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GPERC

Determinants of the wage share: Evidence from publicly listed firms for the UK and the EU14

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Outline

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  - The superstar firm hypothesis: market concentration
  - The bargaining power hypothesis: financialisation
- This paper
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  - Wage share dynamics of publicly listed firms
  - Concentration
  - Financialisation
  - Empirical strategy and Results
- Conclusion and policy implications

The technological change hypothesis

(Karabarbounis and Neiman 2014; Bentolila and Saint-Paul 2003)

- Hypotheses:
  - ↓ Relative price of capital & ↑ offshoring labour intensive tasks → ↑ capital-output ratios
  - Elasticity >1
  - Ambiguous impact of measures of bargaining power

- Evidence
  - Capital-output ratio mostly constant (ICT capital ratios increased)
  - Elasticity ≤1
  - Positive impact of bargaining power

The superstar firm hypothesis

(Autor et al. 2017; Barkai 2016; Grullon et al. 2017; Hartman et al. 2016; Kehrig & Vincent 2017)

- ↑ Concentration → ↓ wage share
- Different mechanisms
  - Barkai 2016: Consistent with between & within effect
    - ↓ Competition → ↑ concentration → ↑ mark-ups → ↓ WS
  - Autor et al. 2017: |between effect| > |within effect|
    - ↑ Competition → ↓ mark-ups → ↑ within WS
    - ↑ Competition → ↑ concentration → ↓ between WS (scale effects)

The bargaining power hypothesis

(Stockhammer 2017; Blanchard & Giavazzi 2003; Rodrik 1998)

- Traditionally focus on labour market institutions & globalisation
  - Decline in union density & collective bargaining coverage
  - Stricter strike legislation
  - Increased mobility of capital: offshoring-threat
  - Labour market flexibility and decreases in gross replacement ratios
- Financialisation:

> 'the increasing role of financial motives, financial markets, financial actors […] in the operation of the domestic […] economies.'
>
> - Epstein (2005)

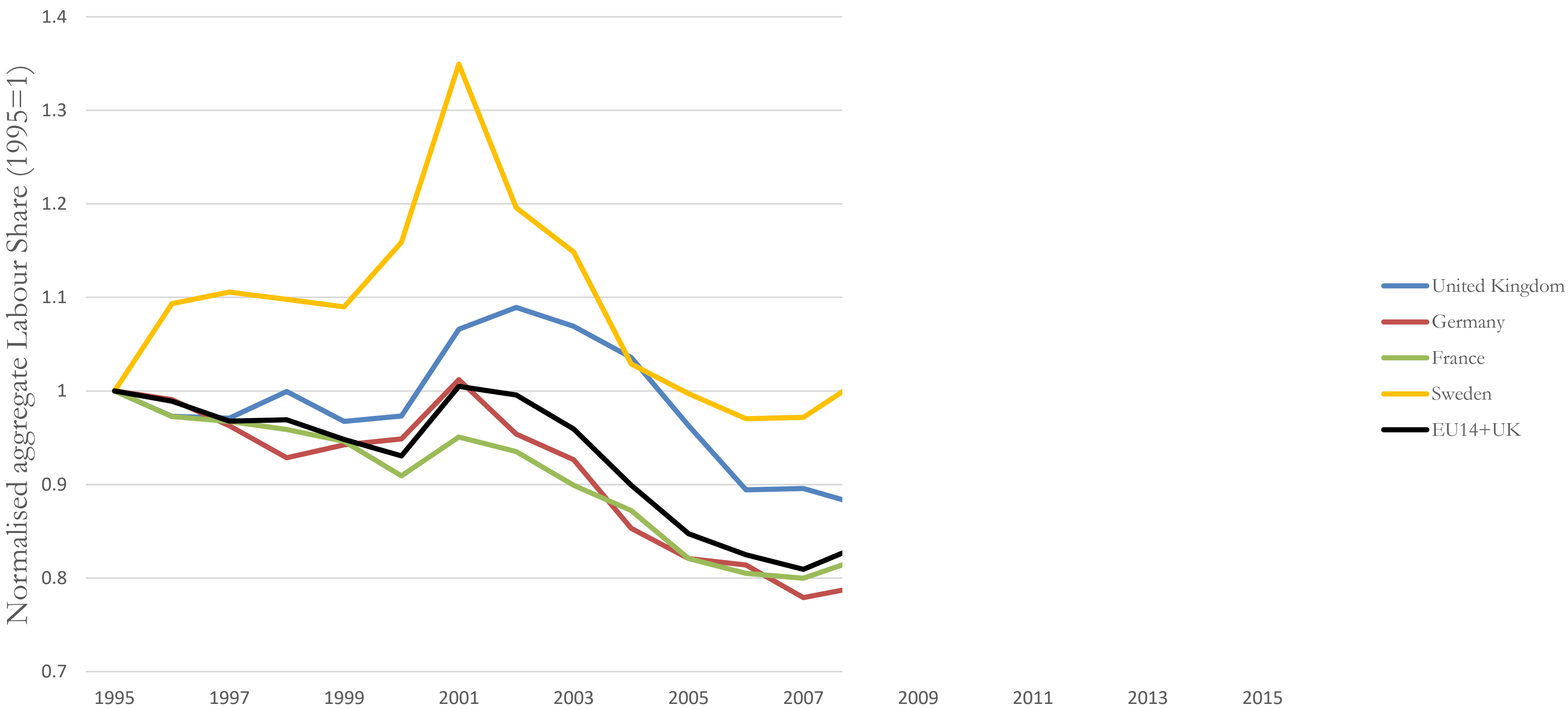
Change in corporate governance and financialisation

- Financial motives $\boxed{\text{Dividend payments}}$
  - Shareholder value maximisation → Performance-based pay, stock options, market for corporate control (Jensen & Fama 1983; Jensen & Murphy 1990)
  - Effects: ↑ productivity (Palia & Lichtenberg 1999); ↑ work intensity (Bryan et al. 2009); wage suppression (Lazonick 2014)
- Financial actors $\boxed{\text{Dividend \& interest payments}}$
  - ↑ Financial payments → ↑ mark-ups (Hein 2015; Dunhaupt 2016)
- Financial markets $\boxed{\text{Dividend \& interest income}}$
  - Alternative source for profits increases fall-back options of capital (Lin & Tomascovic-Devey 2013)
- Three channels. All based on a within firm effect on the wage share

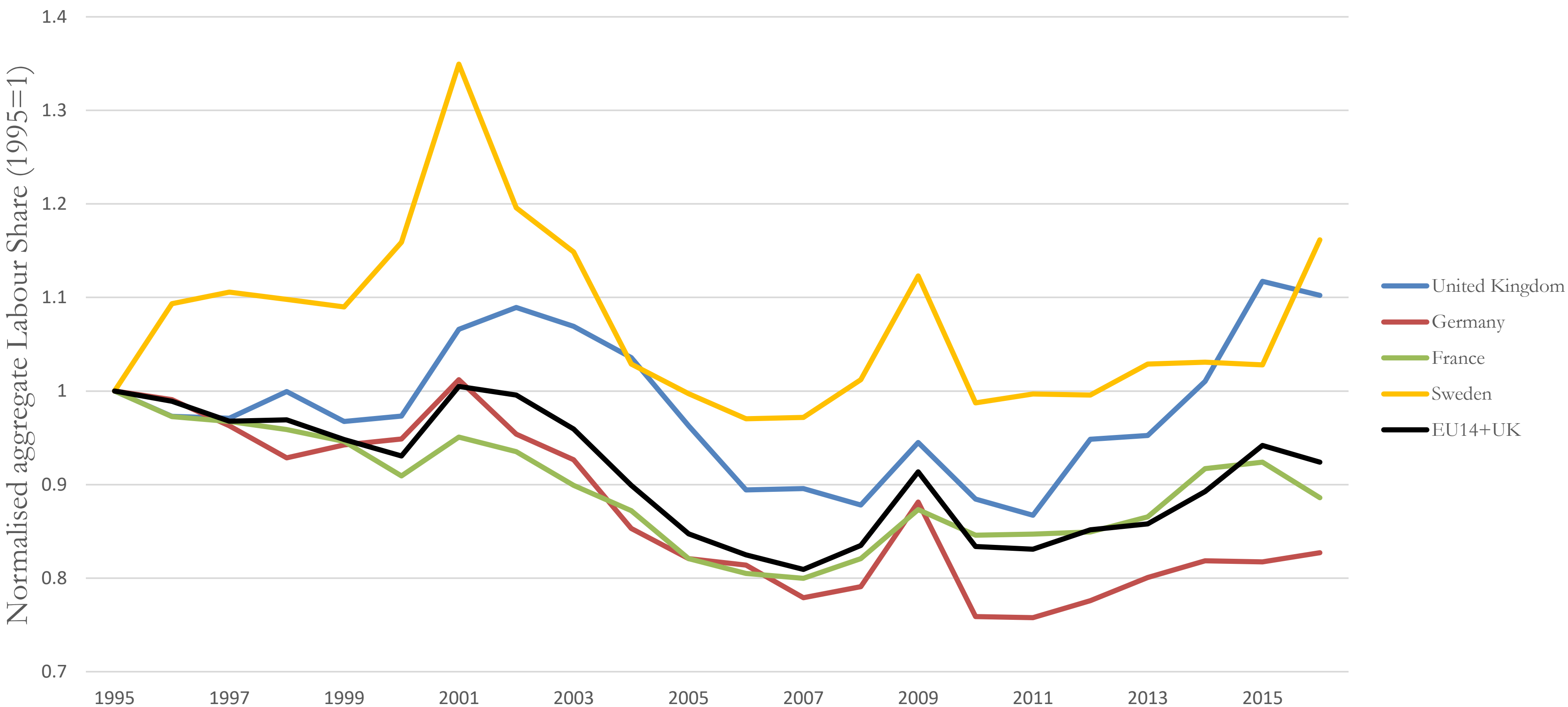
Dataset

- Worldscope, supplied by Thomson Reuters
- Publicly listed companies in the UK, Germany and France (1995 – 2016)
  - Effect of financialisation relevant for listed companies
- International comparability
- Information on financial incomes and payments
- Consolidated balance sheets:
  - Captures global output of the firms
  - Not possible to reconstruct country-level aggregate labour share

Aggregate labour share (publicly listed firms)



Aggregate labour share (publicly listed firms)



Preconditions of the ‘superstar firm’ hypothesis

- Did concentration increase in countries other than the US?
- Are changes in the aggregate labour share driven by within-firm changes in the labour share or between-firm reallocation of output?

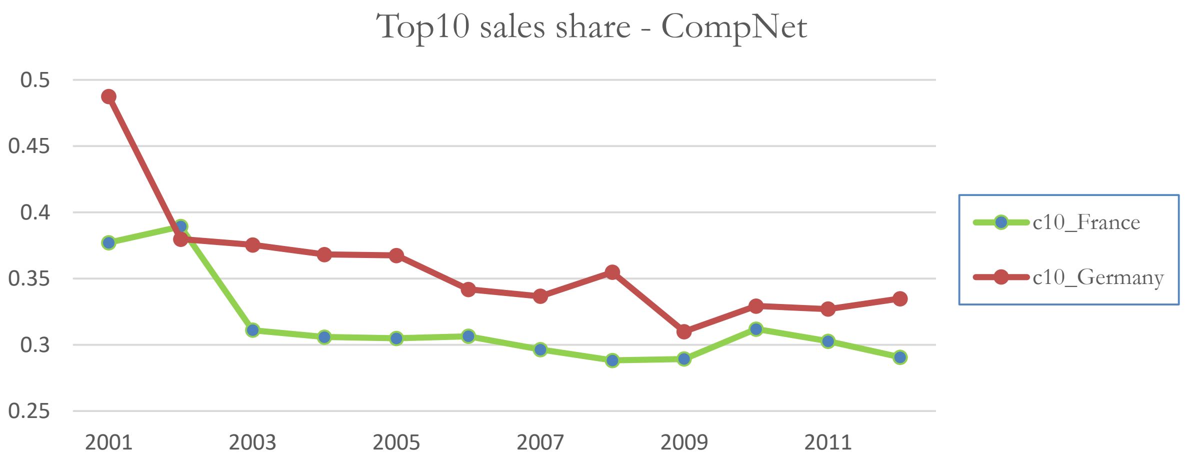
Evidence for the EU for publicly listed companies

- Did concentration increase in countries other than the US?
  - Concentration constant or even declining in France, Germany, the UK, and Sweden based on Herfindahl Index and market share of the 4 largest firms
  - Result confirmed in EU14 sample (including the UK)
  - Confirmed with CompNet database for France and Germany
- What drives the change in the aggregate wage share of publicly listed firms?
  - Within component explains largest share in France & Germany
  - Between component relevant for the UK until the Great Recession (1995-2007); Post-2007 within component dominates

→ Focus on the technological and bargaining power variables

Did concentration increase in European publicly listed firms?

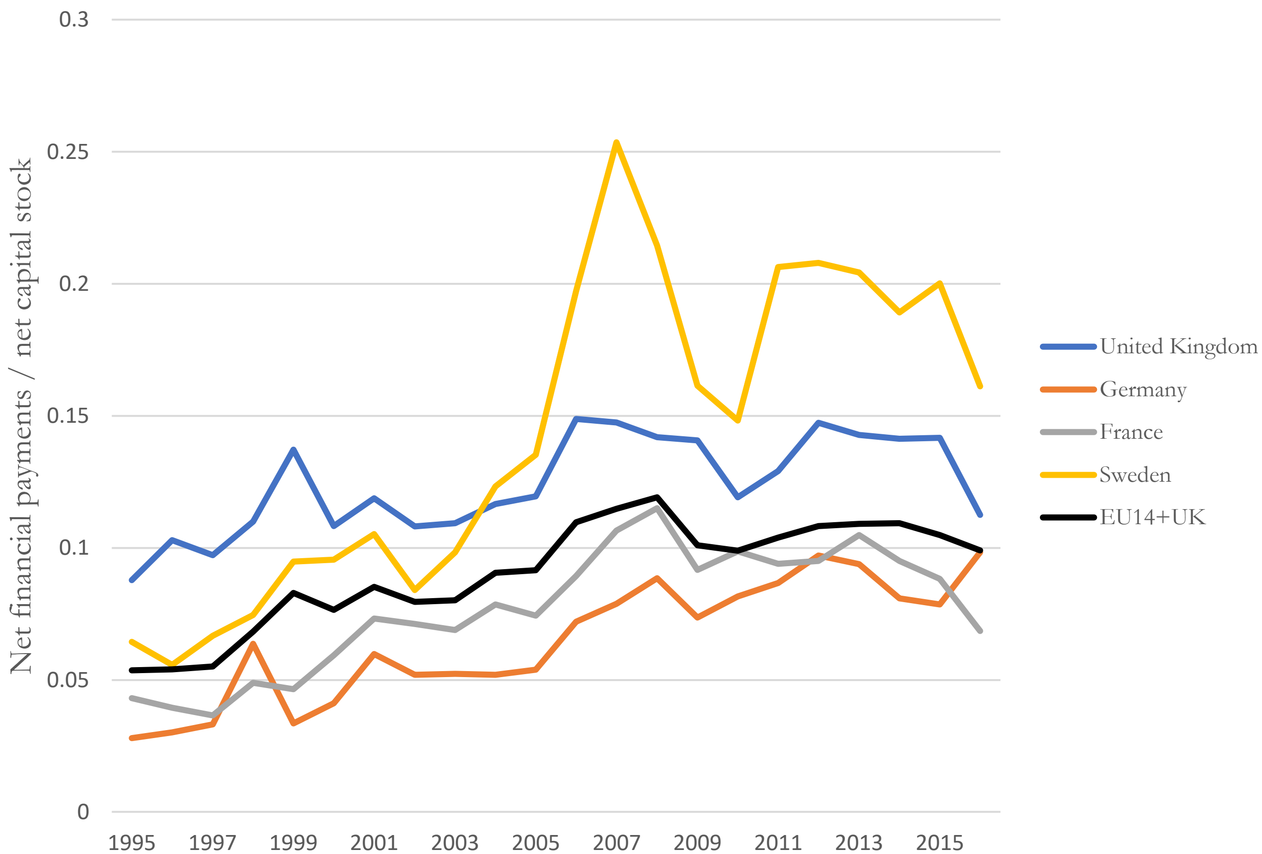
Share of sector with a decline in concentration				
	France	Germany	EU14+UK	EU14+UK
2000-2007	31/44	27/51		
2000-2012	23/44	21/51		
1995-2007			29/35	31/36
1995-2015			28/35	30/36
Measure	Top10-sales share		Top4-sales share	Herfindahl-Index
Database	CompNet		Worldscope	



What drives the change in the aggregate wage share of publicly listed firms?

		ΔWage share	Within effect	Between effect	Covariance
The UK	1995-2007	-0.037	14%	83%	3%
France	1995-2007	-0.179	97%	16%	-13%
Germany	1995-2007	-0.214	93%	-4%	11%
EU14 + UK	1995-2007	-0.149	83%	14%	3%

Net Financial payments are increasing



Trend driven by:
↑ dividend payment
Despite: ↑ interest & dividend income & ↓ interest payments

Estimation strategy

- $\mathrm{WS}_{i,t} = \alpha_{WS}\mathrm{WS}_{i,t-1} + \alpha_{G}\mathrm{GROWTH}_{i,t} + \alpha_{KI}\mathrm{CAPITAL\ INTENSITY}_{i,t} + \alpha_{FNC}\mathrm{FINANCIALISATION} + \varepsilon_{i,t}$
- Country-wise estimations & EU-pool: 1995-2016
- Net- WS: excluding depreciation from value added
- Financialisation: separate variables for dividend & interest payments, dividend & interest income
- Data cleaning
- Estimation method: difference- & system-GMM
  - General to specific & most robust to most efficient
  - Within-firm WS decline
  - Endogeneity

Dependent variable: Firm-level Wage Share	France (1997-2016)	UK (1997-2016)	Germany (1997-2016)	Sweden (1997-2016)	EU14+UK (1997-2016)
growth	-0.359***	-0.069	-0.267**	-0.623**	-0.247***
capital intensity	0.403***	0.015	0.046	0.117	0.081***
capital intensity(-1)	-0.129*				-0.020**
financial income		-0.007		-0.024	
financial income(-1)	0.120		0.028		0.005
dividend payments	-0.103*	-0.038***		-0.014**	-0.006**
dividend payments(-1)			-0.027**		
interest payments				0.106*	
interest payments(-1)	-0.181**	-0.029*	0.009		0.020**
wage share(-1)	0.245***	0.272***	0.182***	0.141***	0.225***
constant		0.509***	0.722***	0.547***	0.550***
year dummies	Yes	Yes	Yes	Yes	Yes
estimator type	Diff-GMM	System-GMM	Sys-GMM	Sys-GMM	Sys-GMM
Hansen test (pval)	0.318	0.579	0.307	0.184	0.199
diffHansen (pval)		0.117	0.422	0.632	0.184
AR1 test (pval)	0.000	0.001	0.000	0.037	0.000
AR2 test (pval)	0.489	0.327	0.670	0.995	0.583
instruments	138	149	146	148	146
number of firms	361	558	381	198	2272
F-test	7.130	8.933	6.242	4.866	15.228
Observations	3845	7771	4720	2135	29024

Results

- Negative effect of dividend payments on the labour share in the UK, Germany, France, Sweden and EU14+UK pool
- Negative effect of interest payments in France and the UK, insignificant in Germany, positive in Sweden and the EU-pool
- Effect is robust when controlling for capital intensity and the business cycle
- Robust when controlling for sector specific trends (union density & concentration)
- Evidence for endogeneity between explanatory variables & wage share → confirms choice of GMM

Conclusion

- Declining labour share in European publicly listed firms
- Weak evidence for superstar firm & technological change hypotheses among publicly listed firms in Europe
  - Concentration did not increase
  - Between effect does not dominate decline in the labour share, except for the UK pre-2007
  - No negative effect of capital intensity
- Dividend payments have a negative impact on labour share in the UK, Germany, France and Sweden. Also evidence for EU14+UK pool
- We cannot falsify other hypotheses (different sample) but results suggest that without financialisation the labour share would have declined less
- Policy conclusions: Reregulating finance could boost the wage share and investment (Tori and Onaran 2017; Lazonick 2014)

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