IWH
Halle Institute for Economic Research
Member of the Leibniz Association

Firm Dynamism – presentation by Ufuk Akcigit

Discussion by Matthias Mertens

(based on the two recent articles by Akcigit & Ates (2019a 2019b))

The context of the studies

- There is a secular decline in business dynamism in the US.
- This might be worrisome and could reflect a decreasing pace of creative destruction
- This again might be related to the secular decline in productivity growth
- Coinciding with the decline in business dynamism in the US, there are several other secular trends in the US. E.g. rising concentration, a falling labor share, rising markups, increasing productivity differences between firms,….. (the study focuses on 10 such trends)

What does the studies do?

- Builds a Schumpeterian growth model/quality ladder growth model (e.g. Grossman & Helpman (1991) and subsequent work))
- Shows how even a simple version of such a model can account for all the document facts
- Key ingredient of this model: „Knowledge diffusion“ parameter -> governs how follower firms can learn incumbent technologies
- Turns out that a decline in knowledge diffusion can explain large parts of the document 10 facts

What does the studies do?

Table 3: Qualitative experiment results

	Data (1)	Lower corporate tax (2)	Higher R&D subsidies (3)	Higher entry cost (4)	Lower knowledge diffusion (5)
Concentration	↑	⟷	⟷	⟷	↑
Markups	↑	⟷	⟷	⟷	↑
Profit share	↑	⟷	↓	⟷	↑
Labor share	↓	⟷	↑	⟷	↓
Entry*	↓	⟷	⟷	↓	↓
Young firms' empl. share	↓	⟷	↓	↓	↓
Frontier vs. laggard gap	↑	⟷	⟷	⟷	↑
Gross job reallocation	↓	⟷	↓	⟷	↓
Dispersion of firm growth	↓	↓	↓	↑	↓

Notes: Upward arrows indicate an increase in the variable of interest, downward arrows indicate a decline, and flat arrows indicate no or negligible change. If the absolute magnitude of the response of a variable is less than 20 percent of the actual change in the data, we denote it by a flat arrow.

* In columns 4 and 5, the experiments match the decline in entry by construction (see Figure 3).

What does the studies do?

Table 6: Quantitative experiment results (contributions as in equation 30)

Channel 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 firms	-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%

Notes: Percentage values measure the share of the contribution from the specific channel to the total model-generated deviation between 1980 and 2010. Negative values mean that adding the specific channel moves the model-generated variable in the opposite of the empirical counterpart. A value larger than 100% means that the difference between the hypothetical and empirical paths is larger than the observed variation.

What does the studies do?

Table 7: Qualitative experiment results for alternative mechanisms

	Data (1)	Lower corporate tax (2)	Higher R&D subsidies (3)	Higher entry cost (4)	Lower knowledge diffusion (5)	Declining interest rate (6)	Ideas getting harder (7)	Weaker power of workers (8)
Concentration	↑	⟷	⟷	⟷	↑	⟷	↓	⟷
Markups	↑	⟷	⟷	⟷	↑	⟷	↓	↑
Profit share	↑	⟷	↓	⟷	↑	↓	↓	↑
Labor share	↓	⟷	↑	⟷	↓	↑	↑	↓
Frontier vs. laggard gap	↑	⟷	⟷	⟷	↑	⟷	⟷	↑
Entry	↓	↑	⟷	↓	↓	↑	↓	↑
Young firms' empl. share	↓	⟷	↓	↓	↓	⟷	↓	⟷
Gross job reallocation	↓	↑	↑	⟷	↓	↑	↓	↑
Dispersion of firm growth	↓	↓	↓	↑	↓	↓	↑	↓

Notes: Upward arrows indicate an increase in the variable of interest, downward arrows indicate a decline, and flat arrows indicate no or negligible change. If the absolute magnitude of the response of a variable is less than 20 percent of the actual change in the data, we denote it by a flat arrow.

Assessment

- Two extremely good, well-written, insightful studies
- I learned a lot from reading them and recommend everybody to read the studies
- Obviously, the topic is very timely and important
- Decline in knowledge diffusion is a convincing explanation and the quantitative power of it is impressive
- Very relevant for guiding future research in understanding the secular evolution of the US economy in the past decades
- Given the above, I do not have many comments to make

Assessment

- The only two comments (rather questions) on which I will thus focus are:
- 1. The test of labor market power as alternative explanation for the secular trends (Table 7)
- 2. What is going on beyond the US?

Labor Market Power

- The study also looks on whether a rise in labor market power can explain the documented trends
- Recent discussion on whether labor market power rose: Naidu et al. (2018), Stansburry & Summers (2020) for US
- Mertens (2020) for Germany (manufacturing)

Labor Market Power

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

Notes: Upward arrows indicate an increase in the variable of interest, downward arrows indicate a decline, and flat arrows indicate no or negligible change. If the absolute magnitude of the response of a variable is less than 20 percent of the actual change in the data, we denote it by a flat arrow.

Labor Market Power

- My question: How shall I think about the way the model can incorporate labor market power?
- The authors do this via increasing the step size of the quality improvements from innovation (Lampda).
- This increases markups, hence profits. Wages then depend negatively on the markup, hence Lampda
- Can we view this as monopsony power or bargaining power?

Labor Market Power

- Typically labor market power = wedge between wages and MRPL (which the model cannot capture)
- I read this rather as „product market power“, particularly as this Lampda defines the scope of the limit pricing markup of firms in the product market
- Beyond that, several studies document a positive association between labor market power and concentration that this way of modelling labor market power cannot capture (work by Azar and coauthors, Mertens (2020))

Labor Market Power

Table 7: Qualitative experiment results for alternative mechanisms

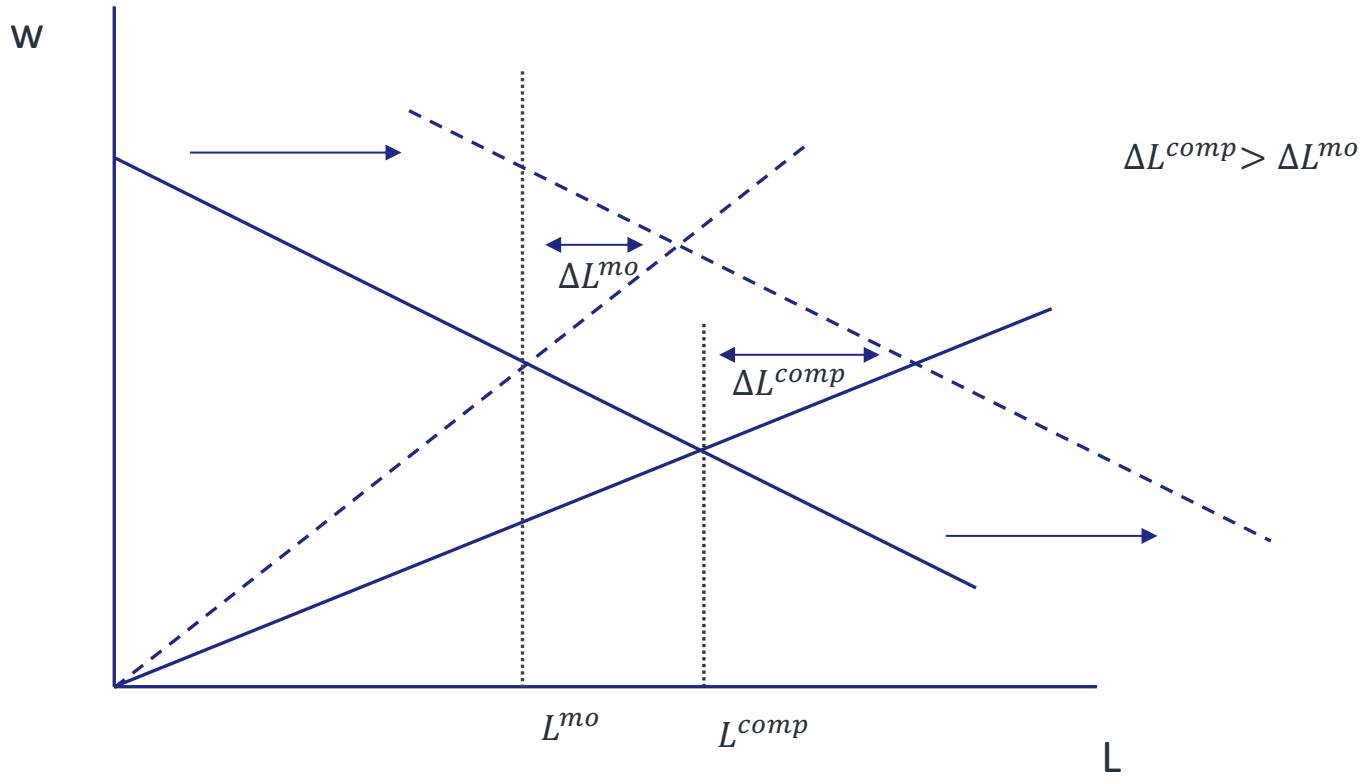
	Data (1)	Lower corporate tax (2)	Higher R&D subsidies (3)	Higher entry cost (4)	Lower knowledge diffusion (5)	Declining interest rate (6)	Ideas getting harder (7)	Weaker power of workers (8)
Concentration	↑	⟷	⟷	⟷	↑	⟷	↓	⟷
Markups	↑	⟷	⟷	⟷	↑	⟷	↓	↑
Profit share	↑	⟷	↓	⟷	↑	↓	↓	↑
Labor share	↓	⟷	↑	⟷	↓	↑	↑	↓
Frontier vs. laggard gap	↑	⟷	⟷	⟷	↑	⟷	⟷	↑
Entry	↓	↑	⟷	↓	↓	↑	↓	↑
Young firms' empl. share	↓	⟷	↓	↓	↓	⟷	↓	⟷
Gross job reallocation	↓	↑	↑	⟷	↓	↑	↓	↑
Dispersion of firm growth	↓	↓	↓	↑	↓	↓	↑	↓

Notes: Upward arrows indicate an increase in the variable of interest, downward arrows indicate a decline, and flat arrows indicate no or negligible change. If the absolute magnitude of the response of a variable is less than 20 percent of the actual change in the data, we denote it by a flat arrow.

Labor Market Power

- Finally, I wonder about the positive impact of higher labor market power on job reallocation.
- If at all, I would expect a negative effect.
- Classical sources of firm labor market power are things like concentration, non-pouching agreements that should ceteris paribus have a negative effect on job reallocation.
- Also, from a standard monopsony model, this should be the result, if I am not mistaken

Labor Market Power



Labor Market Power

- That all being and while I wonder about the test for rising firm labor market power, we must remember: The model is simple and still very powerful and the key result about knowledge diffusion is very convincing.

Beyond the US?

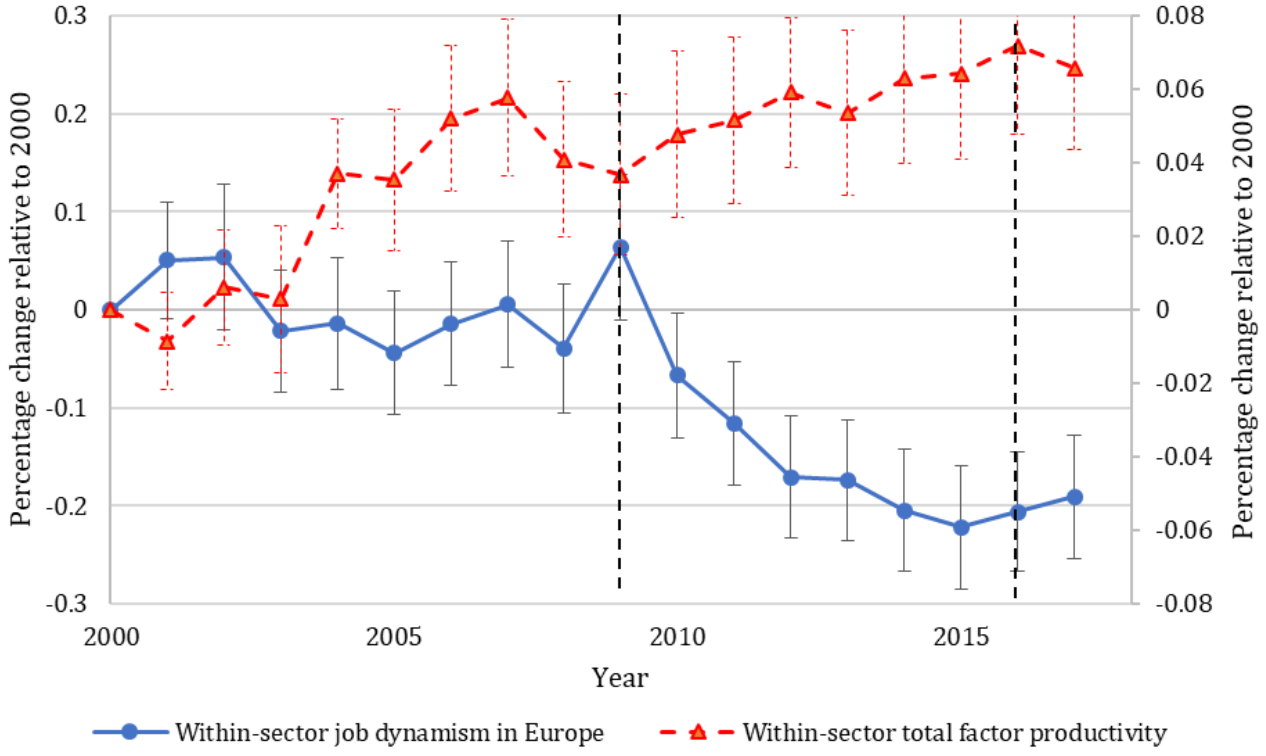
- The study, as also previous work documenting the facts focus strongly on the US.
- But what is about Europe? Evidence scarce on this.
- Is business dynamism declining also in Europe?
- What about the potential role of knowledge diffusion in Europe?
- ....
- This is obviously something for research beyond the studies
- CompNet and similar initiatives (Microprod) can be helpful to answer these questions

Beyond the US?

- In a recent report („Firm Productivity Report“) the CompNet team analysed business dynamism in Europe
- Defined as sum of job creation and destruction rate.
- And this is what we find….

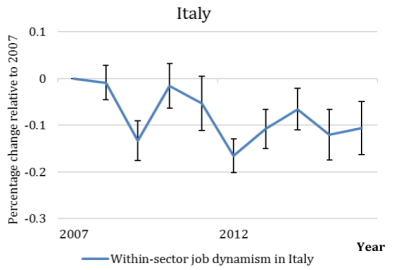
Beyond the US?

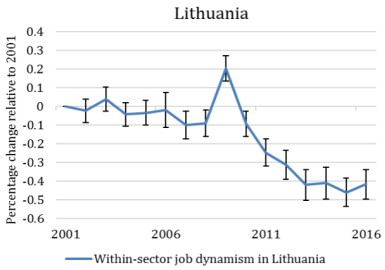
- There is a strong decrease in job-dynamism in Europe

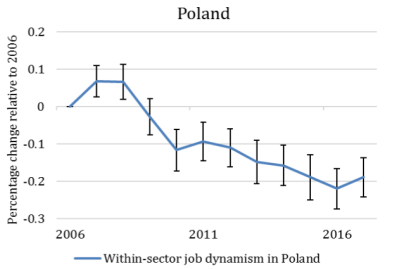


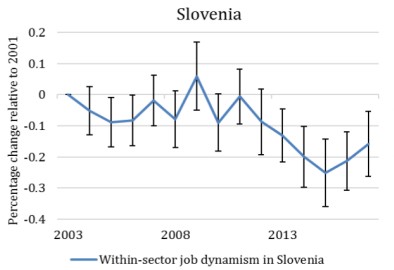
Beyond the US?

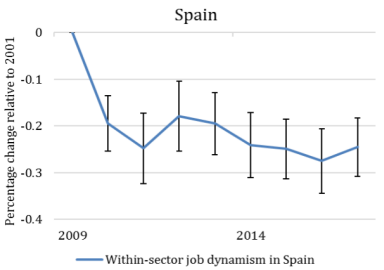
- This holds for almost all (if not all) 19 countries in the CompNet data

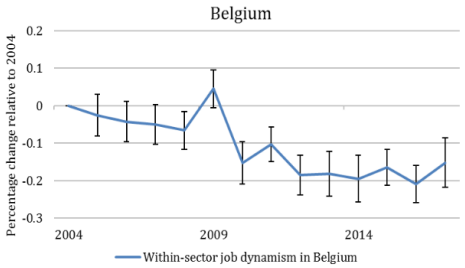


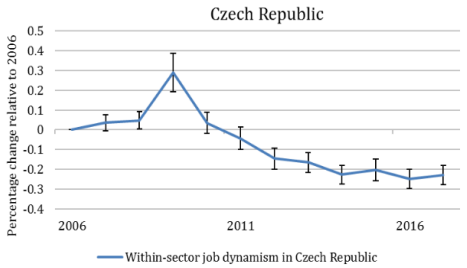


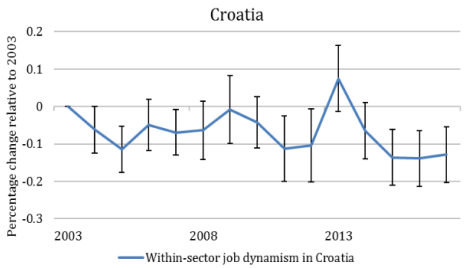


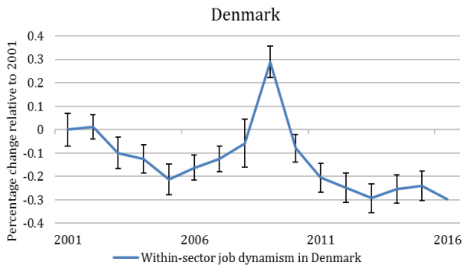


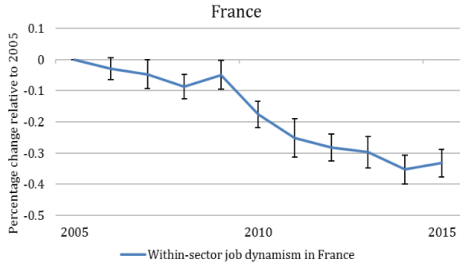












Beyond the US?

- Coinciding with this, we find that the pace of productivity enhancing reallocation declined
- Job-dynamism is positively correlated to allocative efficiency and TFP within sectors (i.e. identified from changes)

Beyond the US?

	(1)	(2)	(3)	(4)
	Covariance between TFP and firm size	*Covariance between TFP and firm size*	*TFP*	*TFP*
Job dynamism	0.0366***	0.0361***	0.107***	0.124***
	(0.0104)	(0.0101)	(0.0400)	(0.0417)
Average firm size		0.0171**		0.152***
		(0.00687)		(0.0577)
Ratio of Capital to Labour		-0.00204		-0.0951**
		(0.00666)		(0.0399)
Obs.	6,923	6,477	6,925	6,479
R-squared	0.354	0.414	0.834	0.839
Year FE	YES	YES	YES	YES
Country FE	YES	YES	YES	YES
Sector FE	YES	YES	YES	YES

Beyond the US?

- So, what is about the other secular trends in Europe?
- Important road for future research to extent the type of analysis Ufuk and Sina did for the US also to Europe (and beyond)
- See Bighelli, Di Mauro, Melitz, Mertens (2020, VoxEU) for research on concentration in Europe
- Ufuk‘s and Sina‘s paper provide a great fundament and guidance for future research
- Thanks for the papers and the opportunity to discuss them

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