



**CEPR Research and Policy Network (RPN) on European
Economic Architecture
Monday 15 - Tuesday 16 April 2019
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Session 2 - What holds back productivity growth in euro area
countries?

PRODUCTIVITY IN THE EURO AREA: A (SAD) STORY IN FOUR ACTS

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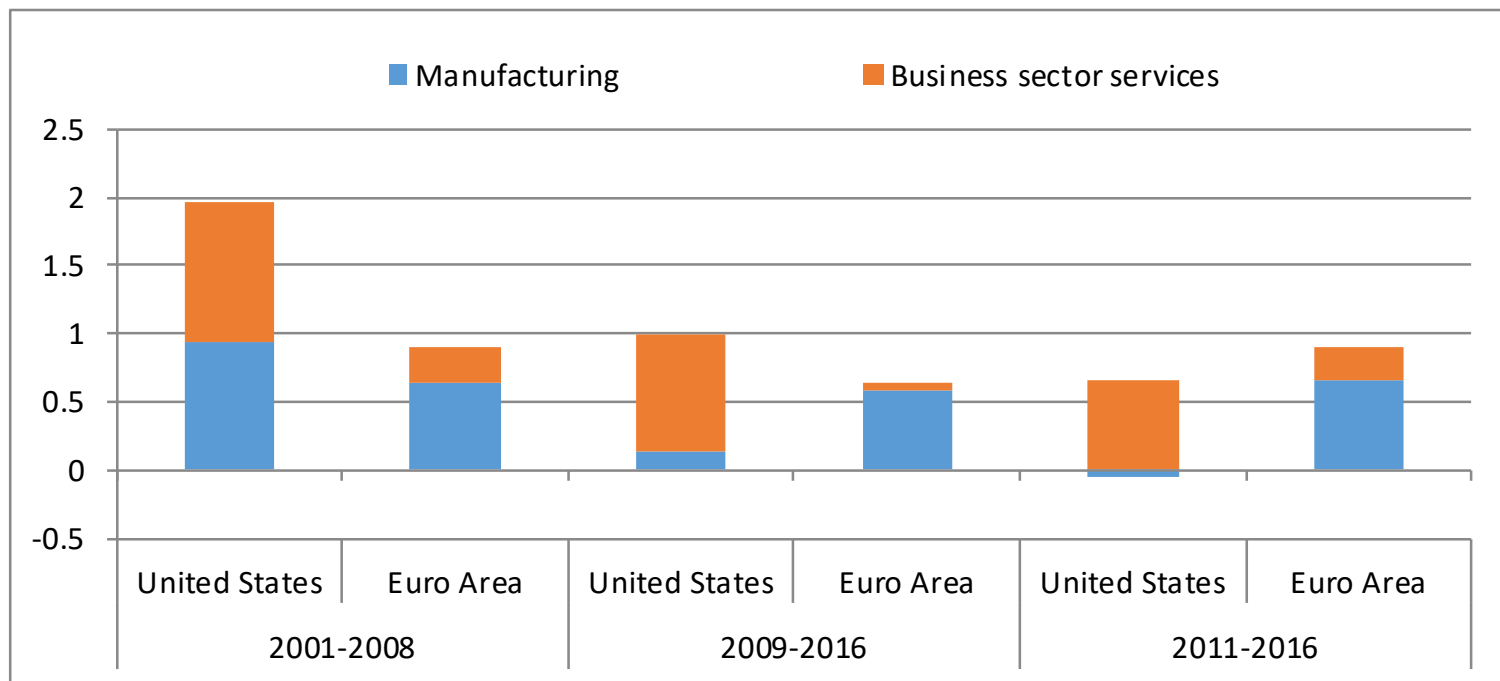
The four acts

- The missing services
- The burden of laggards
- The digital deficit
- A sick man: Italy



EU services: missing in action?

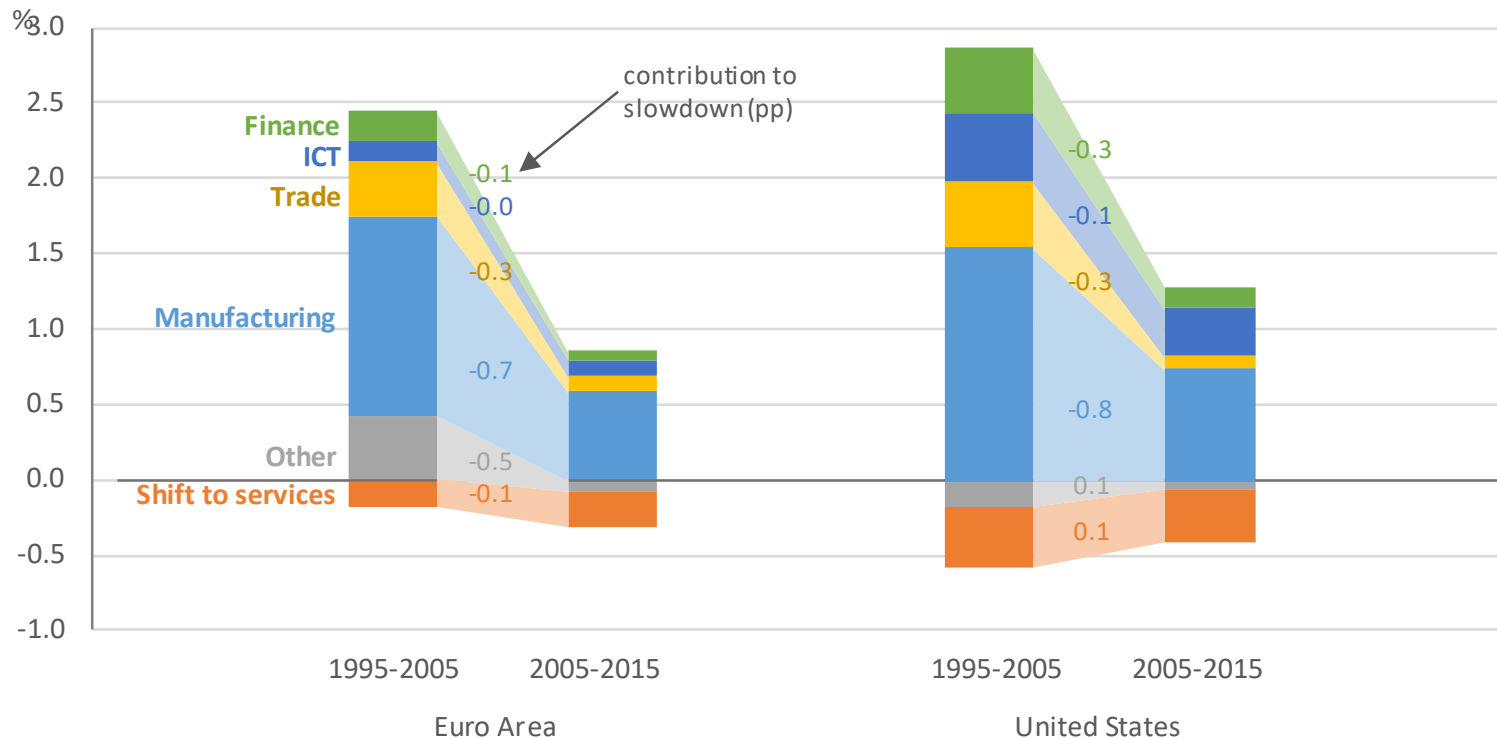
Labour productivity growth by macro-sector, US vs EA



Note: Growth in value-added per employee, OECD Productivity Database



EU services: missing in action?

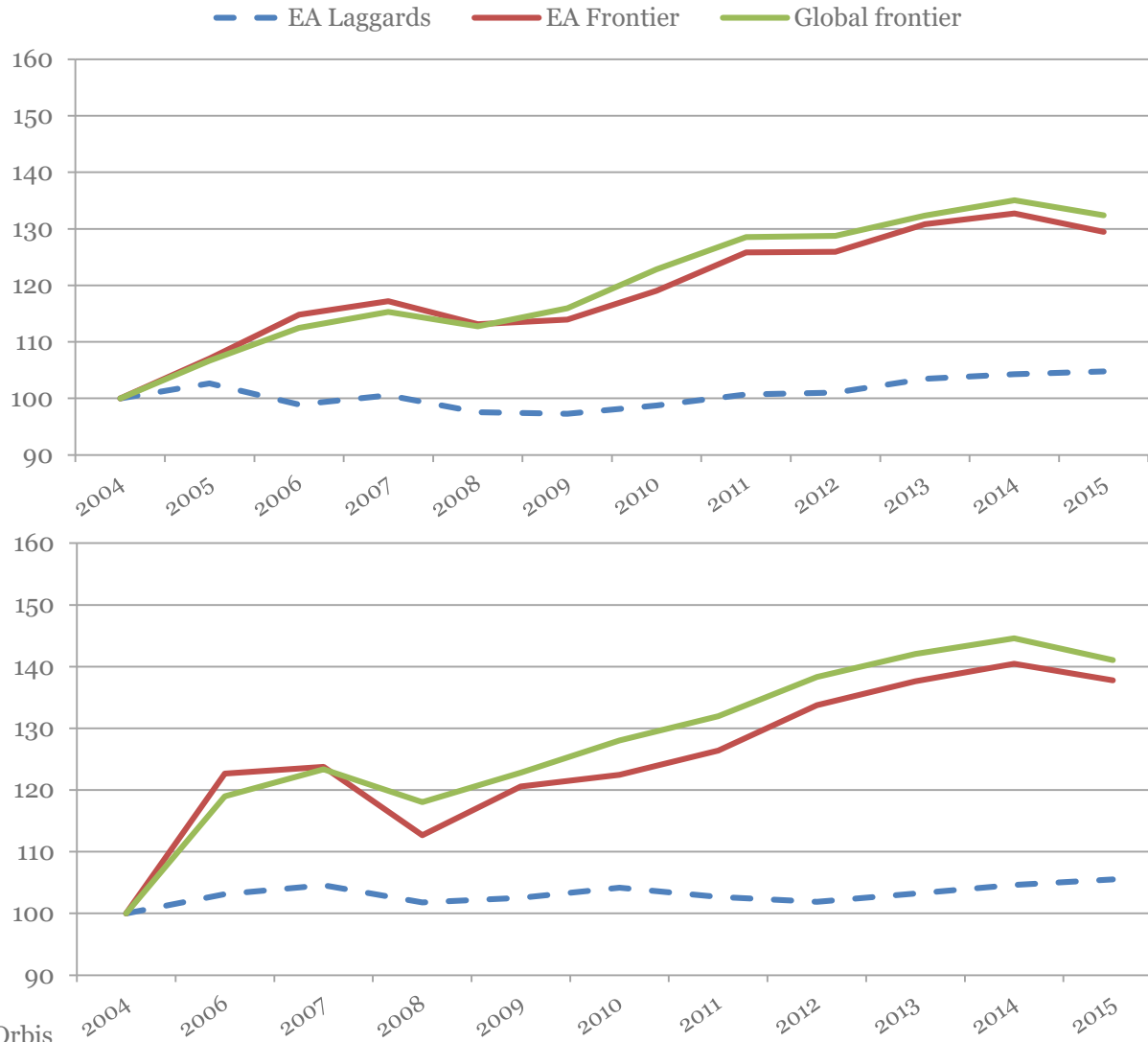


Note: Euro Area: unweighted across on 10 EA countries (AUT, BEL, DEU, ESP, EST, FIN, FRA, ITA, NLD, SVN)



Laggards' weigh down: EA firms losing touch with global and EA frontier

Labour productivity
(2004=100)



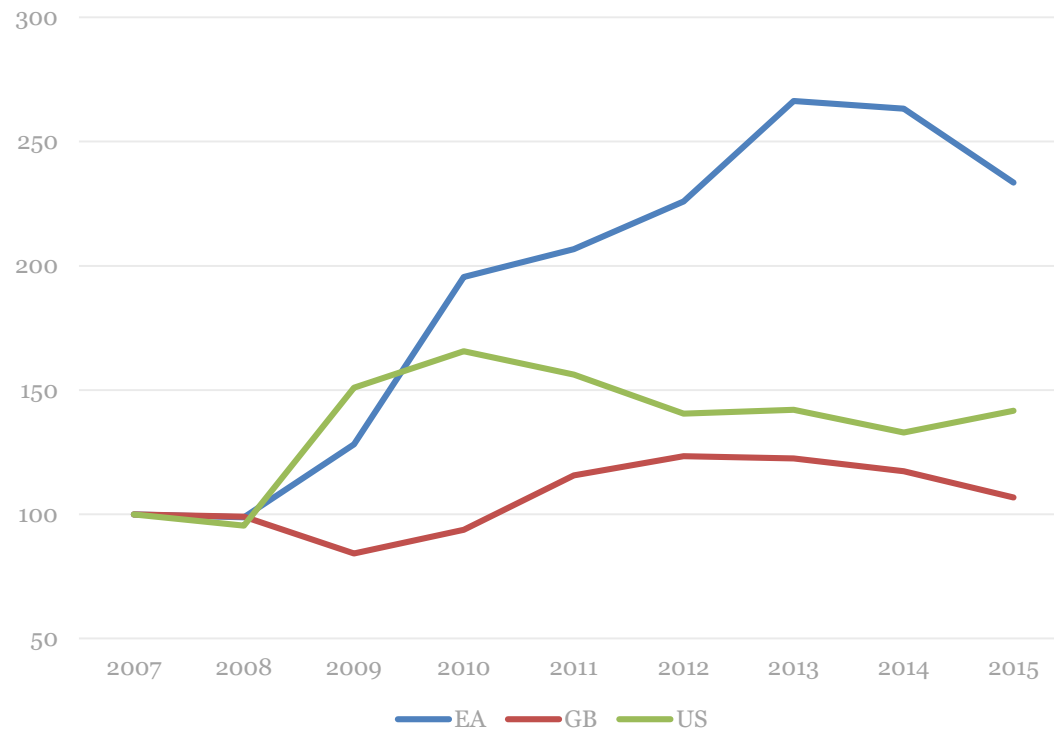
Manufacturing

Services



Laggards weigh down: zombie firms on the rise

Share of zombie firms
Index, 2007=100



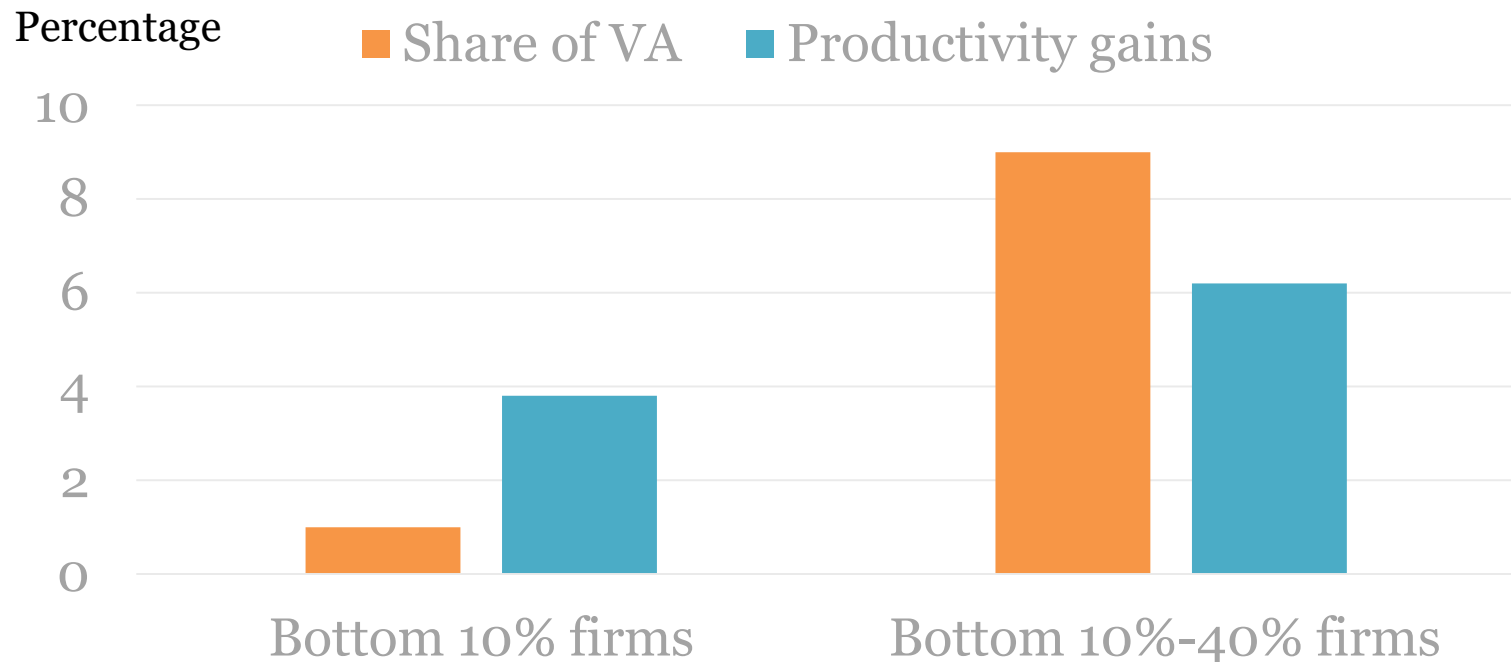
Note: EA includes Austria, Belgium, Germany, Spain, France, Greece, Ireland, Italy and the Netherlands

Source: OECD Orbis dataset



Laggards weigh down: gains from lifting them up

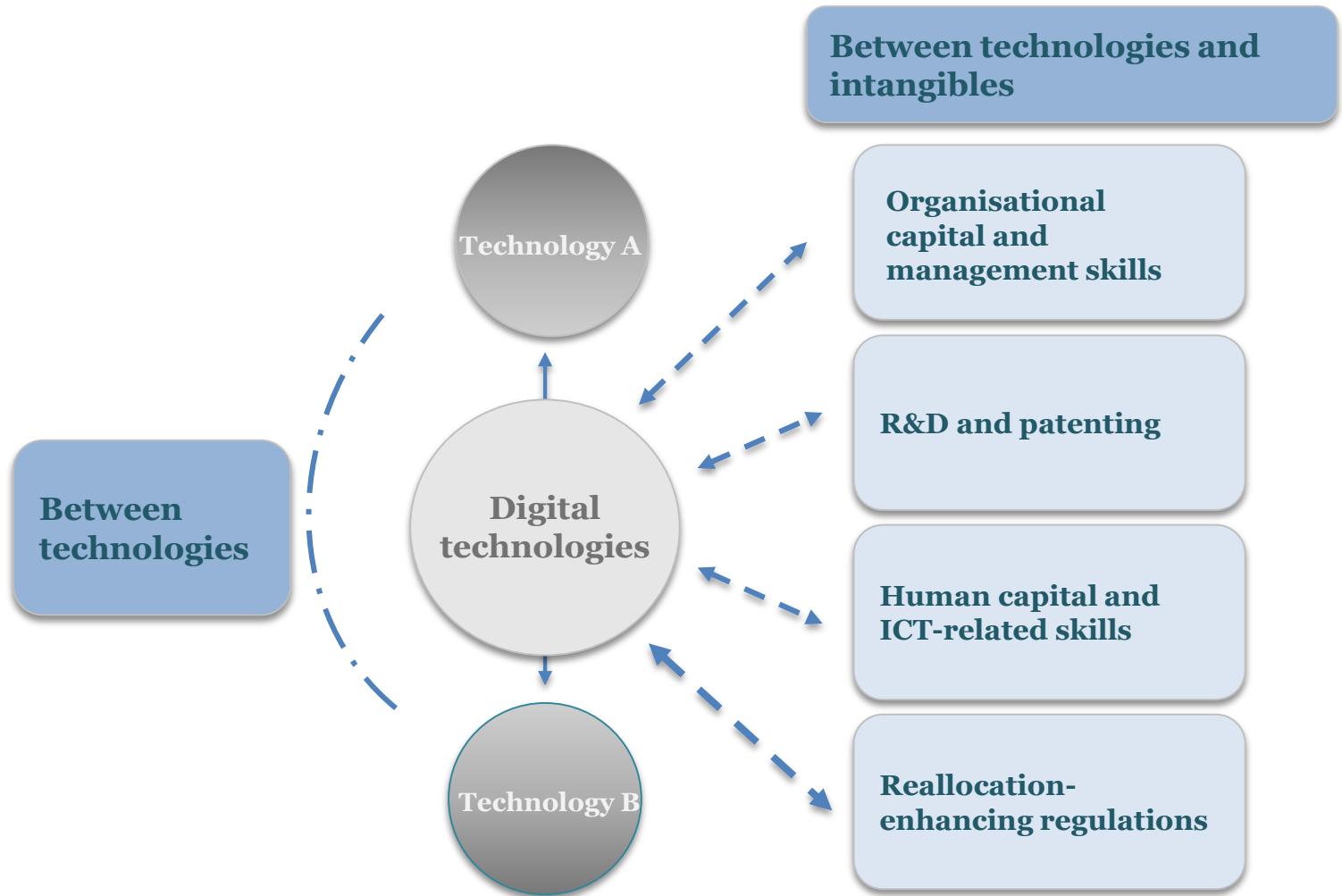
Gains in aggregate productivity from laggards catching up to median productivity levels



Source: Berlingieri et al. (2019) “Last but not least: laggard firms, technology diffusion and its structural and policy determinants”, forthcoming

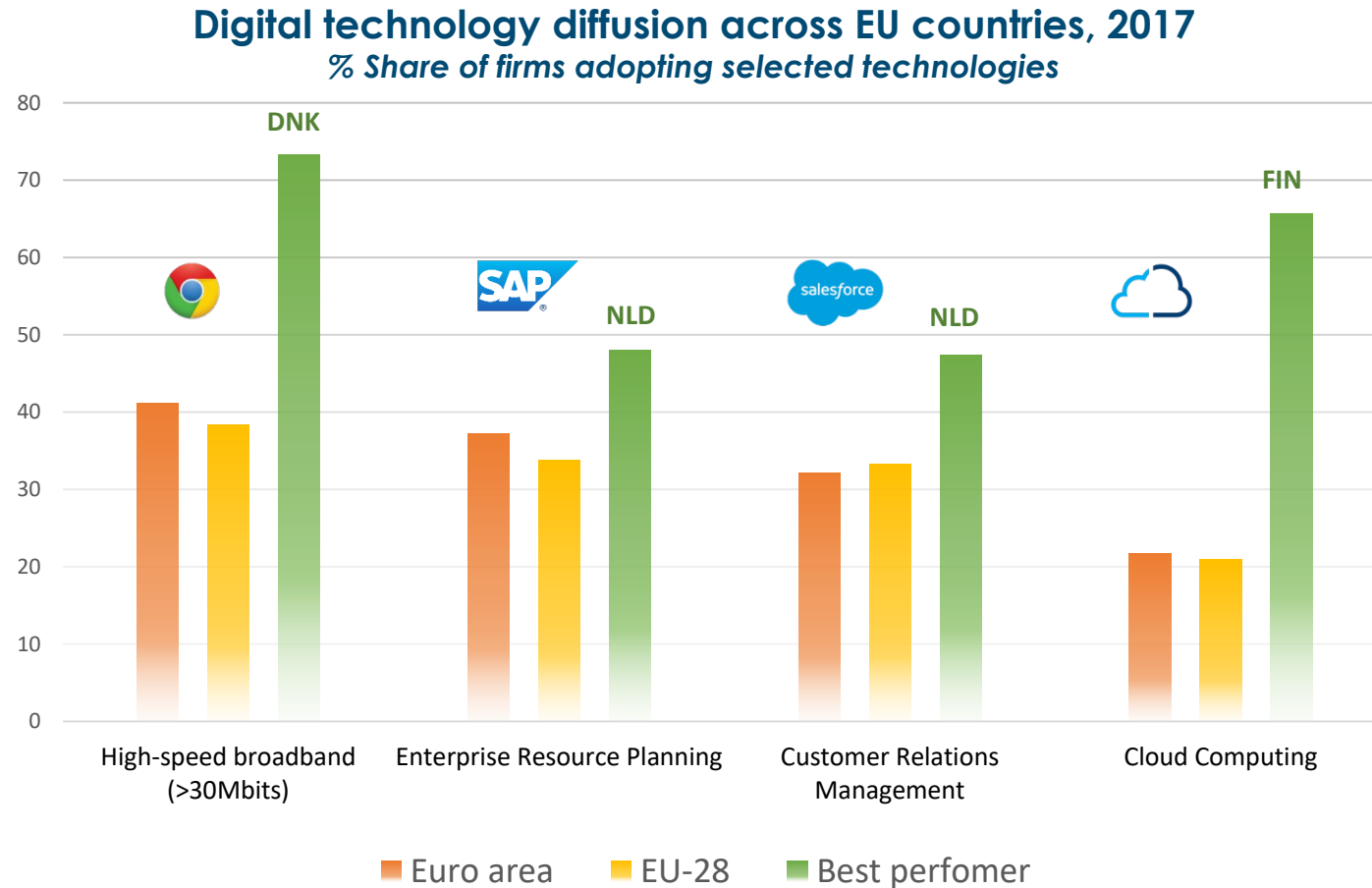


Going digital: the missed complementarities





Going digital: not yet so common after all

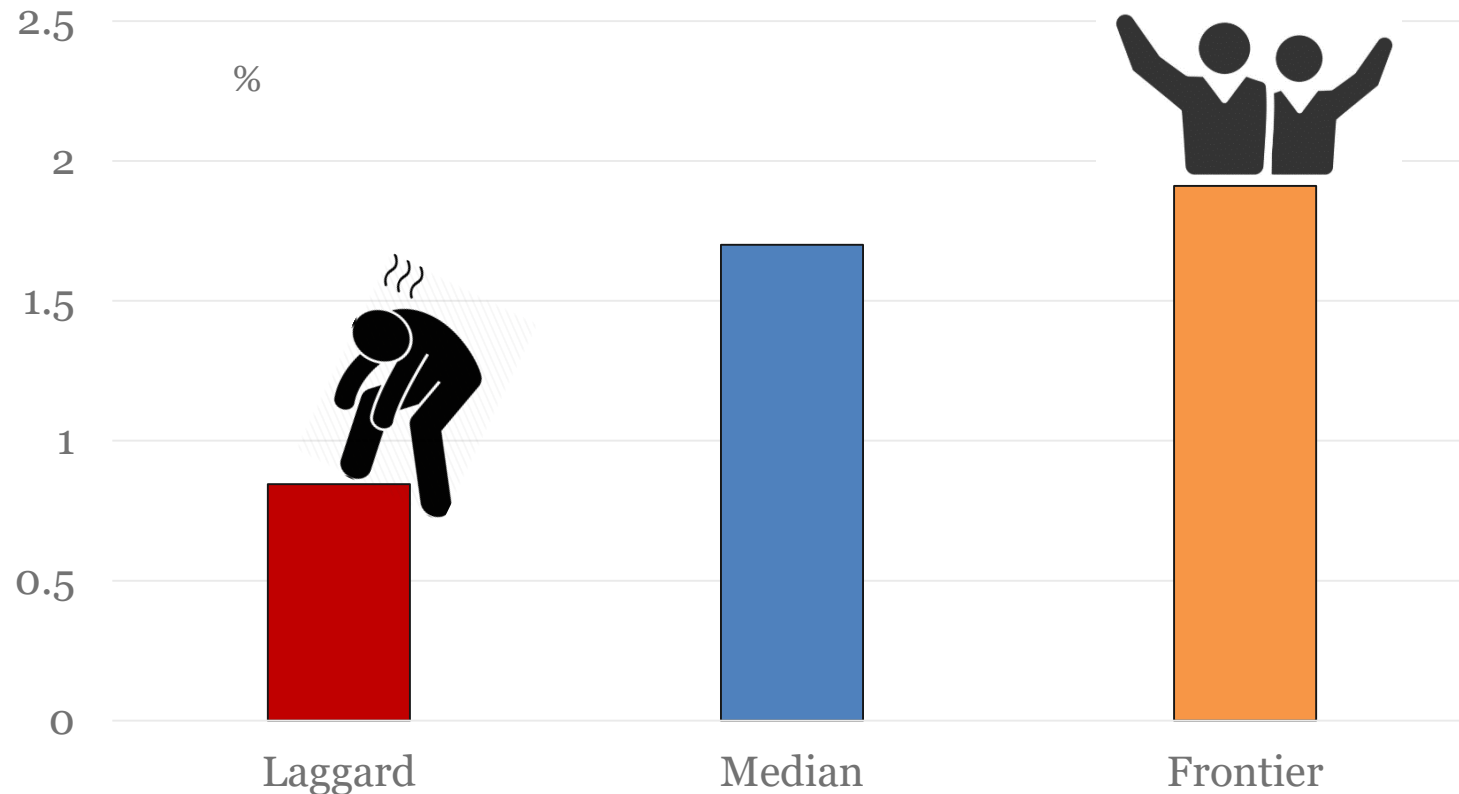




Going digital: benefits are not the same for all

More productive firms benefit more from a digitalized environment

Firm-level increase in productivity from a 10 percentage point increase in digital adoption

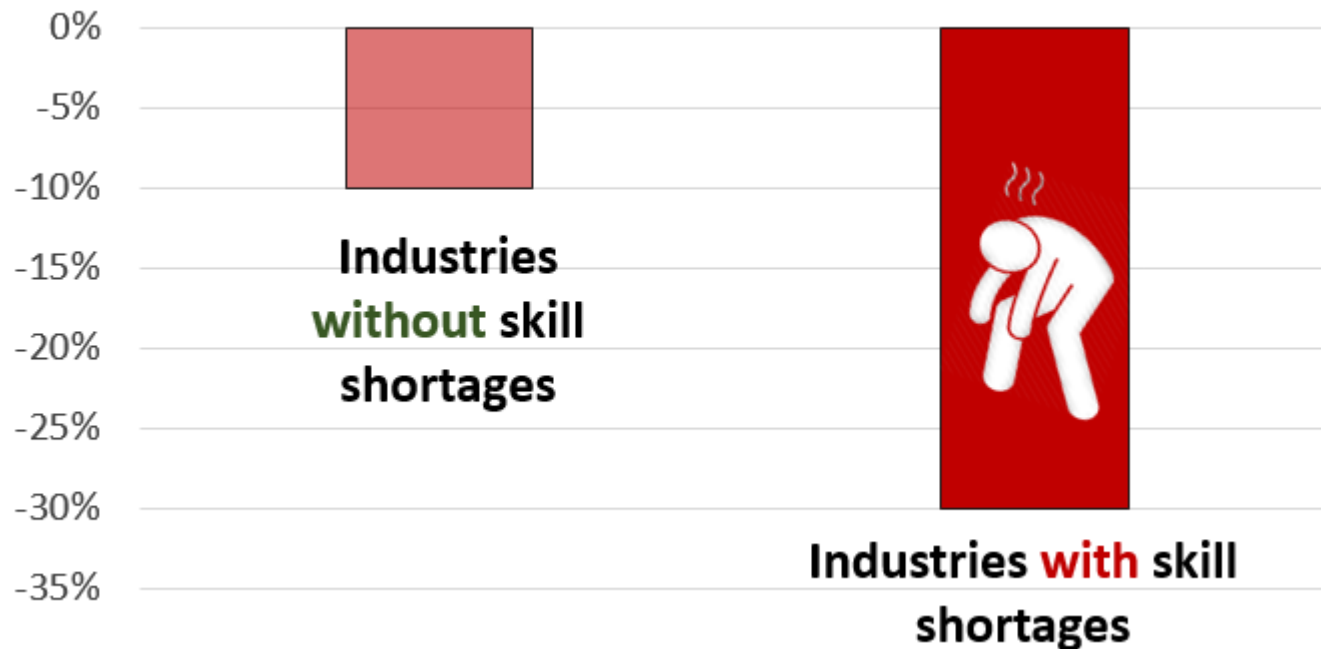




Going digital: skills are key

Skill shortages reduce gains from digital technologies in low productive firms

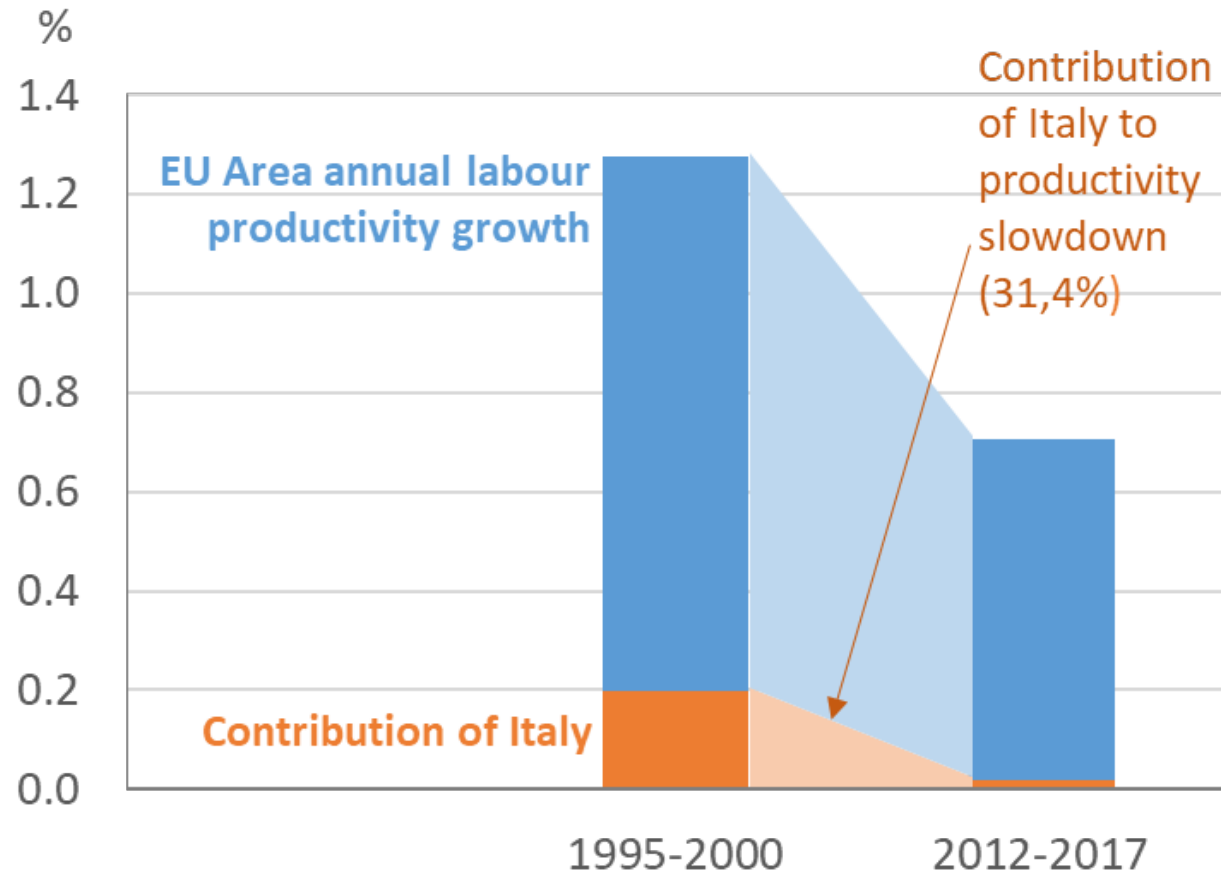
Productivity shortfall from digital adoption in low productive firms relative to most productive firms
(average OECD country)



Source: Gal, Nicoletti, Renault, Sorbe and Timiliotis (2019)



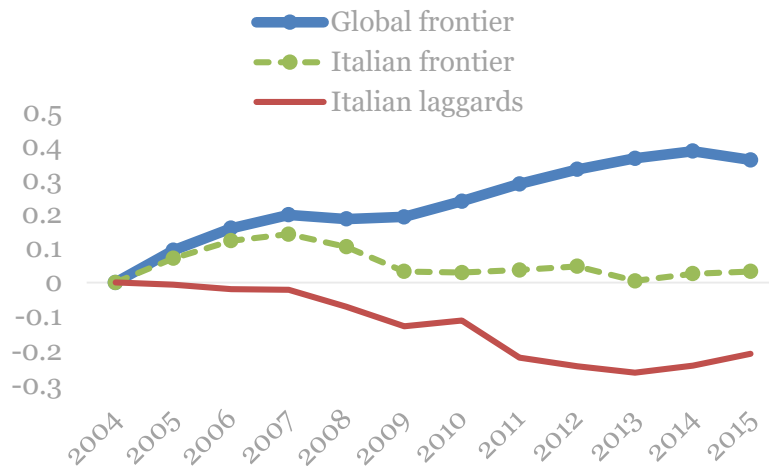
The EA sick man: Italy



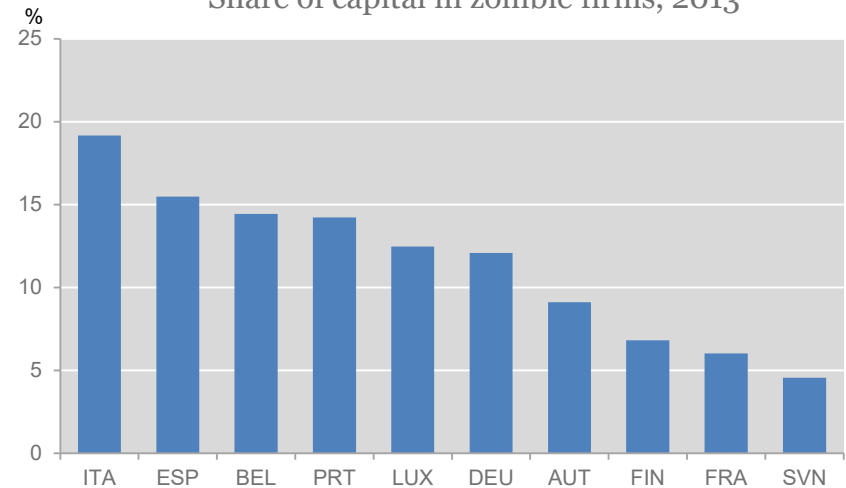


The EA sick man: a concentrate of problems

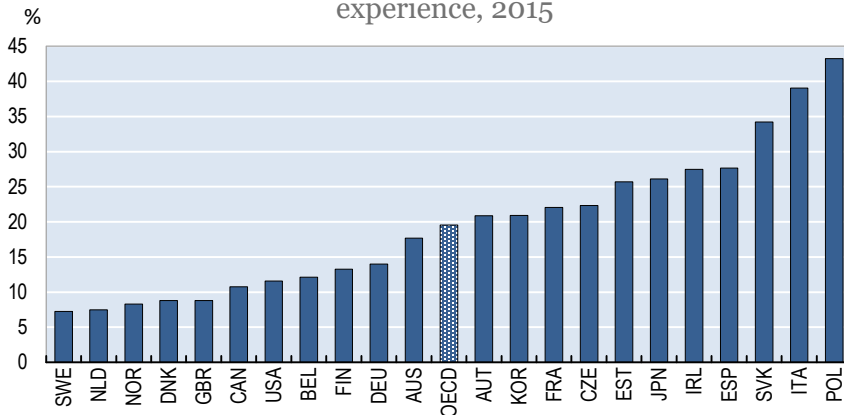
Productivity gaps in services



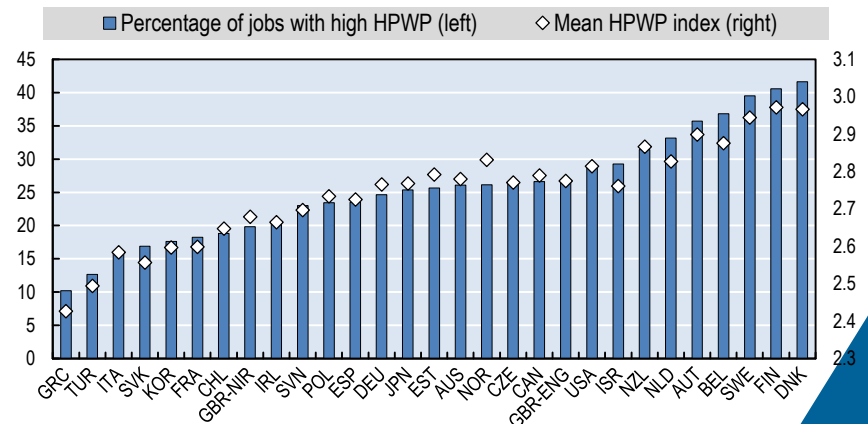
Share of capital in zombie firms, 2013



Percentage share of adults (15-65) with insufficient or no ICT experience, 2015



Diffusion of modern managerial practices (HPWP), 2015





The policy moral

- **Complete services Single Market:**
 - especially professions and digital that have gone in reverse
- **Increase dynamism and facilitate catch-up:**
 - barriers to entry (administrative burdens on startups) and exit (insolvency regimes, NPLs)
 - ensure conditions for innovation and digitalisation (infrastructure, skills/training, non-bank finance, public and private R&D)
- **Repair Italy!**



References

Andrews, D., G. Nicoletti & C. Timiliotis (2018) [Digital technology diffusion: a matter of capabilities, incentives or both?](#)

Sorbe, S., P. Gal, G. Nicoletti & C. Timiliotis (2019) [Digital Dividend: Policies to Harness the Productivity Potential of Digital Technologies](#)

Gal, P., G. Nicoletti, T. Renault, S. Sorbe & C. Timiliotis (2019) [Digitalisation and productivity: In search of the holy grail – Firm-level empirical evidence from EU countries](#)

Adalet McGowan, M., D. Andrews & V. Millot (2017), [The Walking Dead?: Zombie Firms and Productivity Performance in OECD Countries](#)

Berlingieri, G., S. Calligaris, C. Criscuolo & R. Verlhac (forthcoming), Last but not least: laggard firms, technology diffusion and its structural and policy determinants

Sorbe, S., P. Gal and V. Millot (2018) [Can productivity still grow in service-based economies?: Literature overview and preliminary evidence from OECD countries](#)

For more, visit [the Global Forum on Productivity site](#)

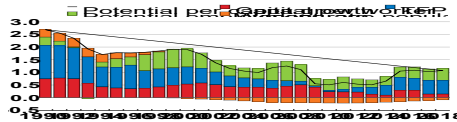


BACK UP SLIDES



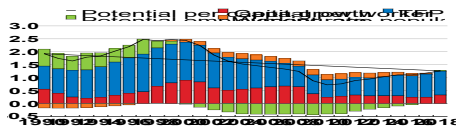
The Euro Area slowdown is deeper and more productivity driven than in the US

Decomposition of potential output per capita growth (% pa) OECD Euro area



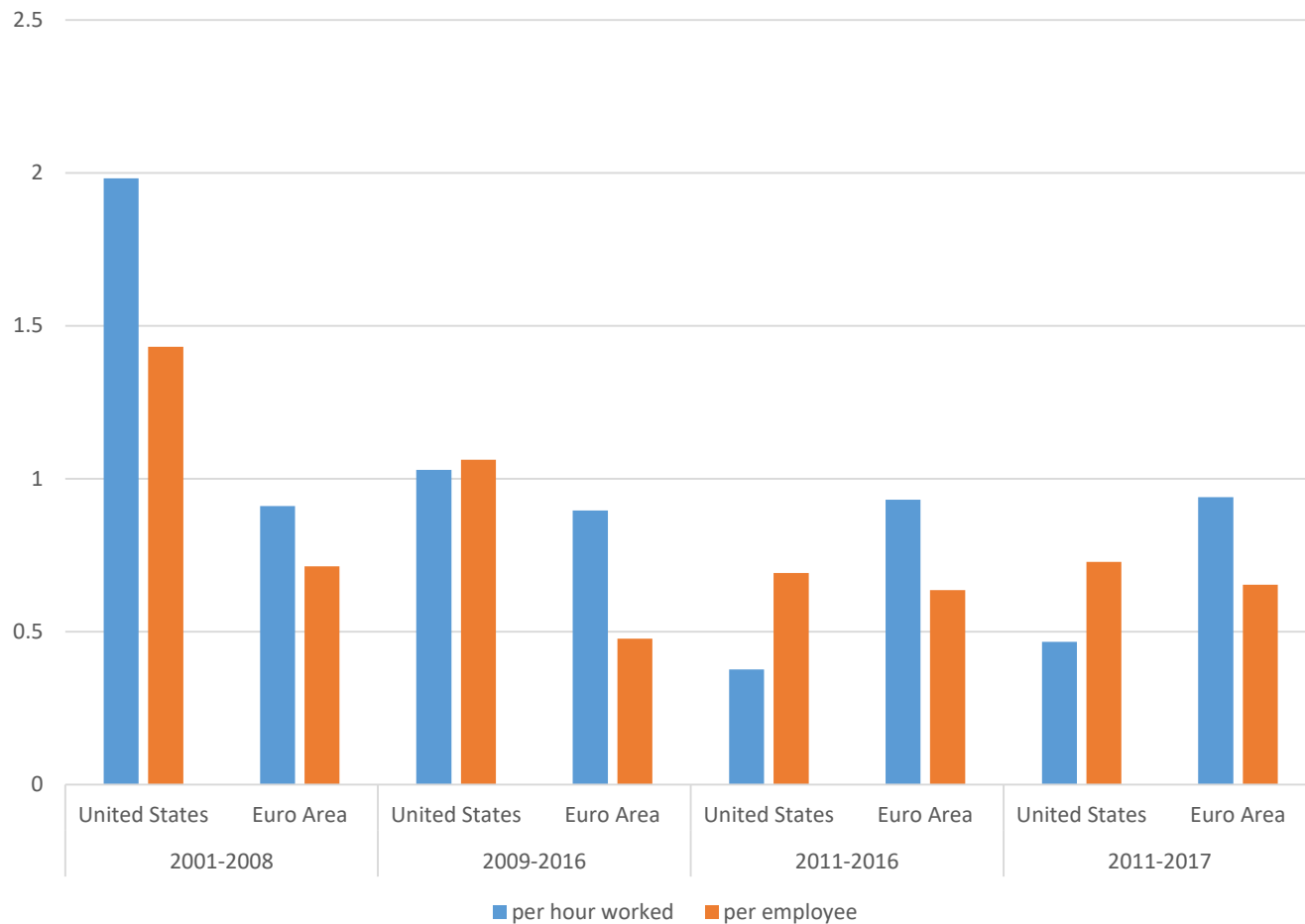
Source: OECD Economic Outlook (EO_LIVE)
22 March, 2019

United States





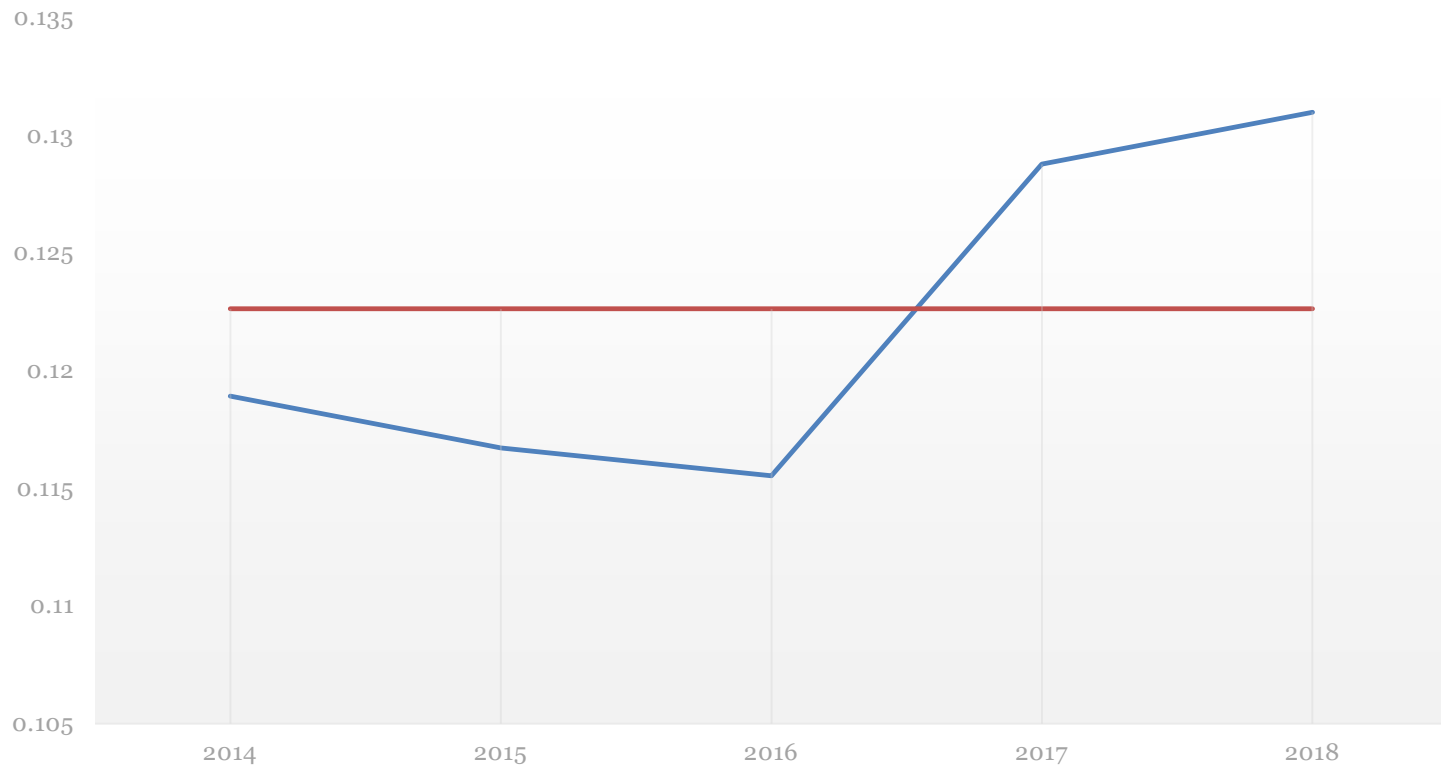
The post-crisis pick up in productivity has been stronger in the EA than in the US, especially per hour worked





Restrictions in digital trade have gone up

Evolution of digital services trade restrictions



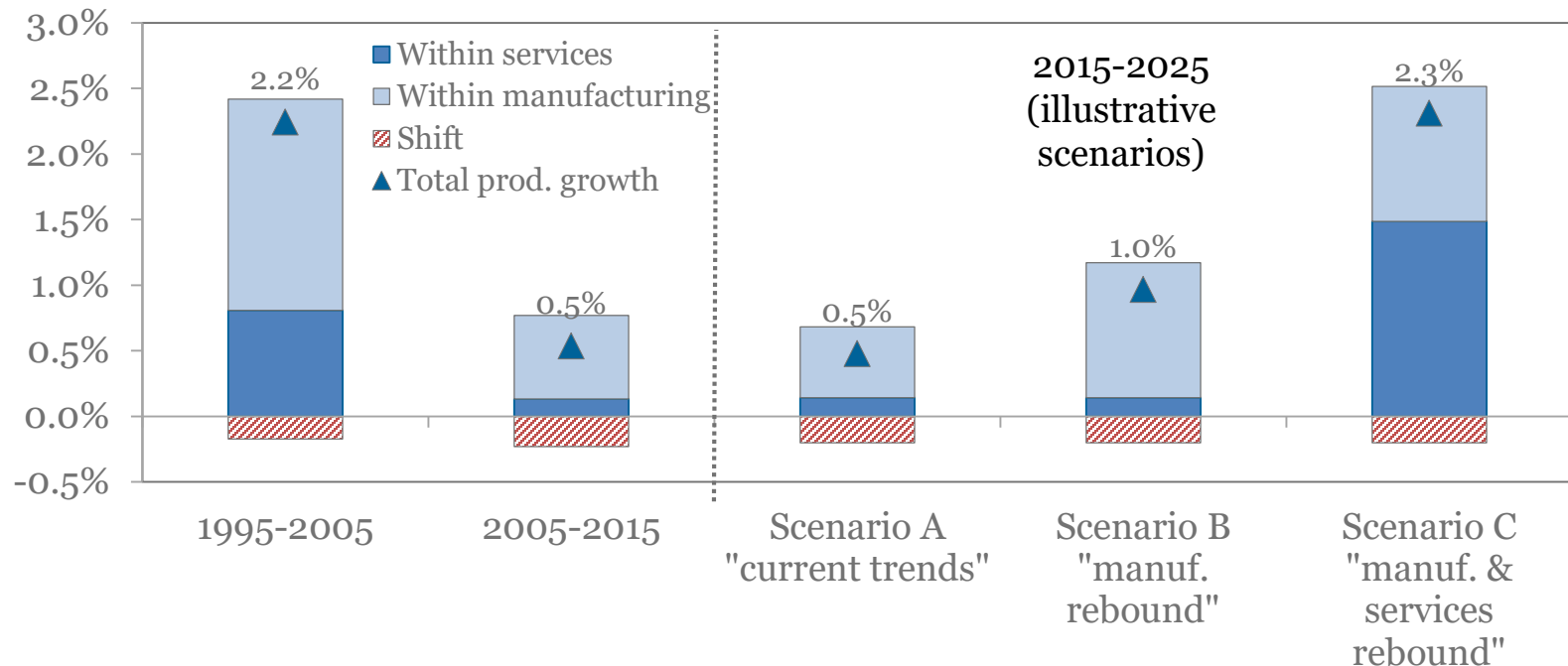
*Source: OECD STRI

— Euro area — United States



Services are key to support EA productivity in the future

EA productivity scenarios under different assumptions regarding future productivity in manufacturing and services



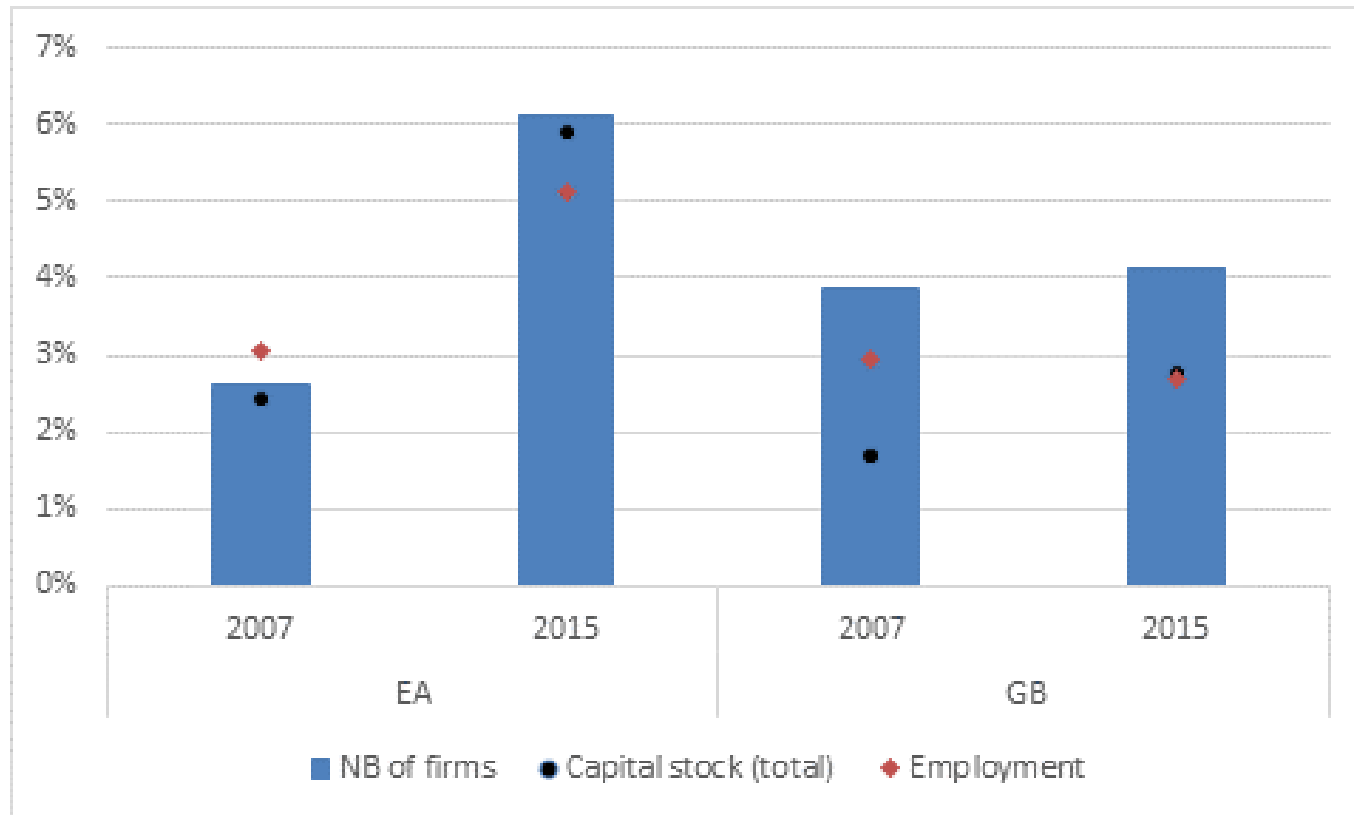
Scenario A: productivity growth as in the past

Scenario B: rebound in manufacturing productivity only (to 4%)

Scenario C: rebound in manufacturing and services (to 2%)



Zombie firms in the EA and Great Britain



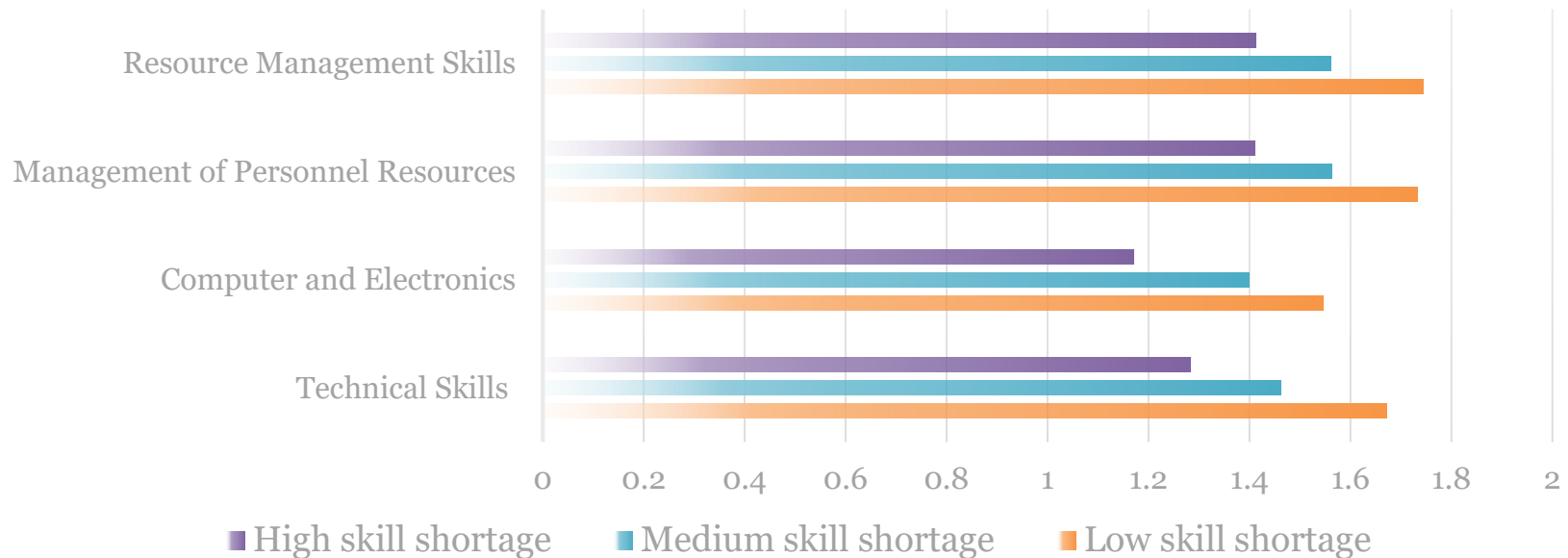
Source: OECD Orbis database



Complementarity between digital technologies and skills

Good management and technical skills are key

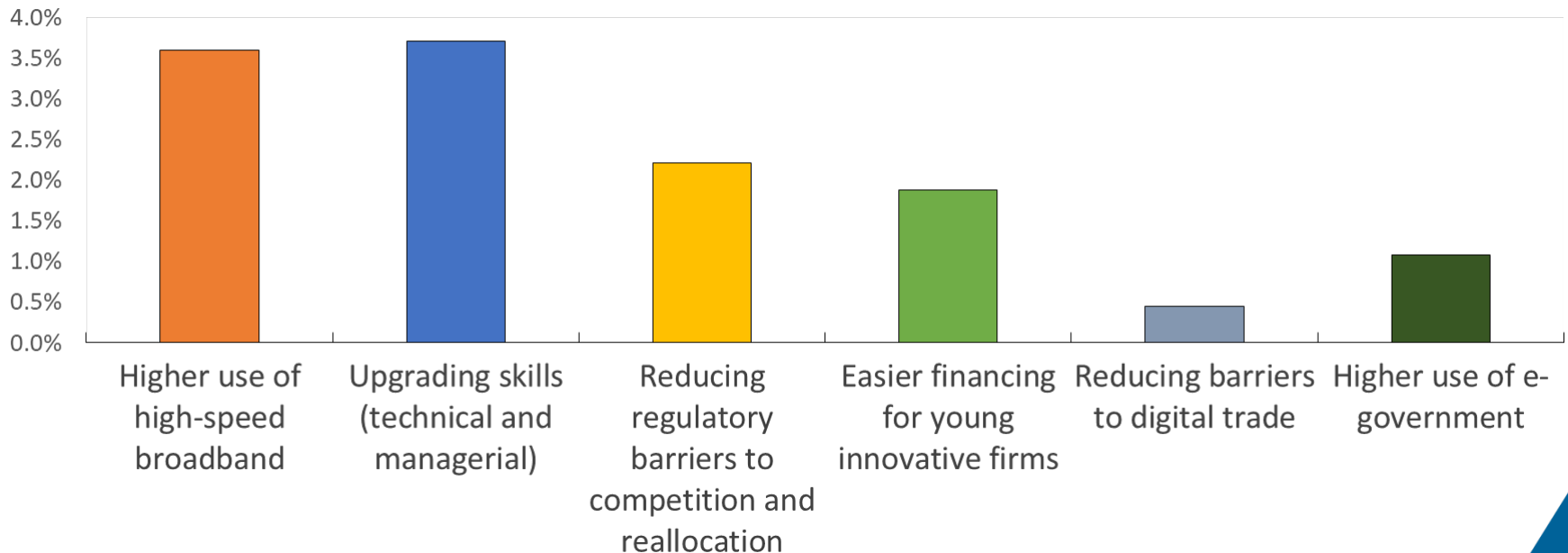
Increase in productivity growth associated with a ten percentage point increase in the diffusion of high-speed broadband, for specific skill shortages





Policies can have strong effects on productivity via digital adoption

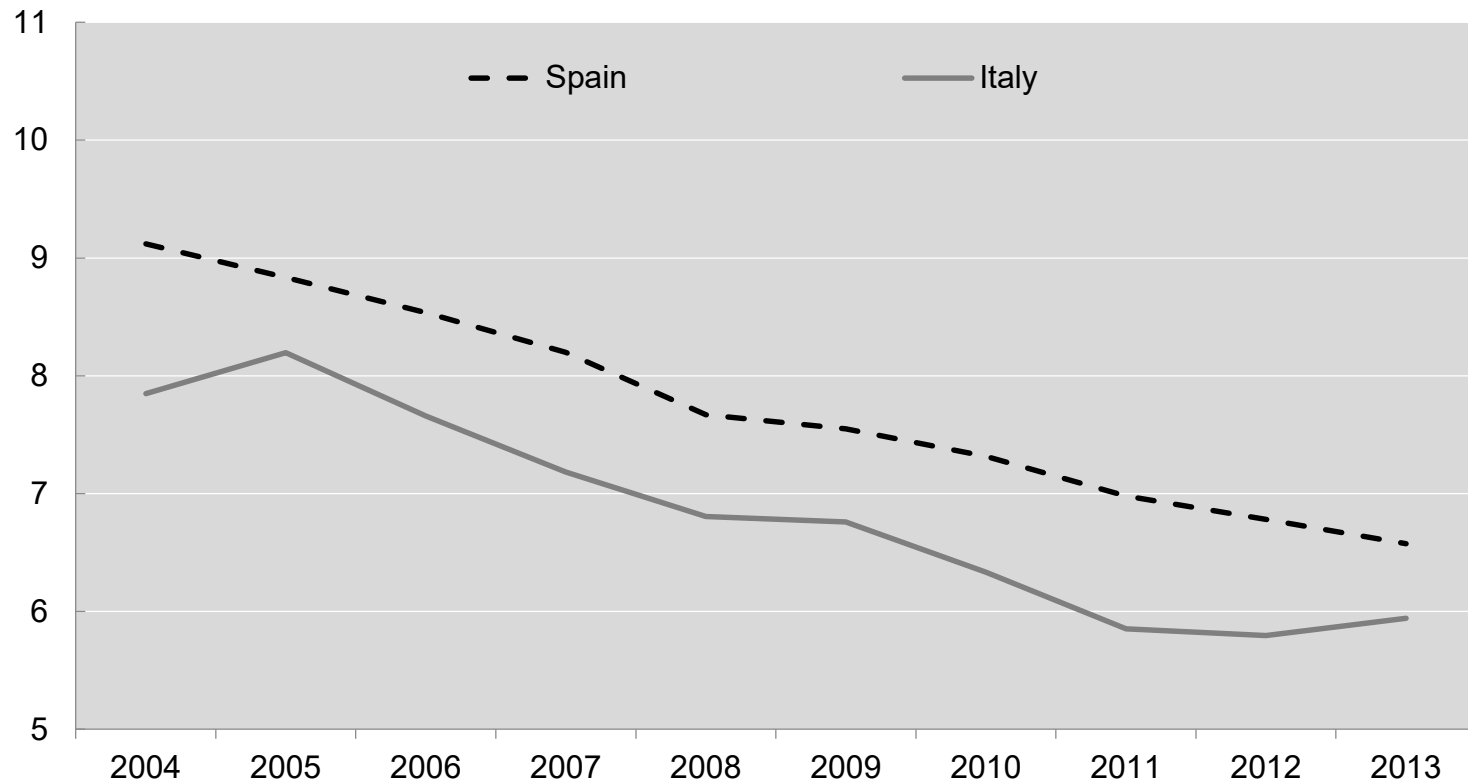
**Effect on firm productivity (through digital adoption) of closing half of the gap with best performing countries in a range of areas.
Average OECD country, effect after 3 years**





The EA sick man: allocative efficiency weakens

Difference in capital growth between high and low productivity firms (%pts)

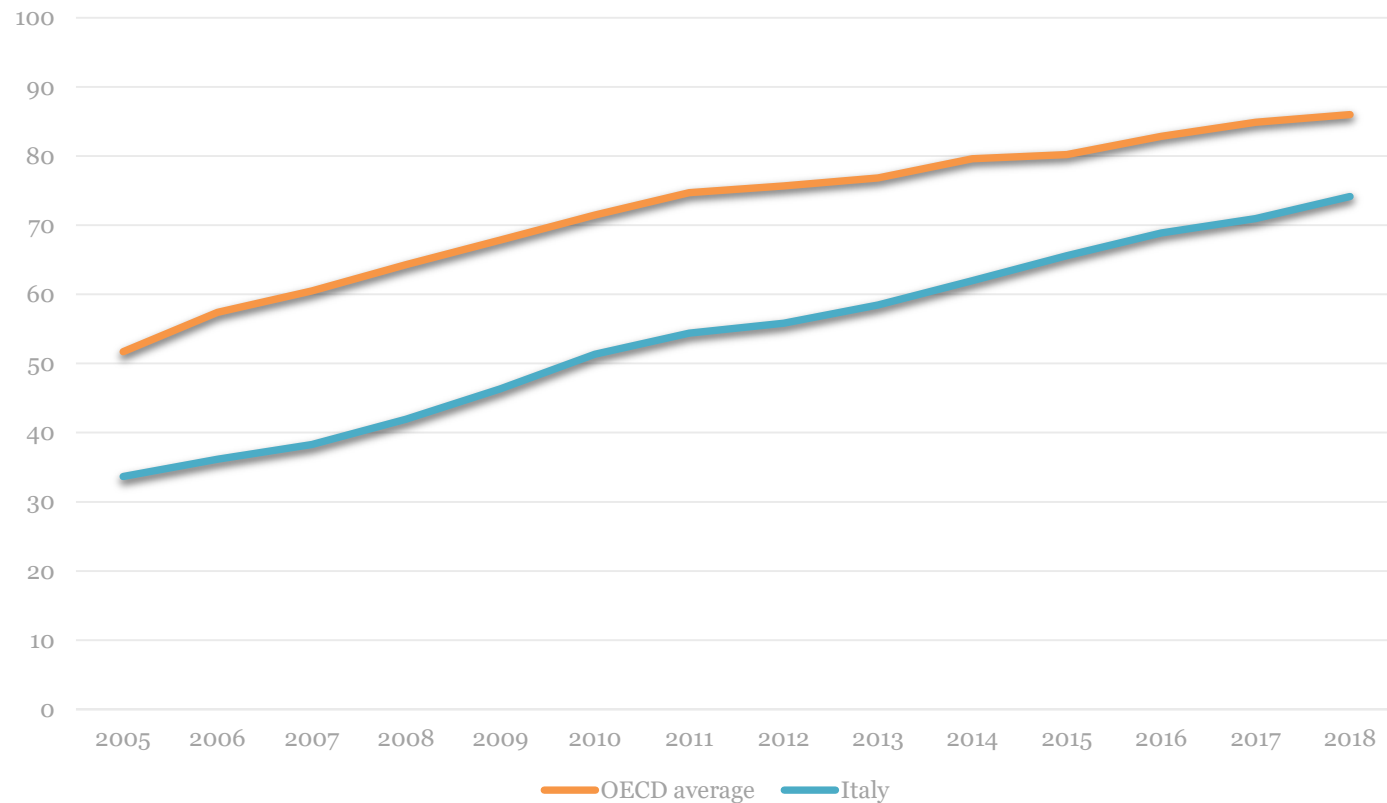


Source: Adalet McGowan et al. (2017)



The EA sick man: digital diffusion lags behind

Individuals using the Internet in the last three months





The EA sick man: banks are also sick

Non-performing loans net of provisions

As a percentage of capital, Q4 2017

