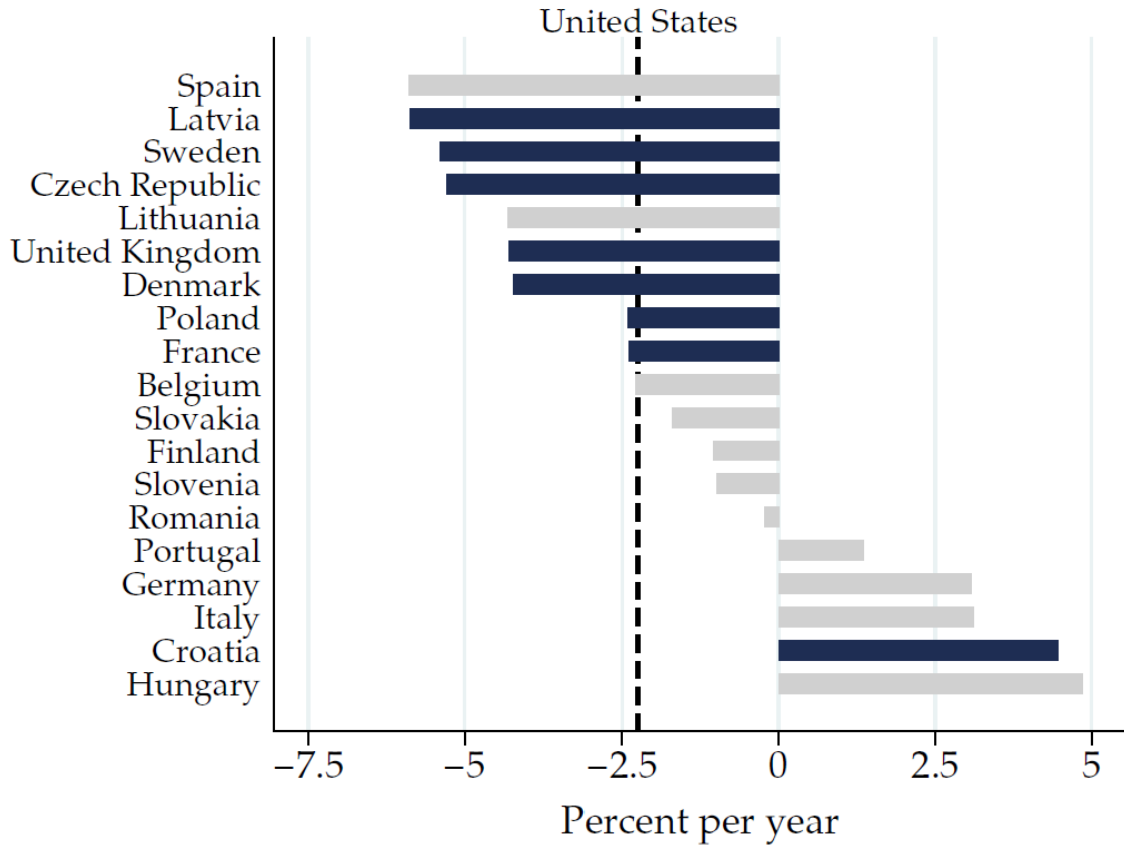
# Decomposing Job Reallocation Rate



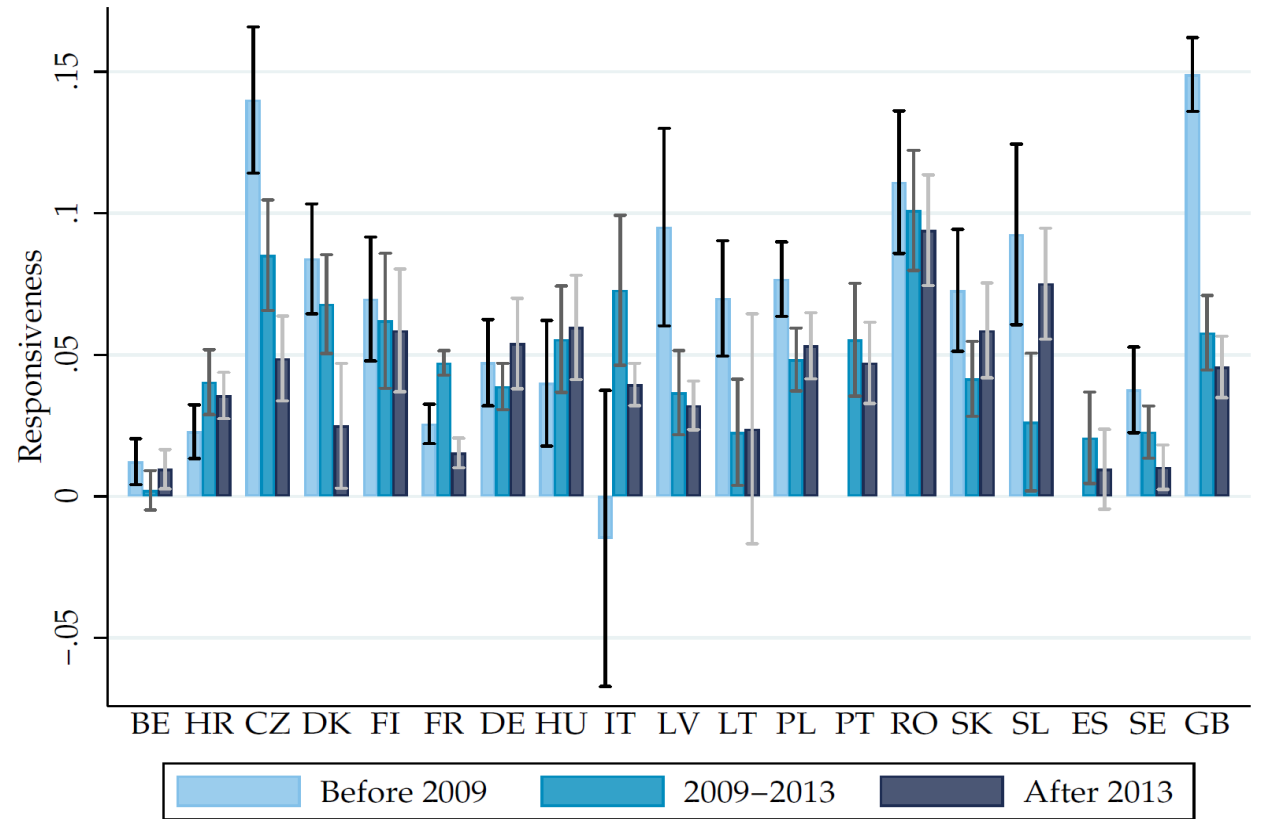
Source: Biondi, Inferrera, Mertens, and Miranda (2023)

Data: CompNet

### Responsiveness, linear trend



### Responsiveness, periods



Source: Biondi, Inferrera, Mertens, and Miranda (2023)  
 Data: CompNet

Thank you...

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