ESRI ECONOMIC & SOCIAL RESEARCH INSTITUTE

Globalisation, productivity and the labour share

An Roinn Airgeadais
Department of Finance

DATE
30th April 2019

VENUE
Department of Finance
Annual Policy Conference

AUTHORS
Ilias Kostarakos, Martina Lawless, Kieran McQuinn, Luke Rehill

Background

$$Labour\ share = \frac{Compensation\ of\ Employees}{Gross\ Value\ Added}$$

- Until the 1980s, stable labour income share was accepted as a ‘stylized fact’ of economic growth.
- Evidence of a decline from 70s until 2000s
- Broad based across regions and economies
- Technological change and greater global value chain participation have compressed labour shares (OECD, 2018)

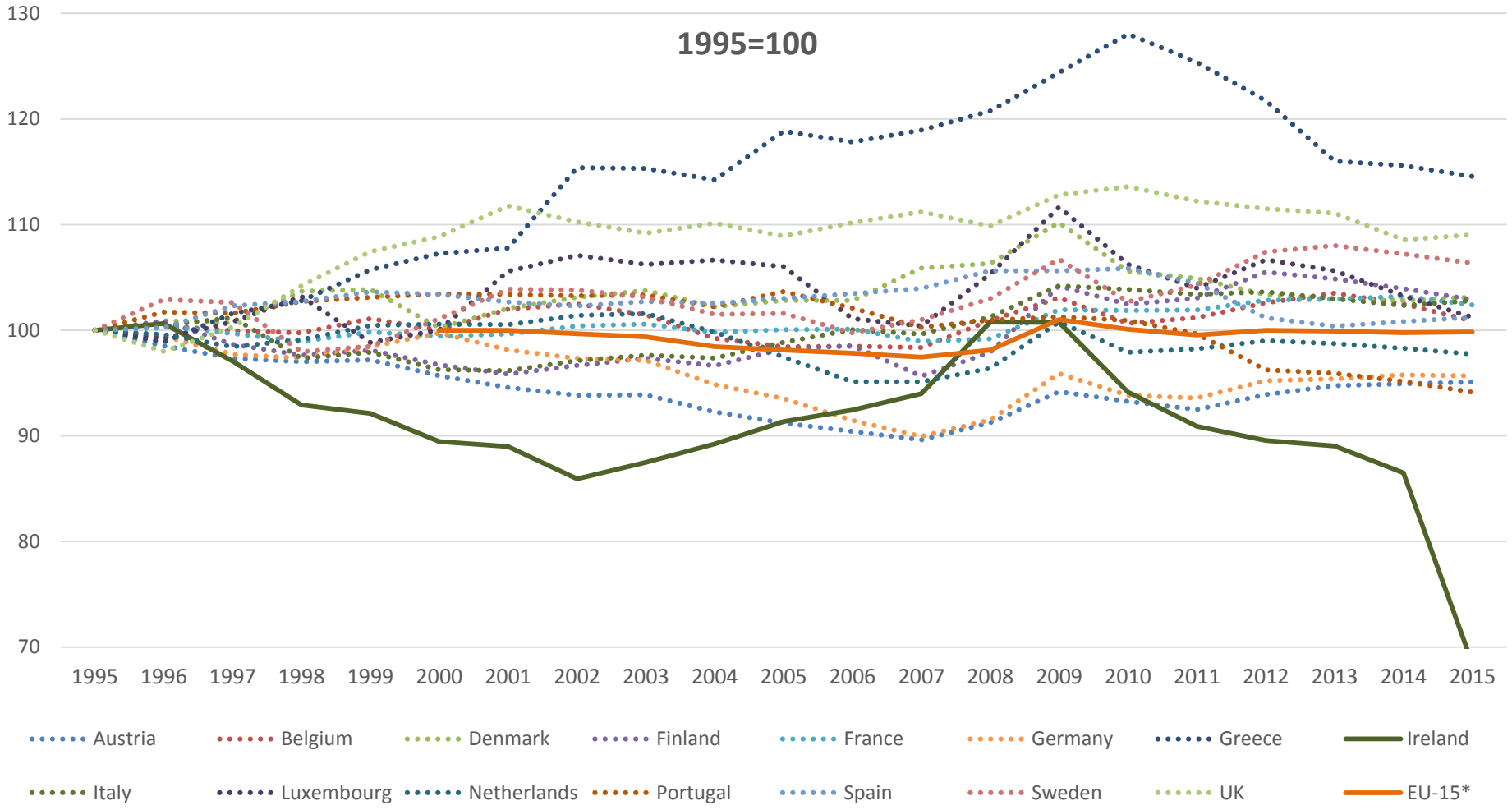
Labour share over time

Source: IMF, World Economic Outlook, April 2017

Why does this matter?

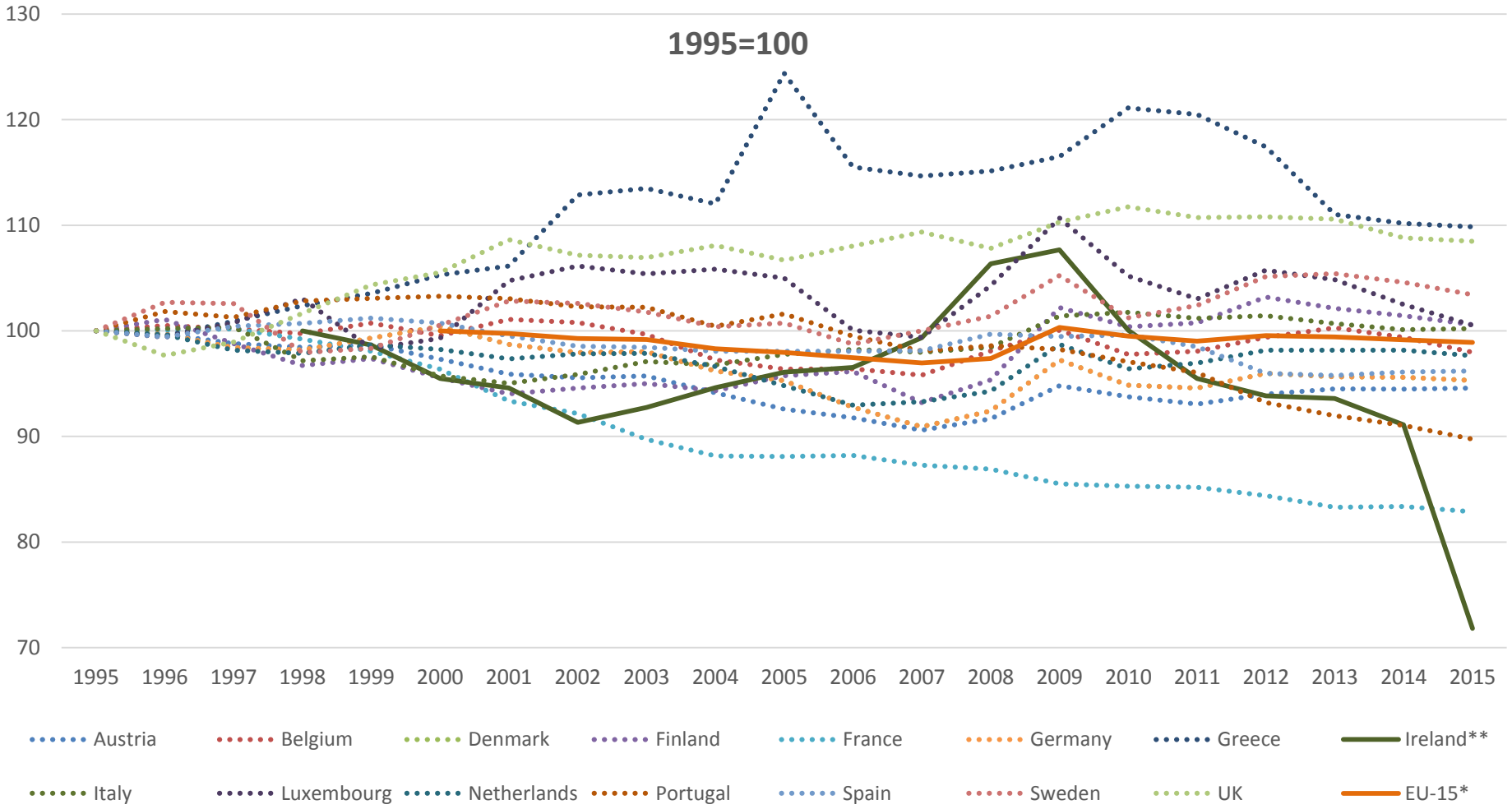
- Wages account for the bulk of household income for the majority of households
- Workers don’t receive the benefit of productivity gains or globalisation
- Capital tends to be concentrated on upper ends of income distribution

Country trends – employees



Source: EU KLEMS

Country trends – all employed

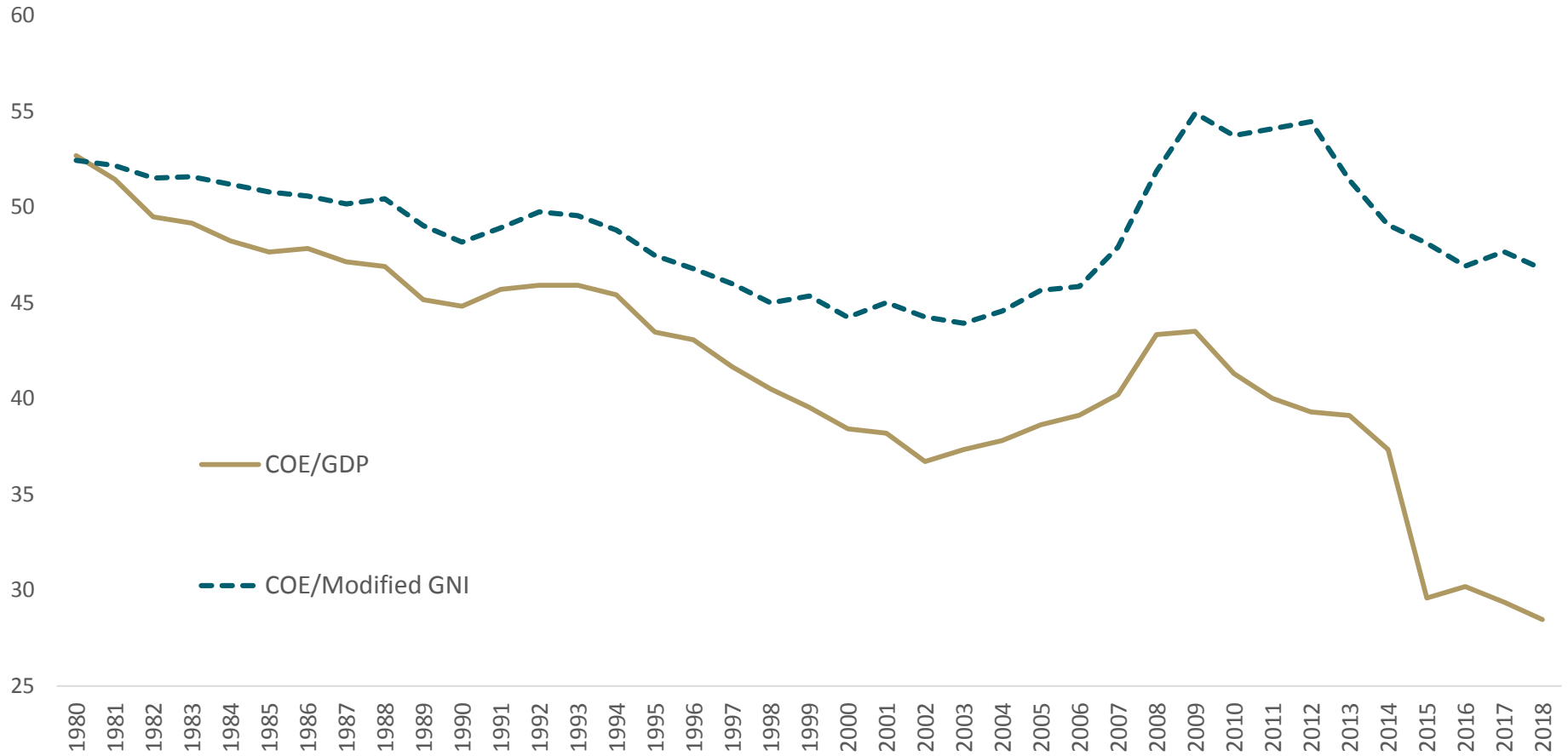


Source: EU KLEMS

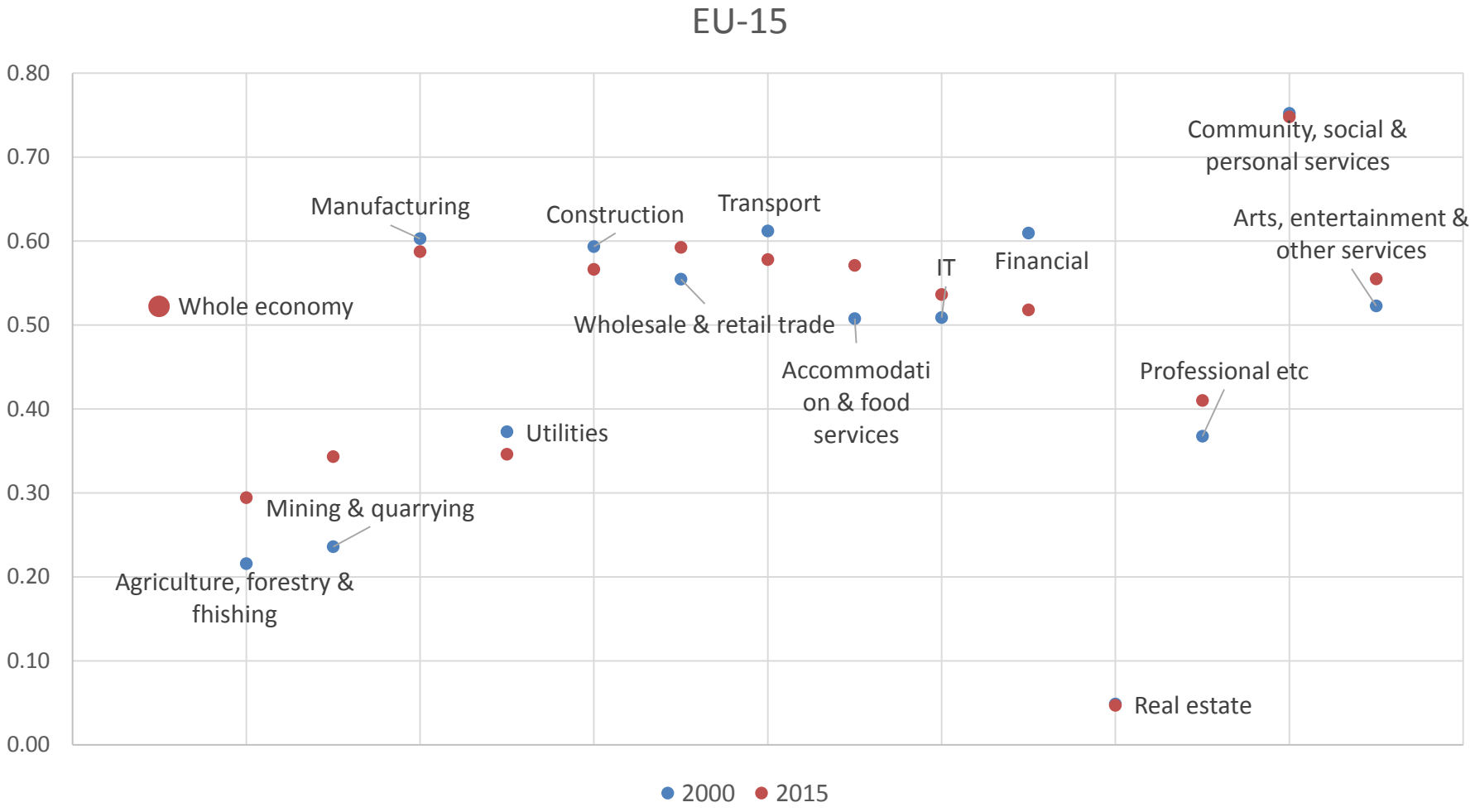
What explains the changes in the labour share?

- GDP distortions
- Changes in composition of the economy towards sectors with lower labour shares
- Changes in the labour share within industries

Irish labour share – GDP based vs. GNI*

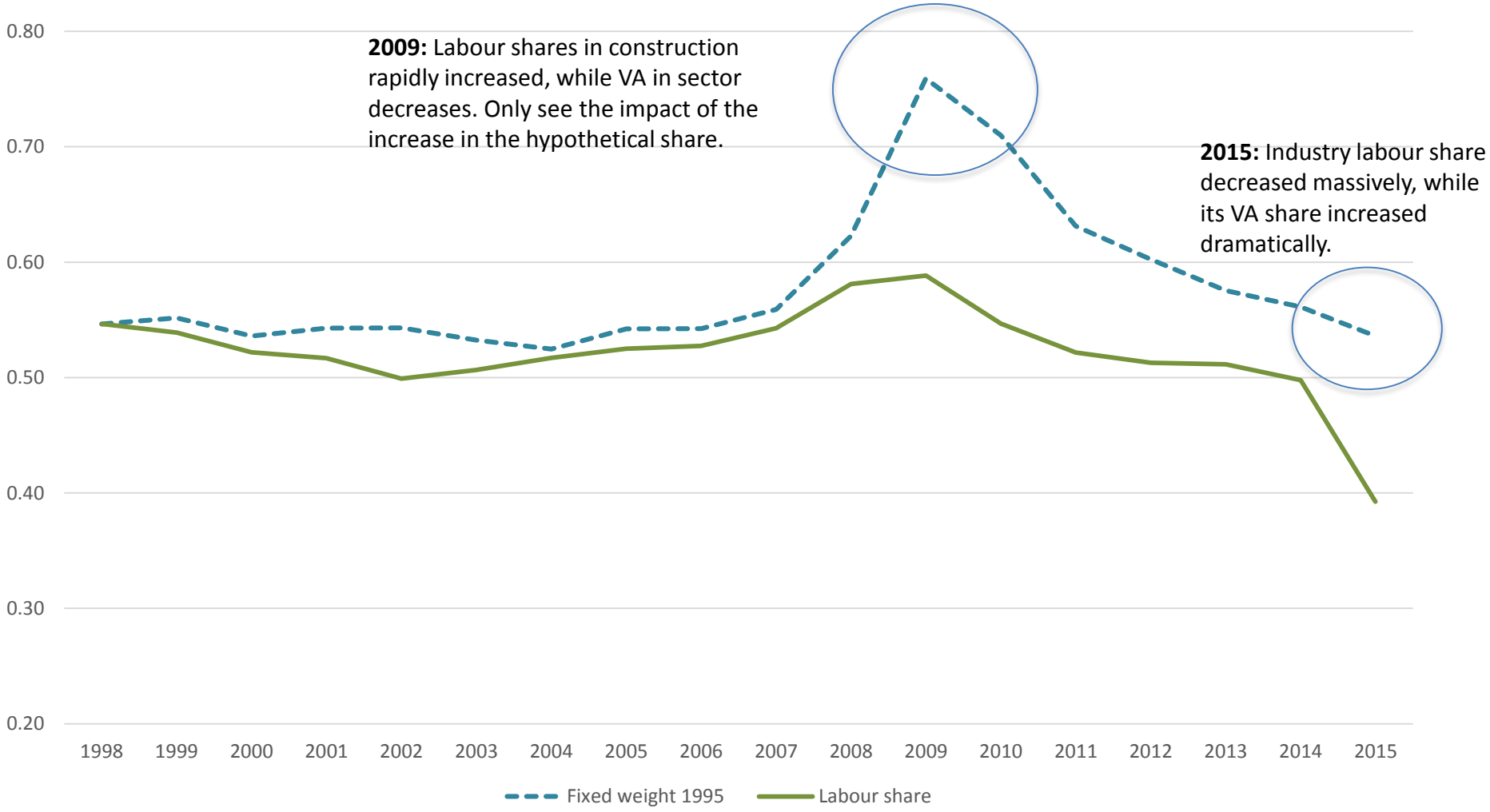


Labour share differences across sectors



Source: EU KLEMS

Irish labour share – actual vs. hypothetical

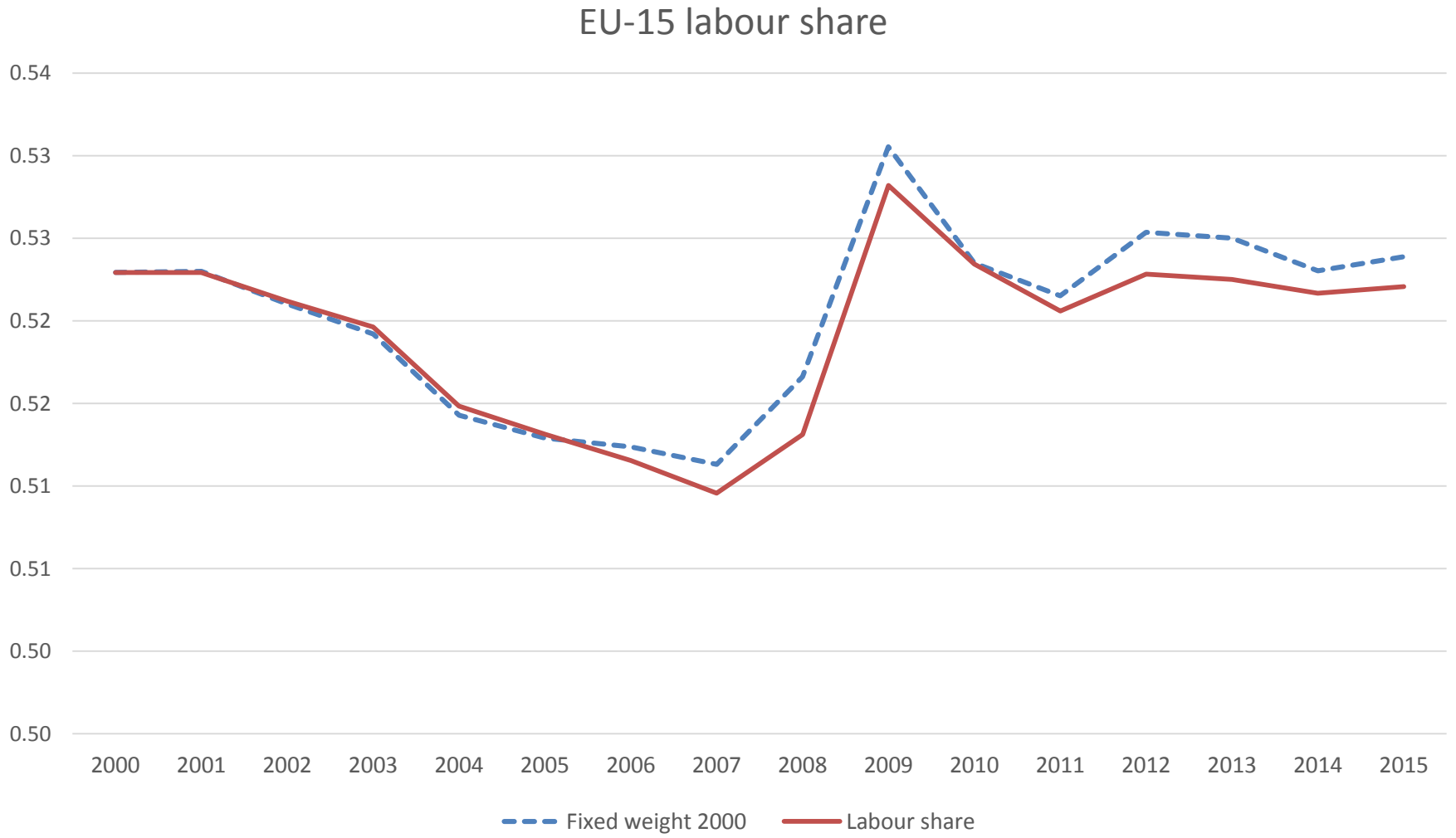


2009: Labour shares in construction rapidly increased, while VA in sector decreases. Only see the impact of the increase in the hypothetical share.

2015: Industry labour share decreased massively, while its VA share increased dramatically.

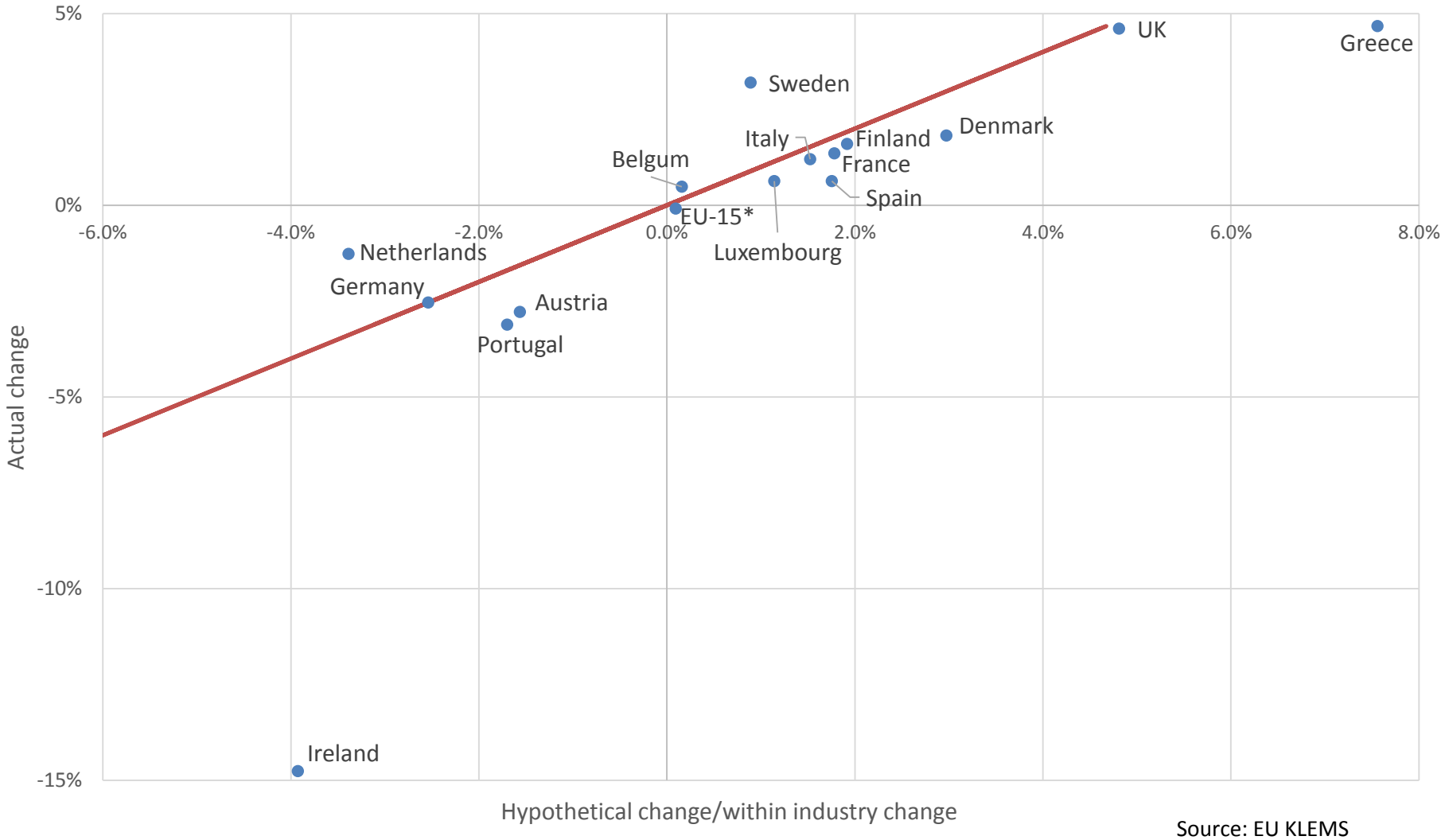
Source: EU KLEMS

EU-15 changes seem to be mainly within-industries



Source: EU KLEMS

Cross-country changes seem to be mainly within-industries



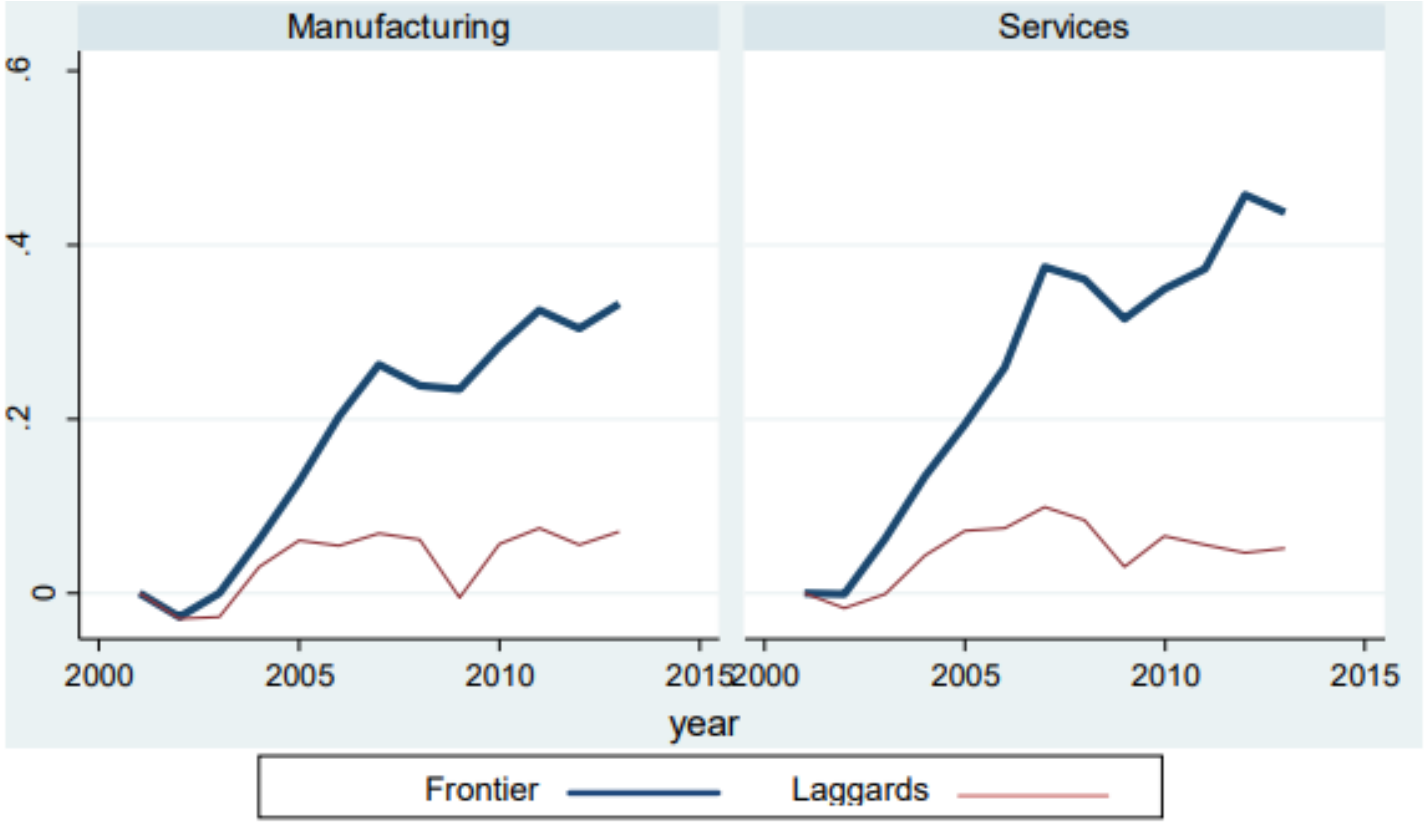
Source: EU KLEMS

What is driving these changes?

- Productivity
- Globalisation
- Rise of superstar firms
- Decline in the cost of capital
- Institutional settings: strength of unions, etc.
- House prices
- Factors are not unrelated..

What is driving these changes?

Labour productivity: value added per worker (2001-2013)



Source : Andrews, Criscuolo and Gal (2017)

CompNet database

- Developed by the ECB
- Firm-level data, aggregated up to 2 digit sector level
- 15 European countries (exc. Ireland)
- 1999-2016
- Approx. 10,000 observations
- Rich information on productivity, trade, financial, competition and labour

Modelling industry level labour shares

$$Labour\ share_{sct} = \alpha_0 + \alpha_i Z_{sct} + \delta_c + \gamma_t + \varepsilon_{sct}$$

Z variables

- Competition: HHI index
- Productivity ratio: 90th - 10th percentile
- Globalisation: outward + inward FDI as a % of GDP
- Relative cost of capital: $\frac{GFCF\ deflator}{GVA\ deflator}$
- Capital intensity: mean capital-labour ratio

Results

	Labour share	Labour share	Labour share	Labour share	Labour share
HHI	- 0.018**				
Productivity gap		- 0.221***			
Globalisation			- 0.078***		
Investment prices				- 0.050	
Capital intensity					- 0.068***

Sectors coke, real estate or non-market are excluded from the analysis as labour shares in these industries are driven by changes in commodity and asset prices or by imputation choices

Year, country dummies included. Errors clustered at sectoral level

- Industry concentration, productivity gap, GVC participation, and capital intensity all reduce the labour share

Conclusion

- Need to ensure productivity gains are distributed evenly
- Technological change and globalisation may offset these gains
- Is the emergence of superstar firms due to technological advancement or market power?
- Further work on disentangling relationship required (e.g. non-linear relationships)