

MARKET STRUCTURES AND INCOME DISTRIBUTION

A DISCUSSION

Chiara Criscuolo

Head of Productivity Innovation and Entrepreneurship Division

Directorate for Science Technology and Innovation

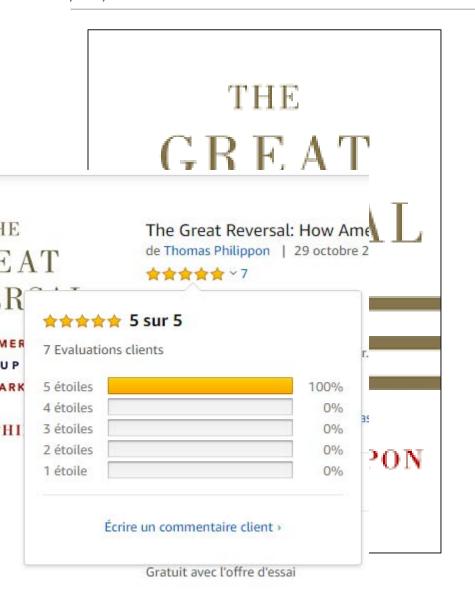
OECD

Annual Research Conference 2019 Brussels, November 15





Important Issue that needs to reach a broad audience!



Great book! #whateconomistsdo

Very well written with a great narrative...also for non economists (e.g. aeronautical engineers!)

Focus mainly (but not only) on the US (evidence for other EU and OECD countries?)



Key point for this discussion: little agreement on causes of rising concentration..6 hypotheses

- Much ado about nothing (wrong measure)
- **Decreasing Domestic Competition** (TP book's main point)
- Rise of Superstar Firms (Autor et al; Andrews, Criscuolo and Gal; etc.)
- Lower Search Costs (easier price comparison; winner-takes-all dynamics)
- Intangible Assets (Crouzet and Eberly; Haskel and Westlake; and...ongoing work at OECD)

"Not mutually exclusive, the truth is a mix of these hypotheses with varying relevance across industries and time periods" (and I would add across countries)



STYLIZED FACTS ACROSS COUNTRIES:



THE RISE OF SUPERSTARS IN AN INTANGIBLE, DIGITAL INTENSIVE ECONOMY...

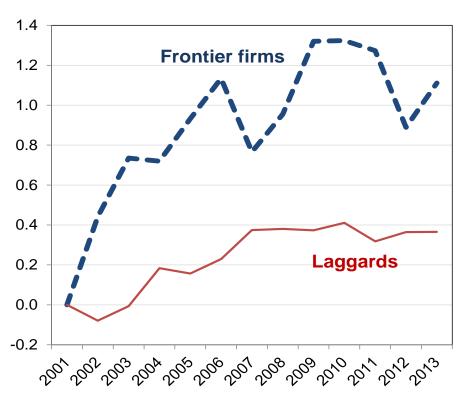




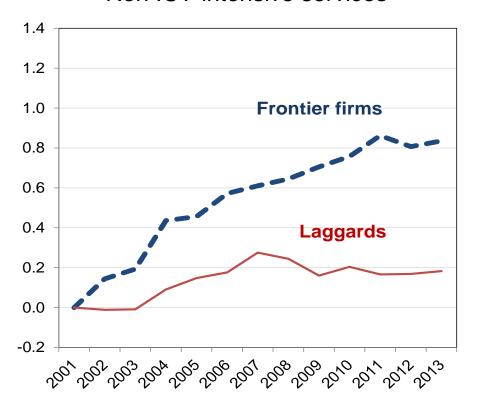
winner takes most dynamics

Sales

ICT-intensive services



Non ICT-intensive services



Source: Andrews, Criscuolo and Gal, 2016



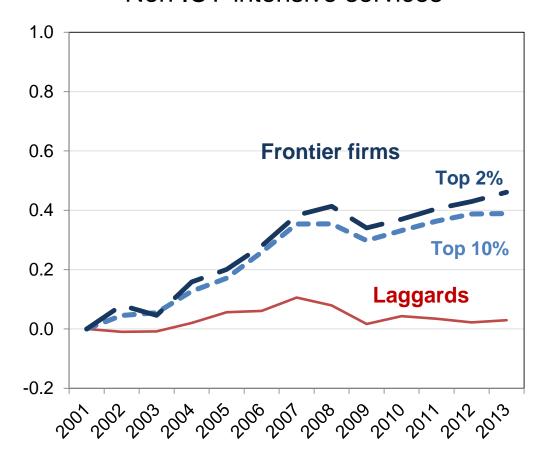
... of Superstar firms

Multifactor Productivity

ICT-intensive services

1.0 Top 2% • 8.0 **Frontier firms** 0.6 **Top 10%** 0.4 0.2 Laggards 0.0 -0.2

Non ICT-intensive services



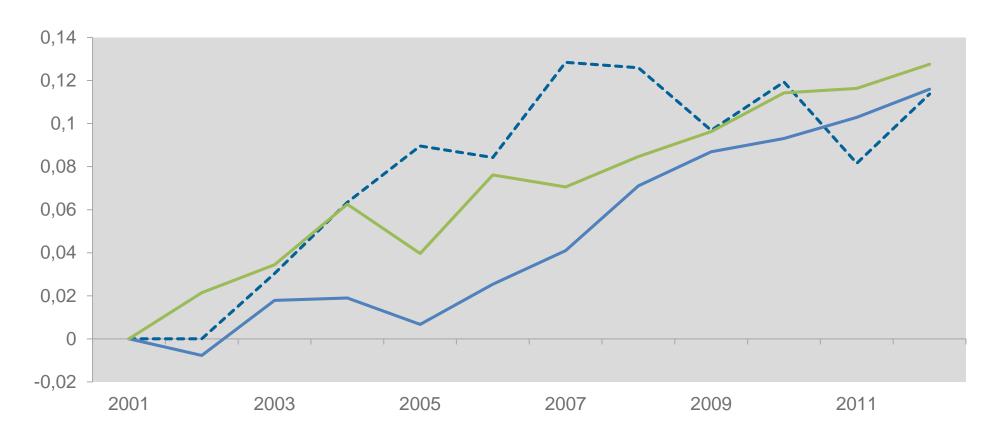
Andrews, Criscuolo and Gal., 2016





With implications for wage inequality

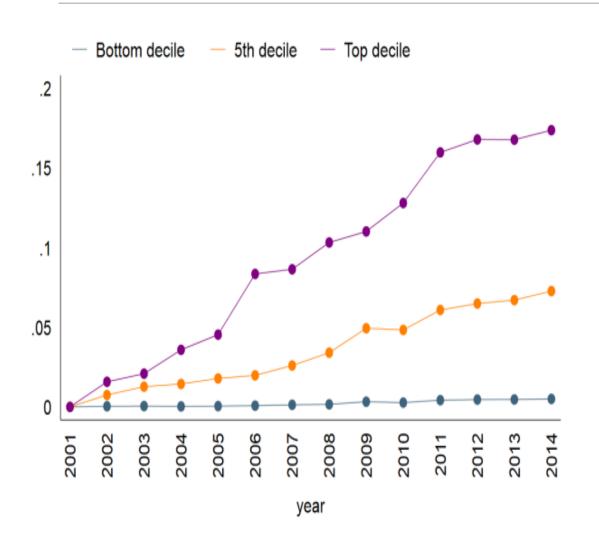
Rising inequality in wages and productivity

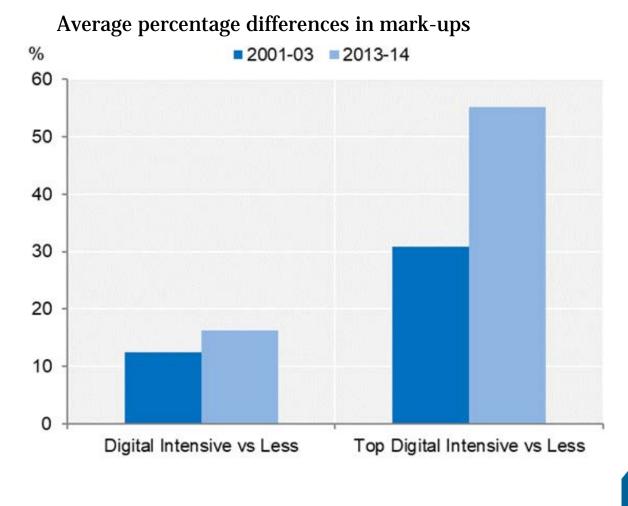


--- Overall earnings inequality 90-10 ——Between-firm wage inequality 90-10 ——Log Labour Productivity 90-10



Rising mark-ups especially in Digital Intensive sectors (even excluding the US from the analysis)



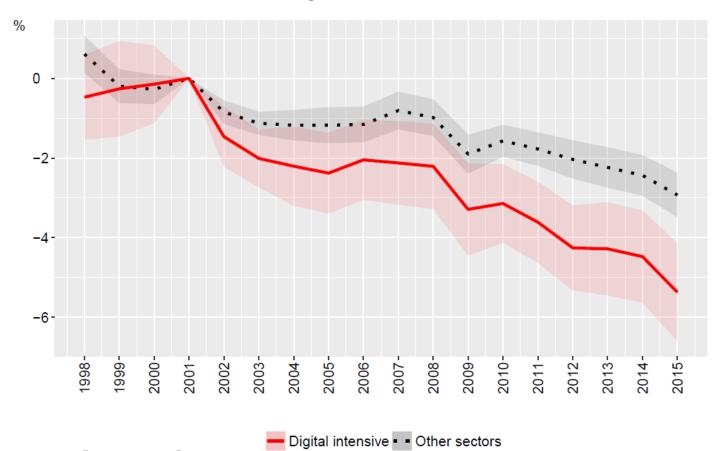


Source: Calligaris, Criscuolo and Marcolin, (2018) "Mark-ups in the digital era".



Declining Business Dynamism beyond the USparticularly in digital intensive sectors

Entry rates

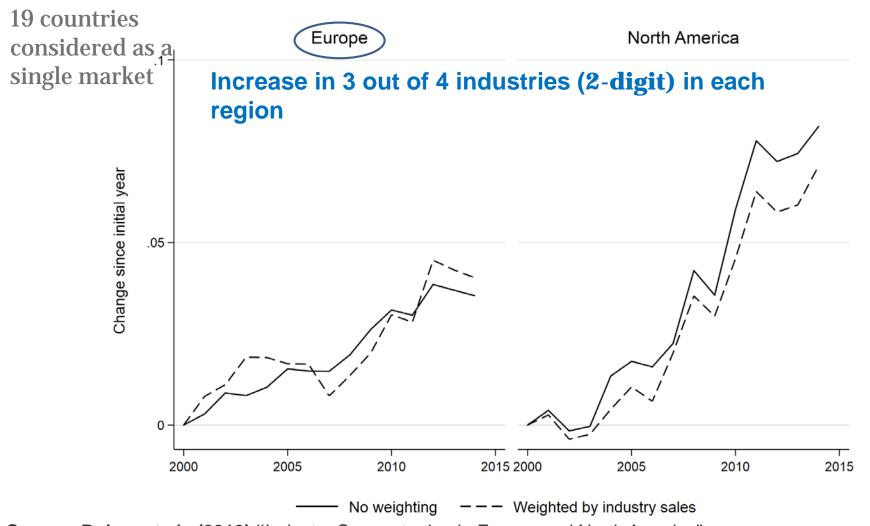


Source: Calvino and Criscuolo, 2018





Concentration increased in both Europe and North America...

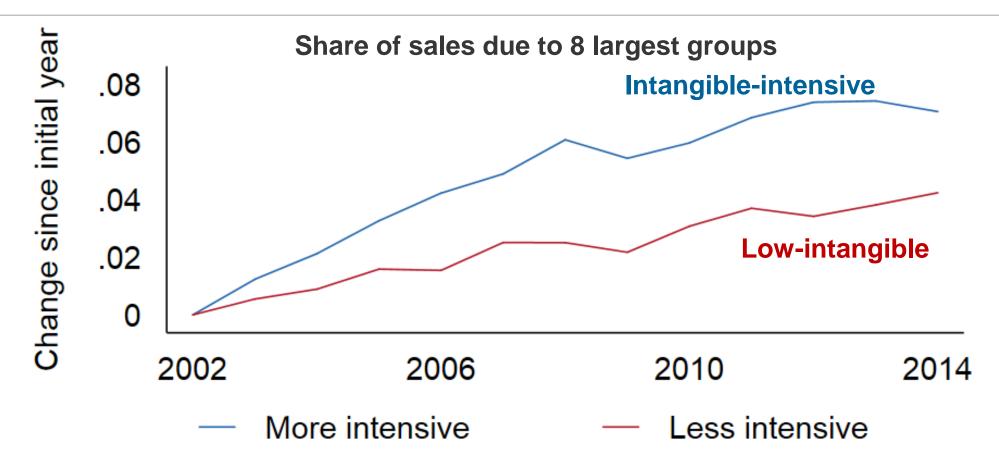


Source: Bajgar et al., (2019) "Industry Concentration in Europe and North America"





Increase stronger in intangible-intensive industries



Stronger the more globalised and digital intensive the industry Sectors with higher intangible intensity also observe higher productivity dispersion (ongoing project)





Questions for discussion

more analysis needed:

- Different drivers across space, industries and over time? (Crouzet and Eberly, 2018; Gutierrez and Philippon, 2019; Covarrubias et al., 2019)
- Grow to top through innovation, remain there through entry barriers? (Van Reenen, 2018; Ayyagari et al., 2019)
- Break-down of knowledge diffusion? (Andrews et al., 2016; Akcigit and Ates, 2019a,b; Berlingieri et al., forthcoming)
- Beyond Competition Policy/Enforcement and regulation (with new rules?), need for policies that support
 - investment in intangibles and digital (finance; complementarities); role of skills?
 - level-playing field (large incumbents vs start-ups) and potential entrants
 - knowledge diffusion (re-think IP?)



Thank you!

Chiara.Criscuolo@oecd.org



Systematic variation in concentration changes across industries

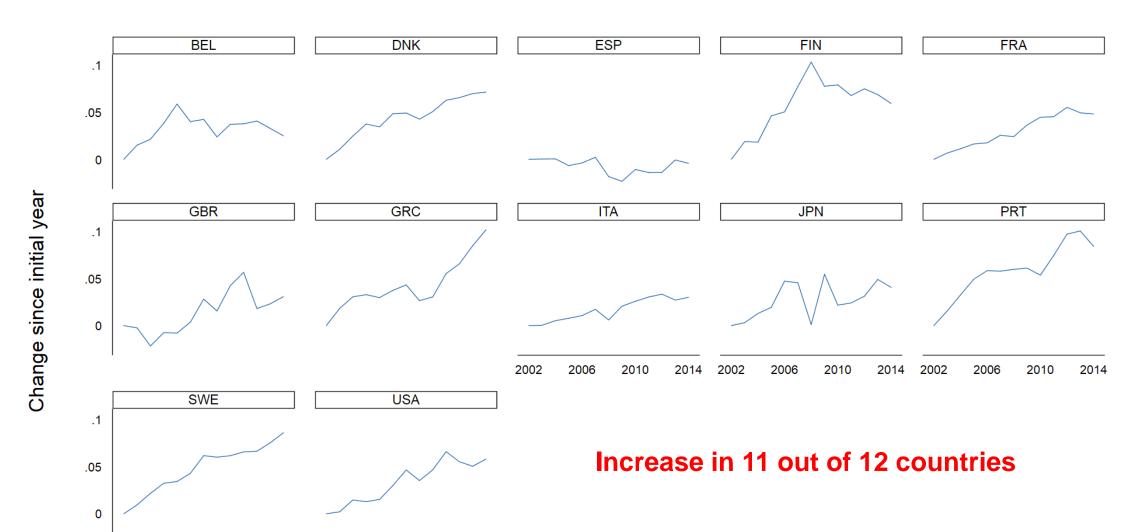
Change in the share of sales due to 8 largest groups (2002-2014)

1	26: Manufacture of computers	0.23
2	13: Manuf. of text., apparel & leathe	0.17
3	61: Telecommunications	0.16
4	29: Manufacture of motor vehicles	0.15
5	47: Retail trade	0.11
6	52: Warehousing	0.11
7	28: Manufacture of machinery eq.	0.10
8	16: Manufacture of wood	0.09
9	50: Water transport	0.09
10	58: Publishing	0.09
•••		
33	55: Accommodation & food services	-0.01
34	68: Real estate activities	-0.01
35	24: Manufacture of basic metals	-0.02
36	19: Manufacture of coke / petroleum	-0.16
37	79: Travel agency and related	-0.18

Countries: BEL, DNK, ESP, FIN, FRA, GBR, GRC, ITA, JPN, PRT, SWE, USA

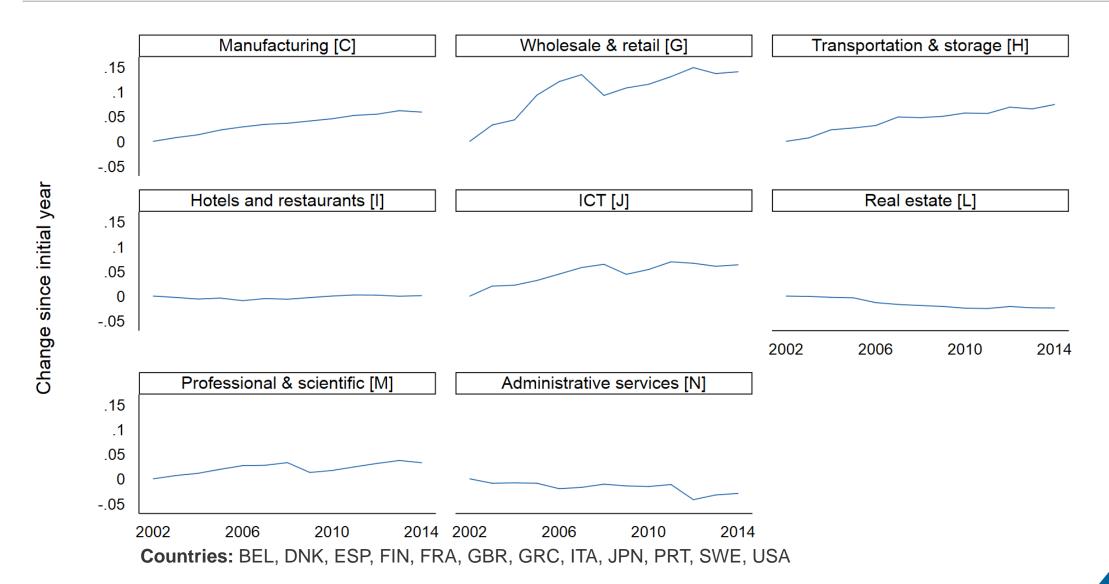


...in many countries...





...and in many (but not all) sectors





DATA AND MEASUREMENT



Concentration measure

Share of sales due to 8 (4, 20) largest business groups...

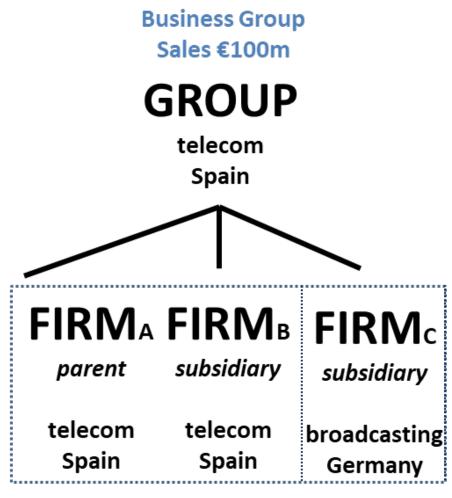
...within each country and 2-digit industry

- Industry vs. market
- Country vs. world region vs. local





Apportioning into countries and industries



Sales = €40m Sales €20m Sales €40m





Data

Sales Data for Subsidiaries, Parent & Group

(100 Countries)



Group-Subsidiary Ownership Data

(2.8 million firms)

Sample

- Europe (BEL, DNK, FRA, FIN, GBR, GRC, ITA, PRT, ESP, SWE)
 + United States + Japan
- Manufacturing + non-financial market services
- 2002-2014





Data on drivers of concentration

- Intangible investment: INTAN-Invest
 - Innovative assets, computerised information, economic competencies
 - by country and A21 industry
- Industry digital intensity: Calvino et al. (2018)
- Tangible investment, trade openness, exposure to FDI, product market regulations: OECD



The role of the digital transformation for competitive dynamics

Digital Technologies:

- lower costs of entry, operation, and experimentation;
- Ease sharing of ideas and innovation;
- network effects;
- Improve real-time measurement;
- Ease penetration of several markets and faster scaling up.

These characteristics can potentially:

- Increase efficiency and productivity growth;
- o Be source of increased competition (Brynjolfsson et al., 2005).

But also:

- Lead to "Winner-takes-most" dynamics (Brynjolfsson et al., 2008; Bessen, 2017);
- o Increase importance of **complementary investments in intangibles** (Haskel and Westlake, 2017; Brynjolfsson and McElheran, 2016; Brynjolfsson et al., 2017).





How can we explain these trends? Competing explanations

- Decline in Knowledge diffusion Akcigit and Ates (2019)
- Implementation lags: Digitalisation, like other GPT needs complementary innovations and investment in intangible capitals (including organizational changes, and new skills)
 - Brynjolfsson, Rock and Syverson, 2017
- Increase in Market Power driven by both changes in market structure and changes in technology (importance of intangibles)
 - De Loecker, Eeckhout, Mongey, 2019
- Heterogeneous and cyclical response of technology adoption to low interest rates
 - Liu, Mian and Sufi, 2019 (heterogeneity); Anzoategui, et al., 2016 (cyclicality)