WHAT HAPPENED TO BUSINESS DYNAMISM?

Session 3: One-country Evidence

Ufuk Akcigit University of Chicago

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Paper #1



Gradzewiczy and Mućk (2018)

Interesting finding: Markups declined in Poland. Due to globalization (?)

10 Empirical Trends

(Mostly based on the US data)

Fact 1: Market concentration has risen.



Source: Autor, Dorn, Katz, Patterson, and Van Reenen (2017).

Fact 2: Average markups have increased.



Source: De Loecker and Eeckhout (2017).

Fact 3: Profit share of GDP has increased.



Source: Akcigit and Ates (2019), BEA NIPA Table 1.15.

Fact 4: The labor share of output has gone down.



Source: Karabarbounis and Neiman (2013).

Fact 5: Negative link b/w concentration and labor share





Source: Autor, Dorn, Katz, Patterson, and Van Reenen (2017).

Fact 6: Larger gap btw. frontier and laggards.

Figure: LABOR PRODUCTIVITY OF FRONTIER AND LAGGARD FIRMS



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

Fact 7: Firm entry rate has declined.



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

Fact 8: Employment share of young firms has fallen.



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

Fact 9: Job reallocation has slowed down.



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

Fact 10: Dispersion of firm growth has decreased.



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

Ten Facts about the U.S. Economy

- 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 labor share are negatively associated.
- 6. Labor productivity gap between "the best" and "the rest" 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.

What Has Changed?

Many Things... Some Examples:

EFFECTIVE CORPORATE TAX RATE



WORKER/UNION POWER





Akcigit and Ates (2019):

"What Happened to U.S. Business Dynamism?"

- Endogenous mark-ups and endogenous market structure.
- Dynamic macro-growth model with strategic interaction.
- Explicit focus on transitional dynamics.

Explicit competition margin:

- \implies incumbents innovate to increase their markups.
- \implies followers innovate to catch-up and leapfrog the leader if they have **"hope"**.
- Similarly, entrants enter if and only if they have the hope of taking down the incumbents.
 - Entrants are "forward looking".

Horse Race Among Alternative Fundamentals:

- 1. Lower Effective Corporate Tax Rate.
- 2. Higher R&D Subsidies.
- 3. Higher Entry Costs.
- 4. Lower Knowledge Diffusion.
- 5. Declining Interest Rate.
- 6. Ideas Getting Harder.
- 7. Lower Worker Power.

Experiment: Shock BGP through one channel at a time

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

TABLE: Qualitative experiment results

Experiment: Shock BGP through one channel at a time

	Data	Lower corporate tax	Higher R&D subsidies	Higher entry cost	Lower knowledge diffusion	Declining interest rate	Ideas getting harder	Weaker union power
Concentration	¢	\longleftrightarrow						
Markups	\uparrow	\longleftrightarrow						
Profit share	\uparrow	\longleftrightarrow						
Labor share	\downarrow	\longleftrightarrow						
Frontier vs. laggard gap	\uparrow	\longleftrightarrow						
Entry	\downarrow	↑						
Young firms' empl. share	\downarrow	\longleftrightarrow						
Gross job reallocation	\downarrow	1						
Dispersion of firm growth	Ļ	Ļ						

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Concentration	¢	\longleftrightarrow	\longleftrightarrow	\longleftrightarrow	1	\longleftrightarrow	Ļ	\longleftrightarrow
Markups	\uparrow	\longleftrightarrow	\longleftrightarrow	\longleftrightarrow	Ť	\longleftrightarrow	\downarrow	†
Profit share	\uparrow	\longleftrightarrow	\downarrow	\longleftrightarrow	↑	\downarrow	\downarrow	↑
Labor share	\downarrow	\longleftrightarrow	1	\longleftrightarrow	\downarrow	1	1	\downarrow
Frontier vs. laggard gap	\uparrow	\longleftrightarrow	\longleftrightarrow	\longleftrightarrow	Ť	\longleftrightarrow	\longleftrightarrow	1
Entry	\downarrow	Ť	\longleftrightarrow	\downarrow	\downarrow	1	\downarrow	↑
Young firms' empl. share	\downarrow	\longleftrightarrow	\downarrow	\downarrow	\downarrow	\longleftrightarrow	\downarrow	\longleftrightarrow
Gross job reallocation	\downarrow	î	1	\longleftrightarrow	\downarrow	1	Ļ	1
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TABLE: Qualitative experiment results

What about Welfare?

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What Do These Trends Mean for Policy?



Source: Akcigit and Ates (2019)

Empirical Trends on IP and Innovation

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Empirical Fact (1)

 \rightarrow Patenting by new entrants has declined.

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Source: Akcigit and Ates (2019)

Empirical Fact (2)

 \rightarrow Patenting concentration has increased.

Empirical Fact (2)

 \rightarrow *Patenting concentration has increased.*



Source: Akcigit and Ates (2019)

Empirical Fact (3)

 \rightarrow Patents are bought by the largest firms.

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SHARE OF TOP-1% BUYERS OVER TIME

Source: Akcigit and Ates (2019)



Source: Decker, Haltiwanger, Jarmin, and Miranda (2016b)

Empirical Fact (4)

 \rightarrow *Patents have become less exploratory.*

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Source: Akcigit and Ates (2019)

Empirical Fact (5)

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AVERAGE CLAIM LENGTH OVER TIME

Source: Akcigit and Ates (2019)

Figure 1: Buyer Power Across Sectors



Interesting finding: Substantial buyer power in France. It correlates with the size and productivity of the firm.

Thank You...

www.ufukakcigit.com uakcigit@uchicago.edu

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Innovation Types



Leader Innovation



Follower Innovation: Slow Catch-up





Evaluation of Each Shock

	$contribution_i = \frac{X_{2010}^4 - X_{2010}^{4\setminus i}}{X_{2010}^4 - X_{1980}^4}.$						
Channel <i>i</i>	Lower corporate tax	Higher R&D subsidies	Higher entry cost	Lower knowledge diffusion			
Entry	-8.2%	-0.4%	17.9%	50.6%			
Labor	-9.0%	-7.7%	3.6%	78.7%			
Markup	7.6%	10.8%	3.6%	84.2%			
Profit	-9.0%	-7.7%	3.6%	78.7%			
Concentration	4.3%	7.1%	-7.2%	96.2%			
Young	-13.2%	-7.7%	-1.3%	71.2%			
Prod. gap	7.2%	10.5%	3.5%	83.8%			
Reallocation	-6.9%	0.2%	13.6%	48.5%			
Dispersion	32.7%	29.2%	-44.6%	136%			
Average	0.6%	3.8%	-0.8%	80.9%			

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