



Competition and Digitalisation

What's the buzz?

Giuseppe Nicoletti

Head of Structural Policy Analysis
OECD Economics Department



ORGANISATION
FOR ECONOMIC
CO-OPERATION
AND DEVELOPMENT

Banque de France (Paris), 8th April 2019 8th April 2019
Competition in a globalised world: the role of public policies
Session 2: Competition policies in a globalized and digital world: new challenges

Broad **economic trends** that raise concerns

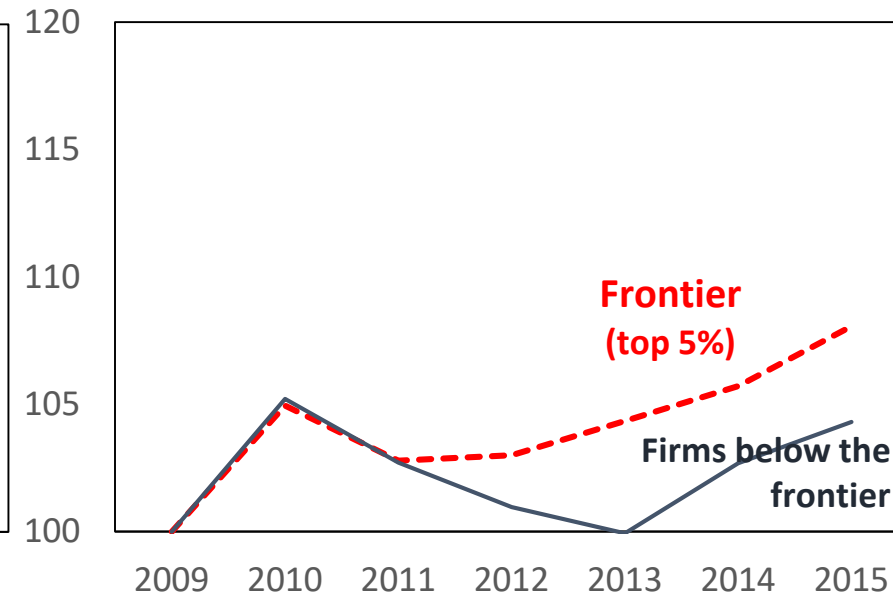
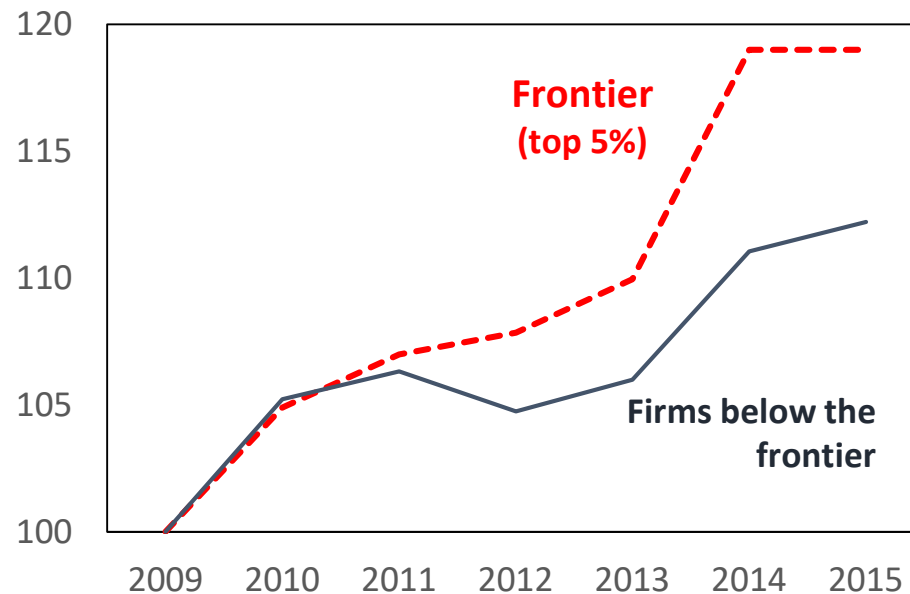


Productivity gaps have widened especially in digital-intensive sectors

Industries with high digital intensity

Industries with low digital intensity

Total factor productivity (2009=100)

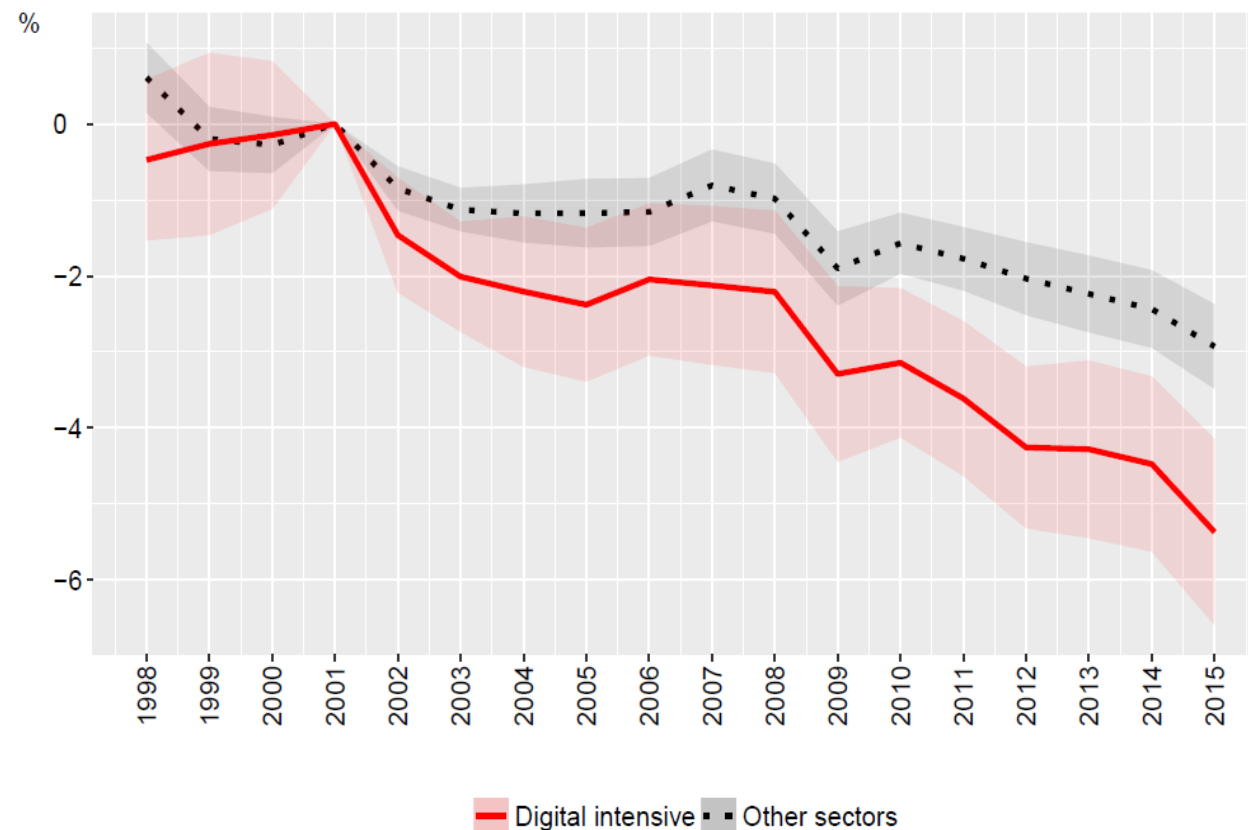


Source: Gal et al. (2019)



Evidence of declining business dynamism, especially in digital sectors

Firm entry rates have fallen faster in digital, though from higher levels



Source: Calvino and Criscuolo, 2018 based on OECD DynEmp3 database, August 2018.



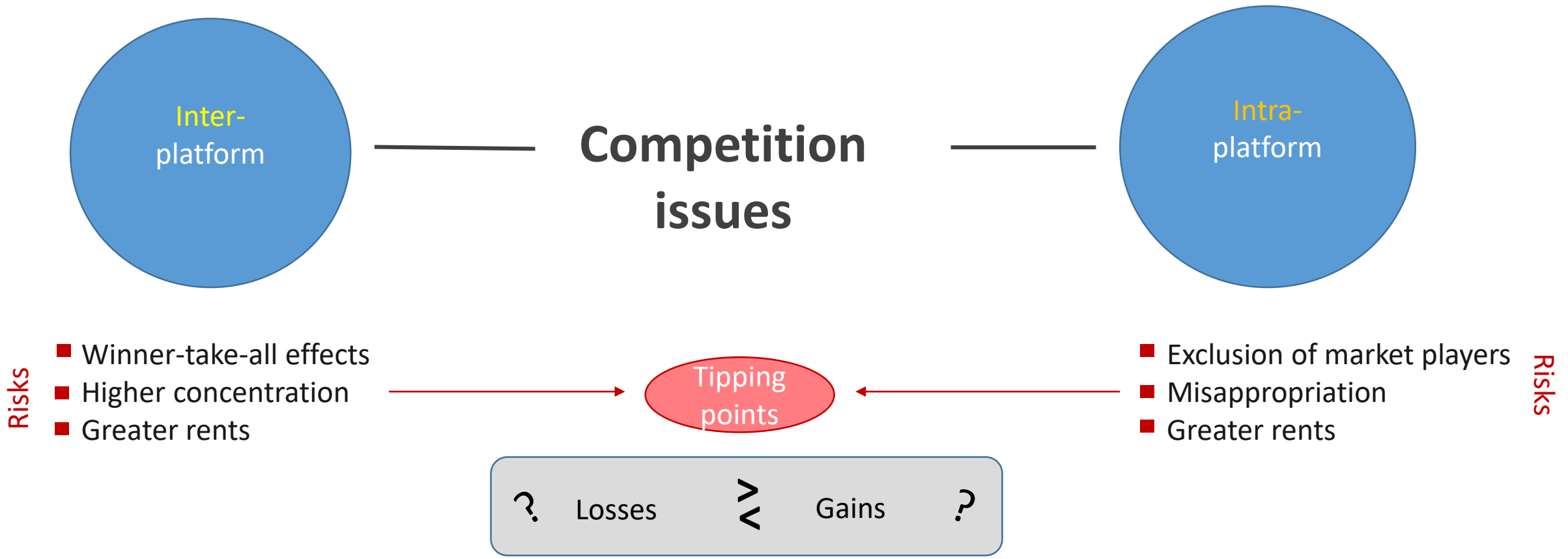
Digital markets have features that both **deter** and **encourage** competition

Supply	Market	Demand
<ul style="list-style-type: none">• Scale economies• Network effects• Vertical integration• Complementarities • Scale without mass• Modularity	<ul style="list-style-type: none">• Switching costs• Collusion• Interaction users/suppliers • Lower transaction costs• Lower asymmetries	<ul style="list-style-type: none">• Network externalities• Non-rival/often non-excludable• Pricing strategies

The combination of these factors can affect **efficiency** and **welfare** in different ways as well as have repercussions in other markets using digital inputs



Concern 1: Digital superstars and market structure

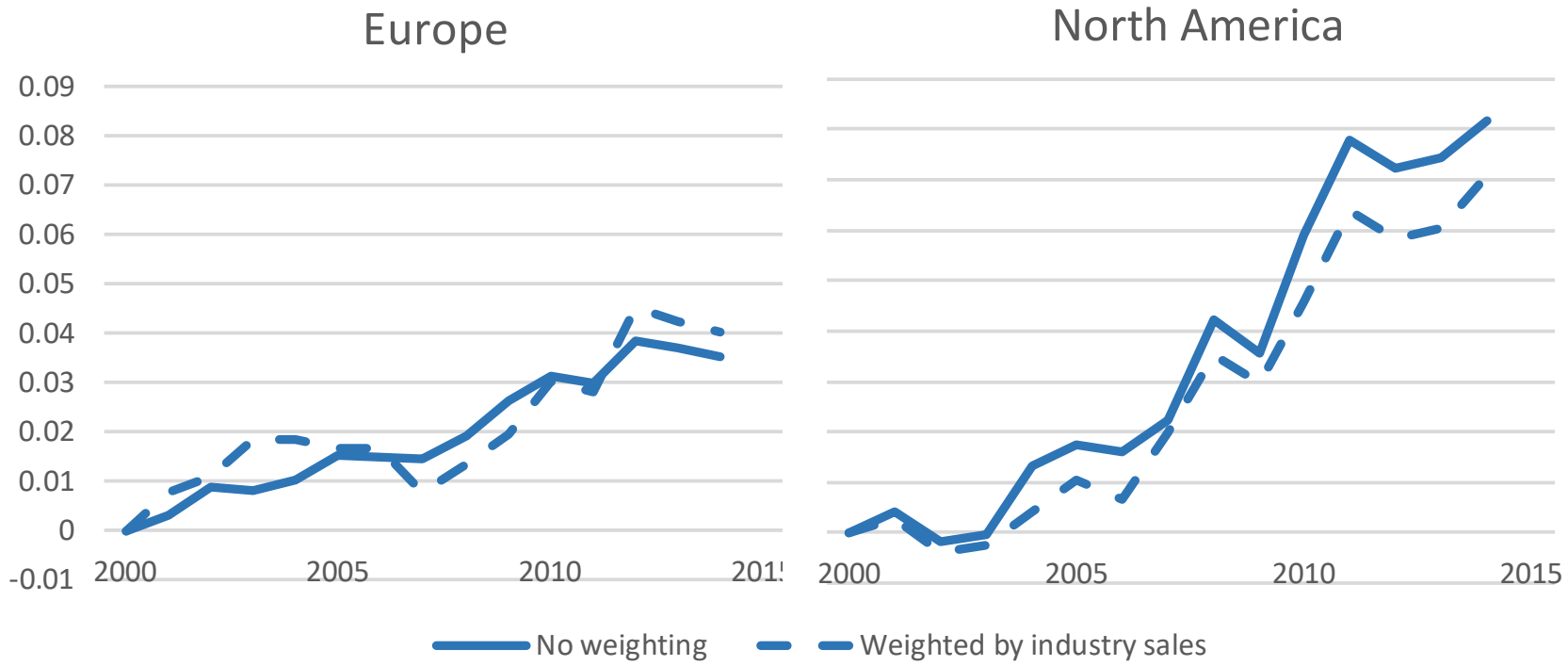


Policy levers
Interoperability, access to data, transparency rules, M&A and IPR review, competition enforcement, level playing field, avoid regulatory bypass...



Industry concentration has increased in Europe and North America

Evolution of CR8 (Orbis and OECD STAN data)

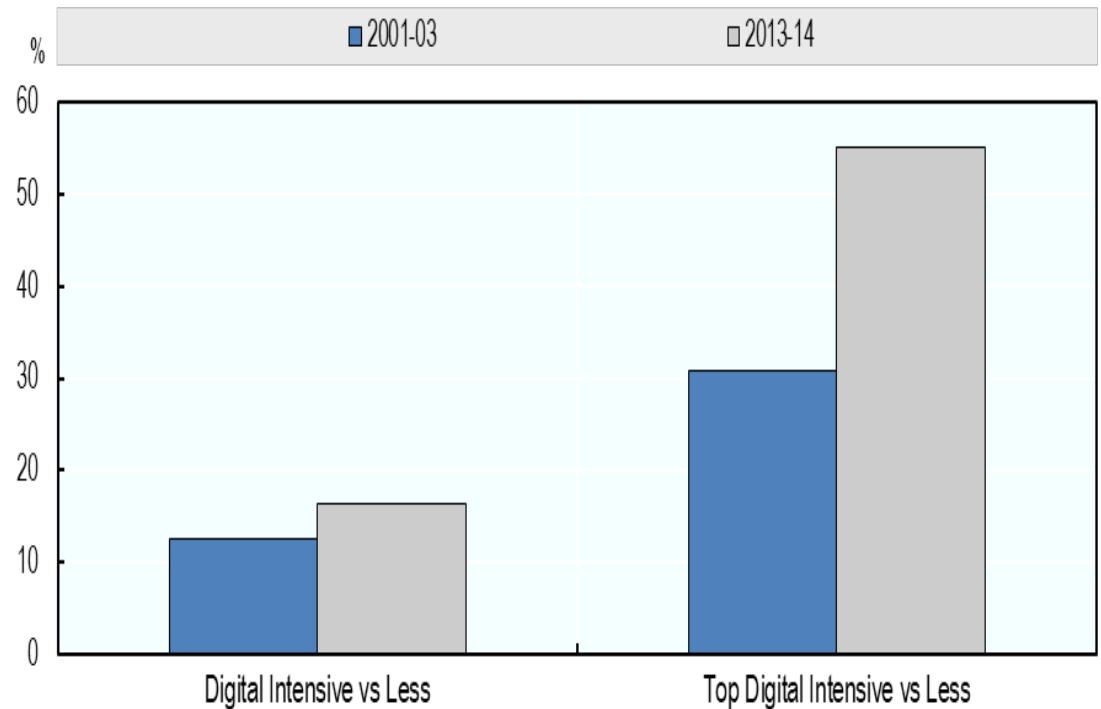
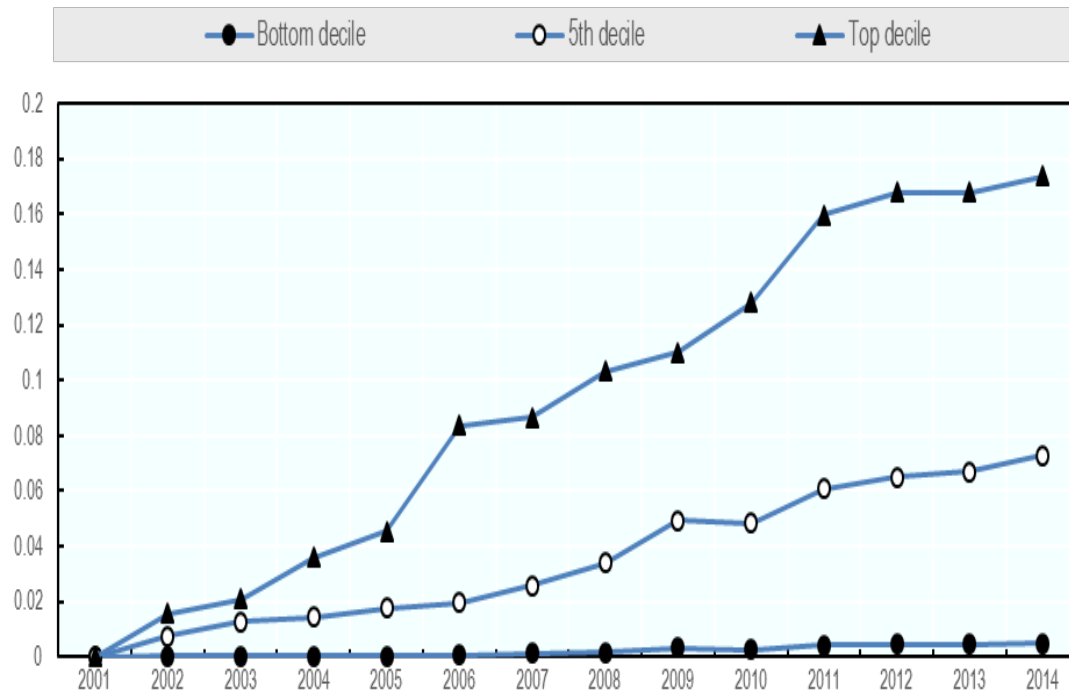


Source: Bajgar et al. (2019), Industry concentration in Europe and North America



Evidence of **increasing mark-ups**, especially at the top of digital-intensive sectors

Increasing mark-ups across 25 countries for firms with more than 20 employees



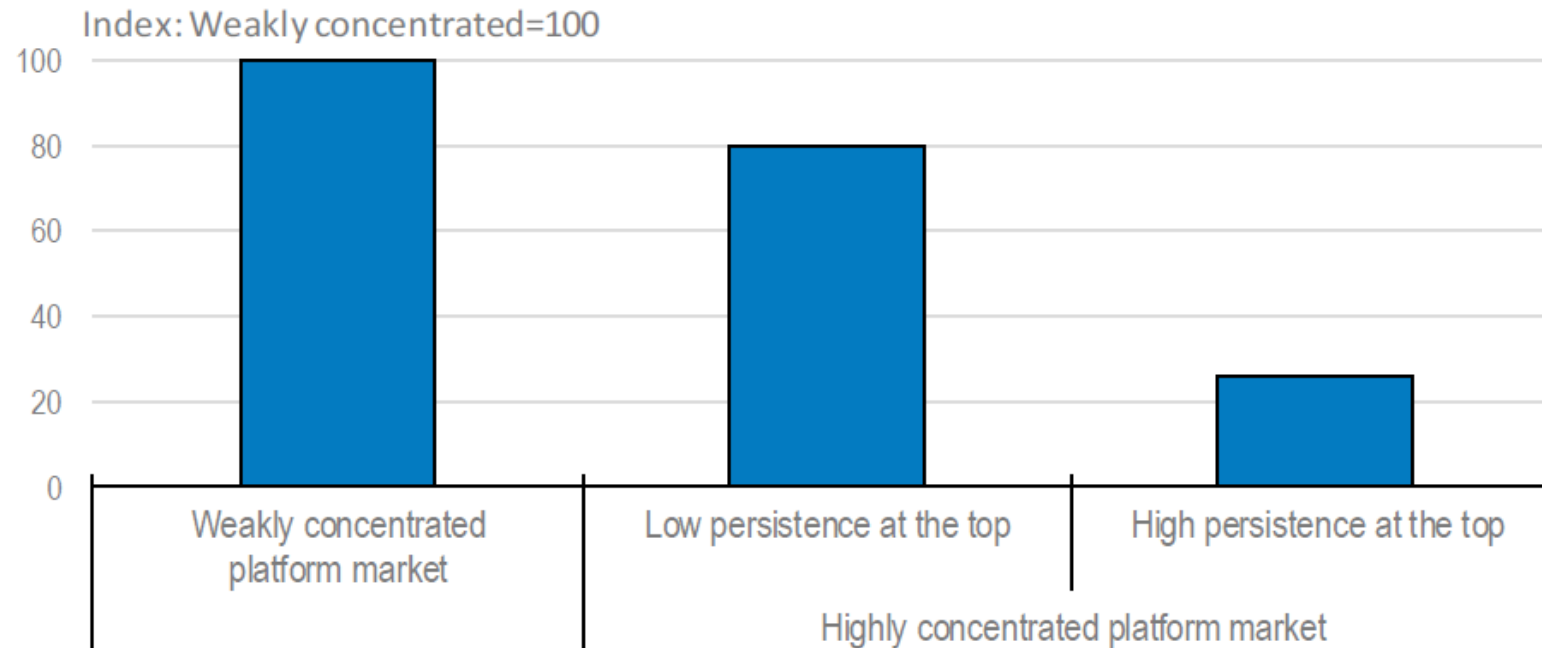
Note: Includes 25 countries (AUS, AUT, BEL, BGR, DEU, DNK, ESP, EST, FIN, FRA, GBR, HUN, IDN, IND, IRL, ITA, JPN, KOR, LUX, NLD, PRT, ROU, SVN, SWE, USA).

Source: Calligaris et al., (2018) "Mark-ups in the digital era".



The positive effects of platform development on productivity decline with market concentration

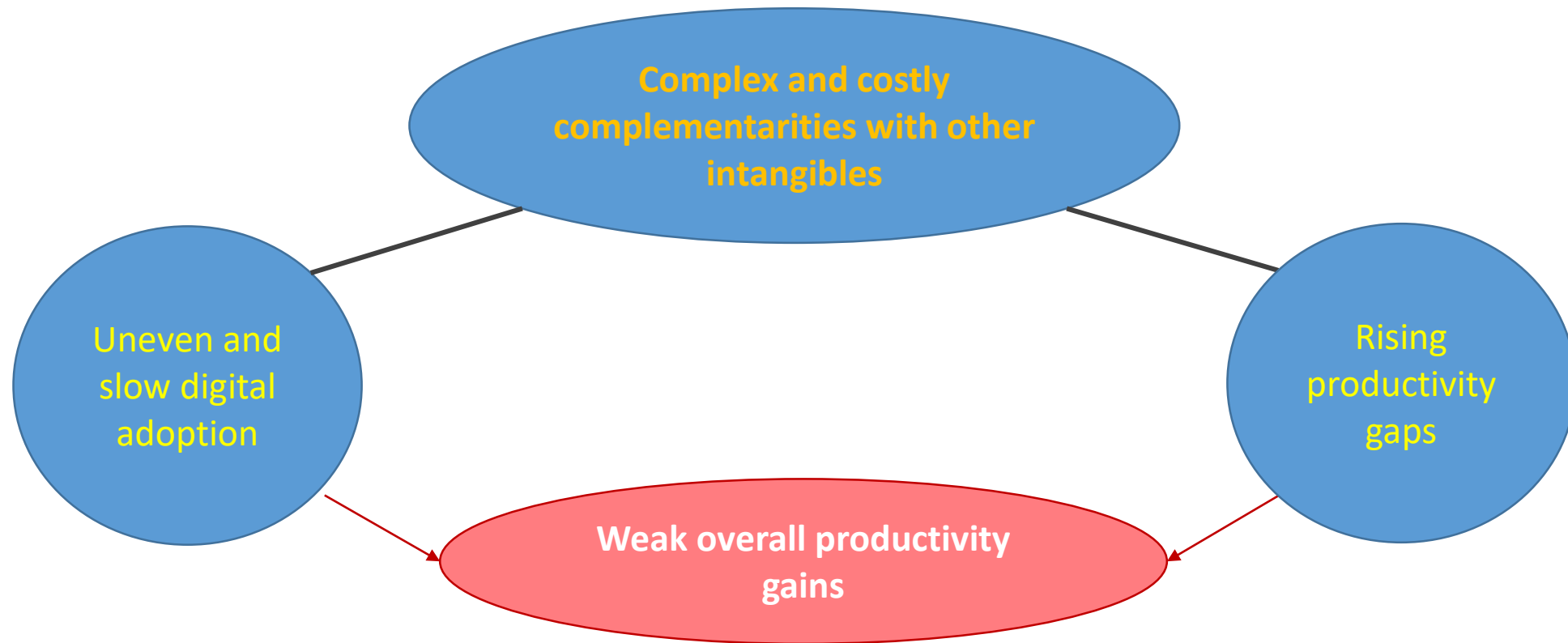
Effects of “aggregator” platforms on productivity of incumbents at different levels of market concentration and persistence



Source: Gal et al. (2019), Like it or not? The impact of online platforms on the productivity of service providers



Concern 2: Digital diffusion and productivity



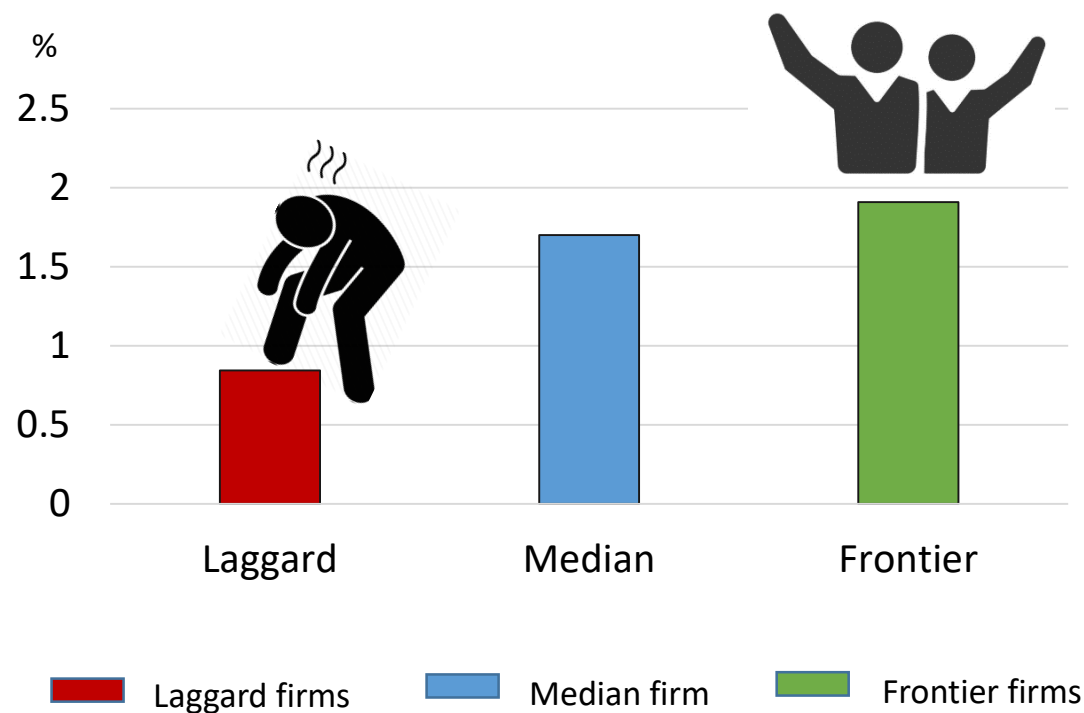
Policies should address:

Skill shortages, financing constraints, barriers to market dynamism, low incentives for innovation, inappropriate regulation, low infrastructure



More **productive firms** benefit more from a digitalized environment

Firm-level increase in productivity from a 10 percentage point increase in industry-level digital adoption of high speed broadband

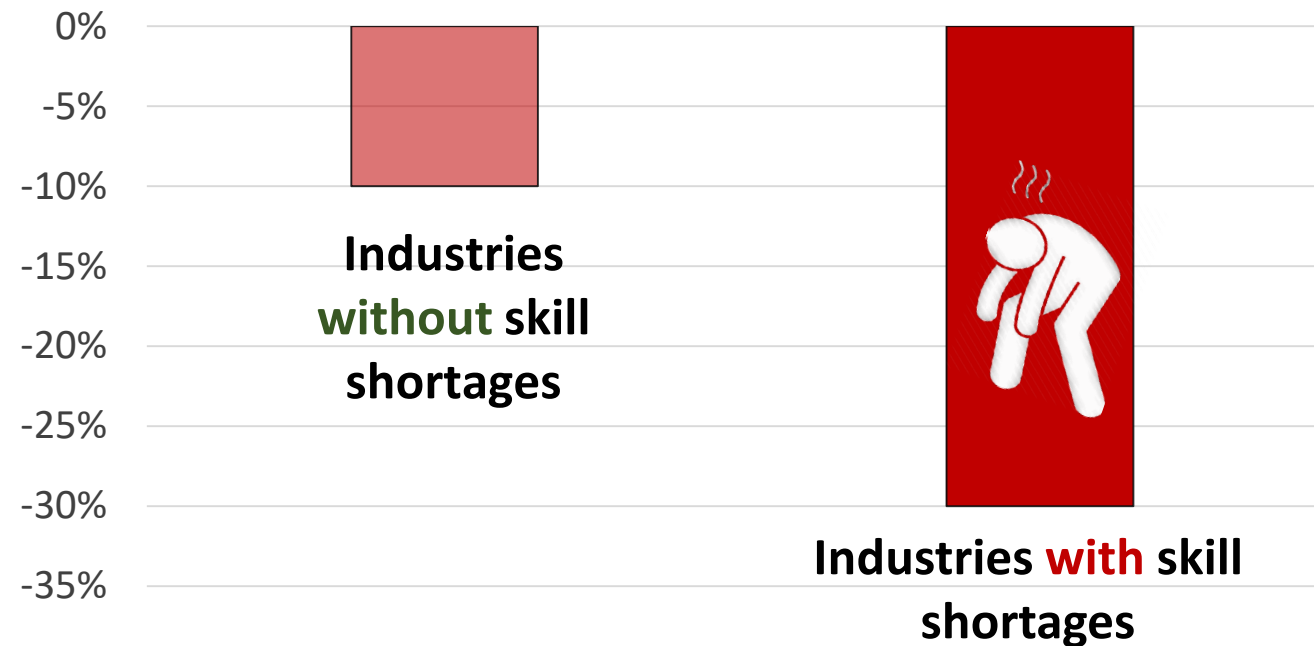


Source: Gal et al. (2019)



Skill shortages reduce gains from digital technologies in low productive firms

Productivity shortfall from digital adoption in low productive firms relative to most productive firms
(average OECD country)



Source: Gal et al. (2019)



Conclusions

- Digital markets embed features that are likely to change the nature of competition and the structure of markets
- Taken together, empirical evidence suggests that in digital-intensive sectors
 - market power is on the rise and dynamism and competition are under stress
 - rising complementarities with intangibles (data, skills) challenge adoption and productivity gains
 - the combined effect of market dominance and complementarities can be pernicious for competitive pressures and productivity
- However, a number of issues are still open:
 - does all this reflect rewards for innovation and efficiencies?
 - from a competition perspective, **big is not always bad**
 - we need more evidence concerning contestability and the efficiency impact of platforms
 - is the ability of digitalisation to counter the many headwinds that cause the aggregate productivity slowdown hampered by rising gaps between top and laggard firms?
- Looking forward, **key risks for efficiency and welfare** emerge from:
 - Entry barriers and access to key complementary intangibles
 - Anticompetitive conduct by dominant firms (in both product and labour markets)
 - Competition-distorting regulation (or lack of regulation) in digital markets



Annex Slides

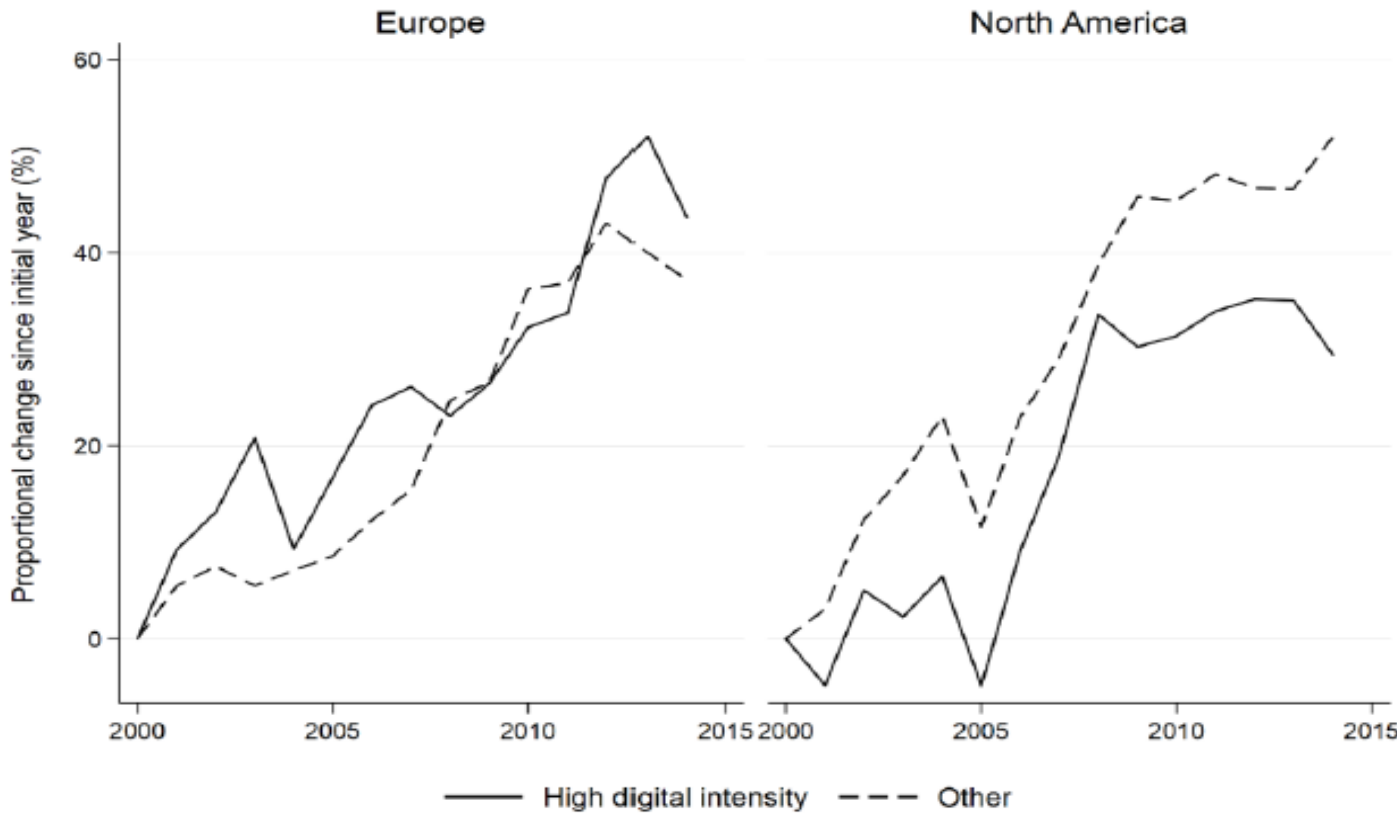
OECD References on digital competition and productivity

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- Gal, P., G. Nicoletti, T. Renault, S. Sorbe and C. Timiliotis, [Digitalisation and productivity: In search of the holy grail – Firm-level empirical evidence from EU countries](#), OECD Economics Department Working Papers, 2019-, OECD Publishing, Paris
- Gal, P., V. Millot and S. Sorbe, “Like it or not? The impact of online platforms on the productivity of service providers”, OECD Economics Department Working Papers, 2019-(forthcoming)
- Competition Committee resources on a variety of digital topics (available at <http://www.oecd.org/competition/>):
- Concentration, Big data and competition, Ex-post evaluation of agencies’ enforcement decisions, Market studies, Multi-sided platforms, Analysing innovation and privacy in merger control



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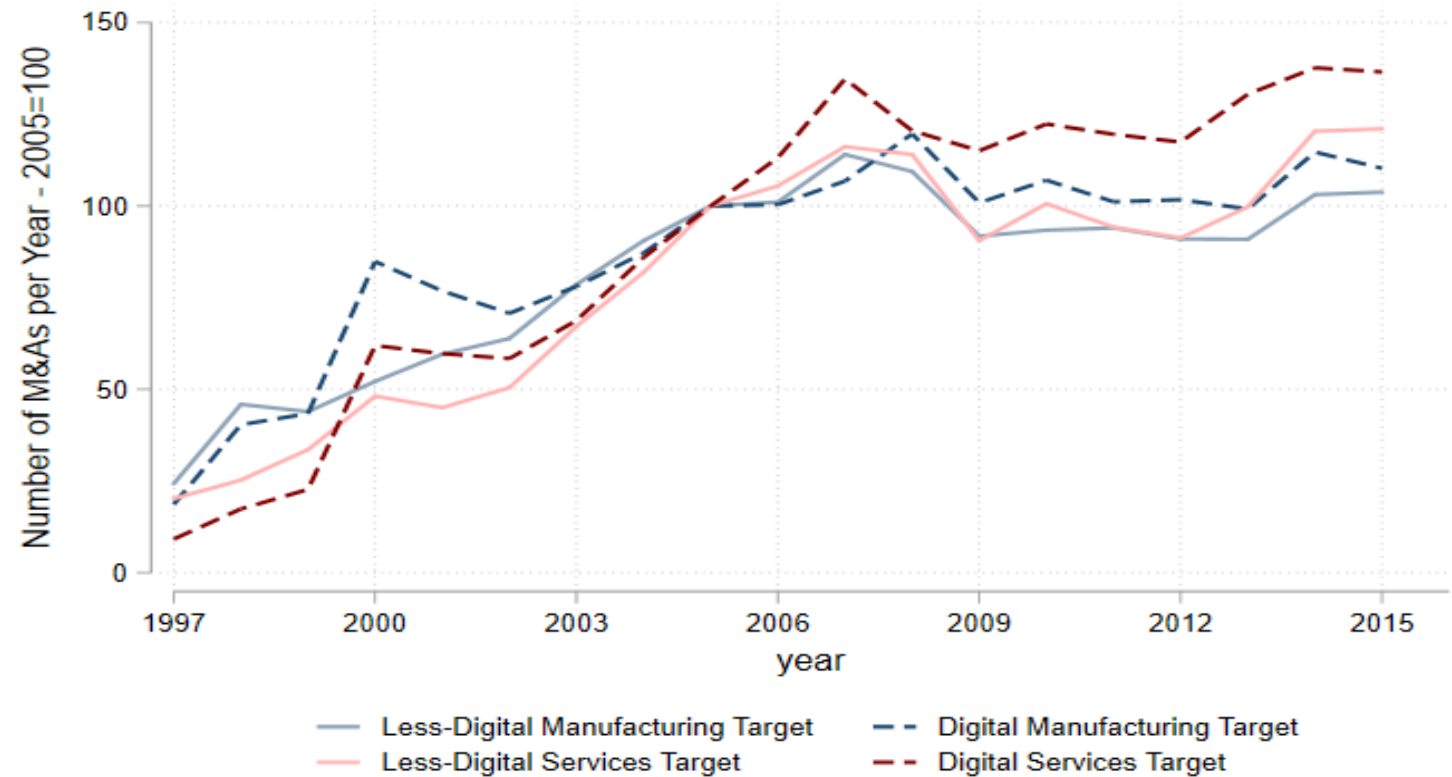


Source: Bajgar et al. (2019), Industry concentration in Europe and North America



Rising M&A activity, especially in digital sectors

The yearly number of M&A has increased rapidly over the past two decades, especially in digital services



Source: Bajgar, Criscuolo and Timmis, 2019, forthcoming.

