



CHANGING INNOVATION & GROWTH PARADIGMS IN PORTUGAL

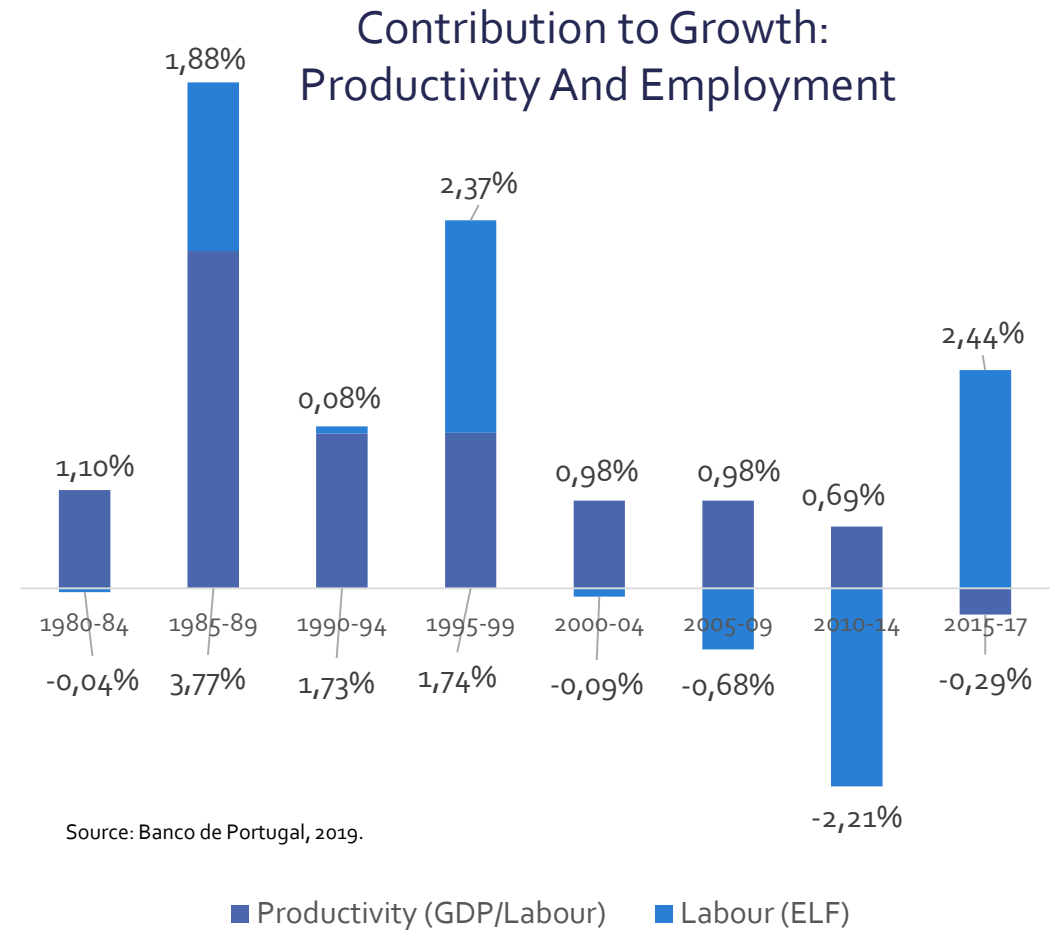
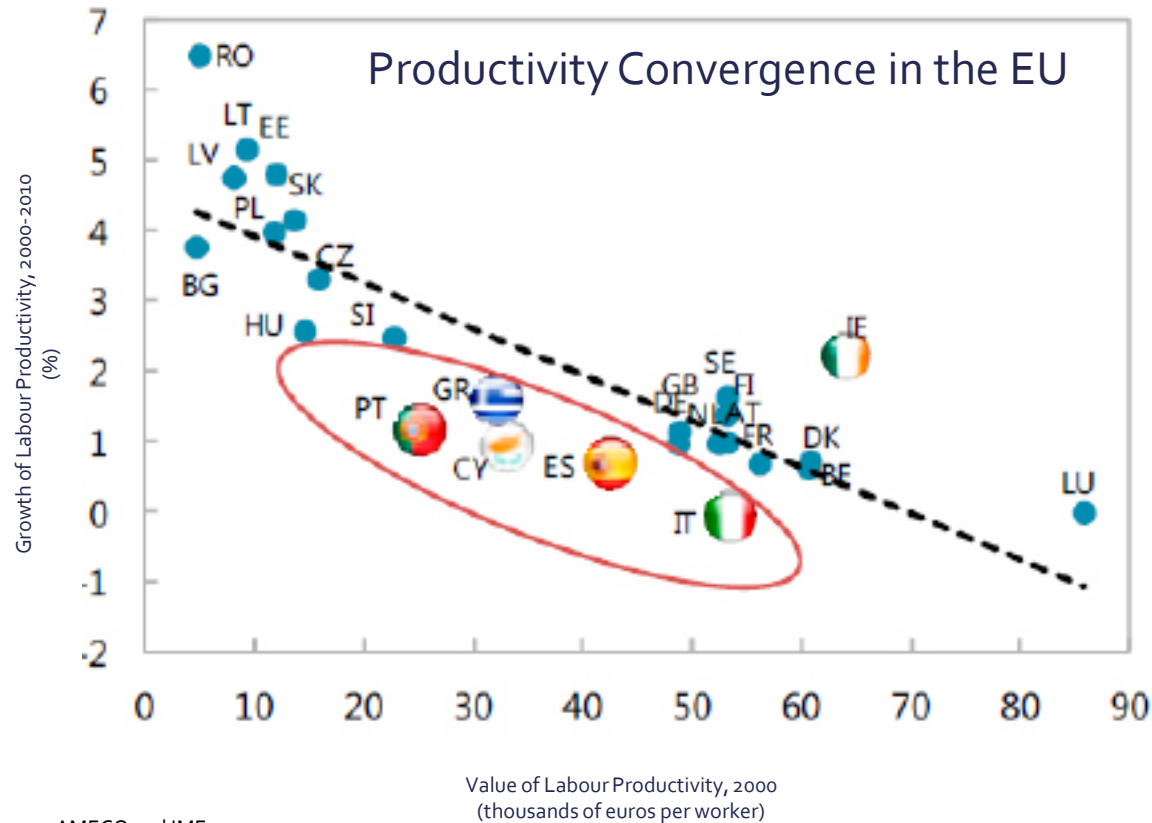


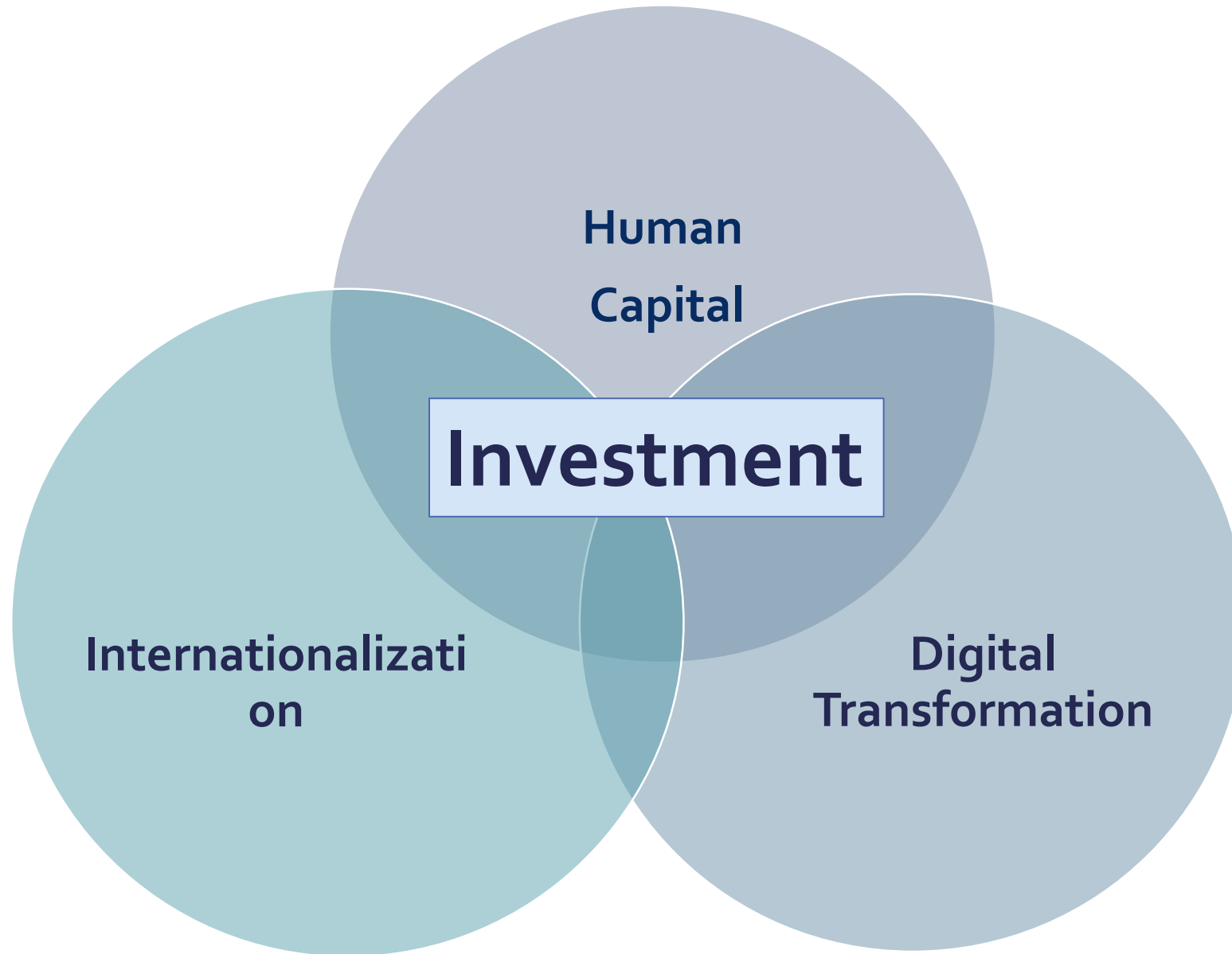
DANIEL TRAÇA
JANUARY 2019



NOVA SCHOOL OF
BUSINESS & ECONOMICS

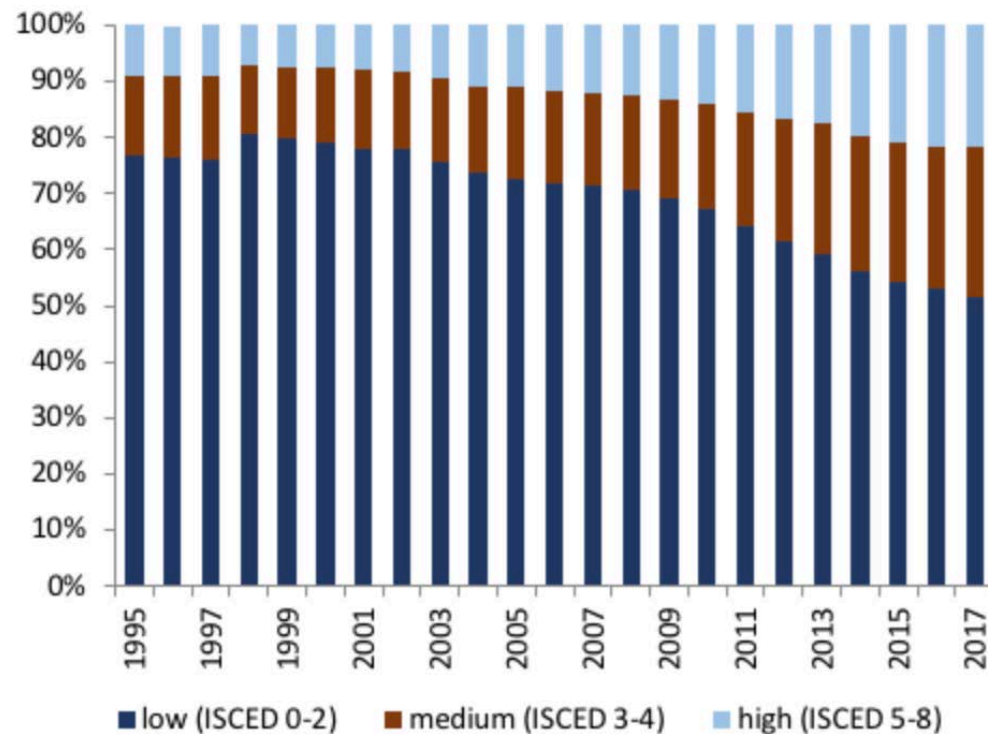
PRODUCTIVITY REMAINS “THE CHALLENGE”





QUALIFICATIONS AND SKILLS PORTUGAL

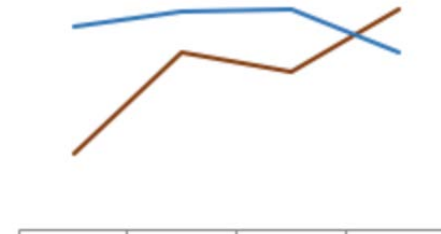
Evolution of education levels



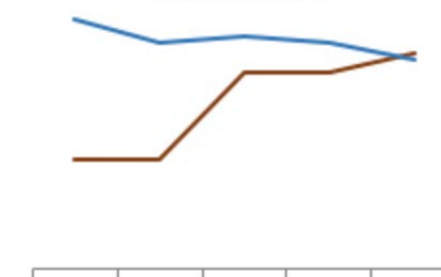
Source: Eurostat, 2019

PISA scores

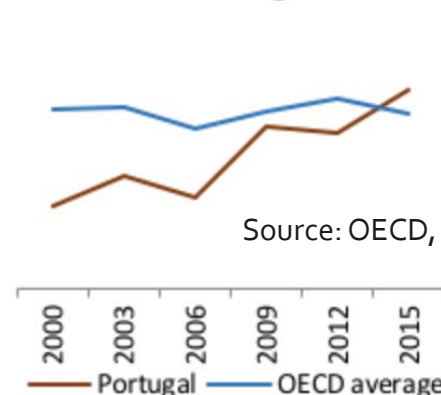
Science



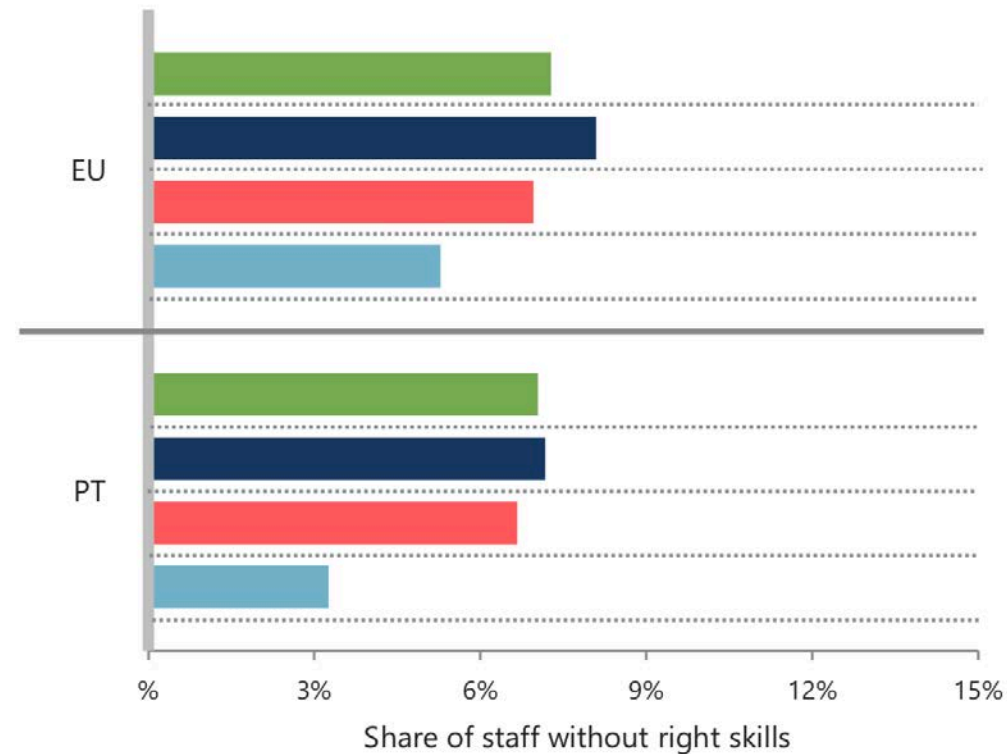
Mathematics



Reading



■ All ■ Lower level ■ Intermediate level ■ Higher level

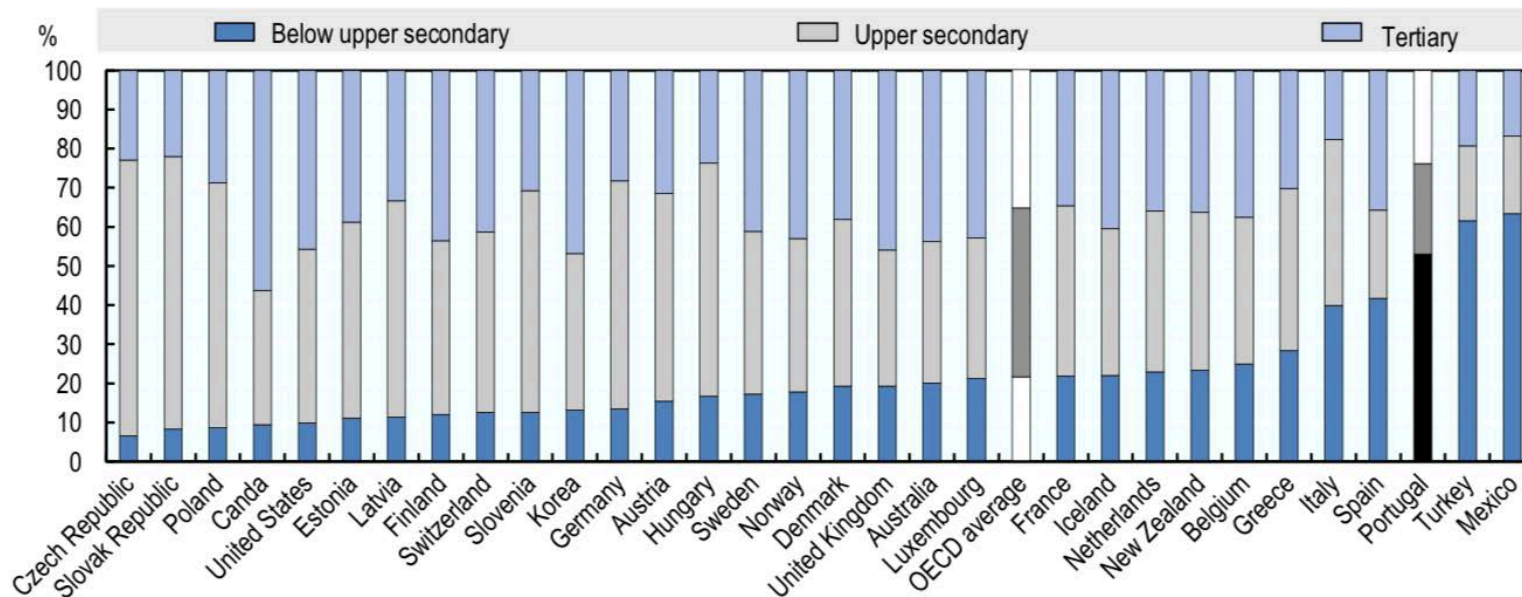


Source: EIB, 2019

ADULT EDUCATION IN PORTUGAL

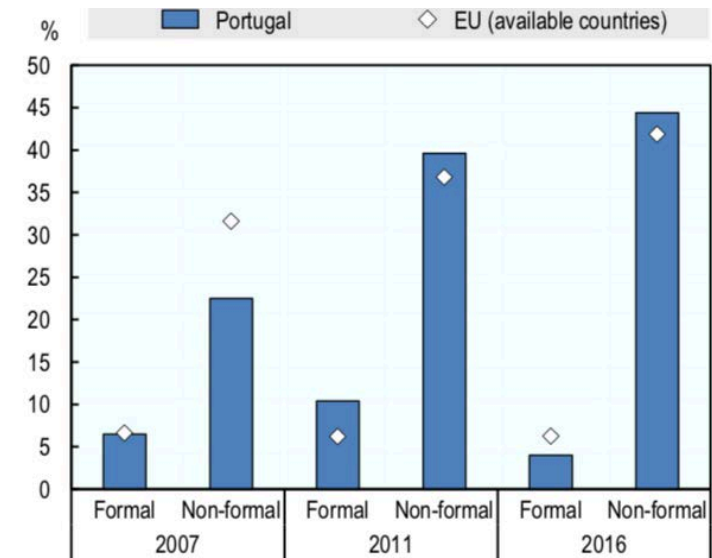
A long way to go...

Education attainment of adults (25-64 year-olds) in Portugal, 2016



but catching up

Participation rate (last 12 months), by type of education and training



Source: OECD, 2019

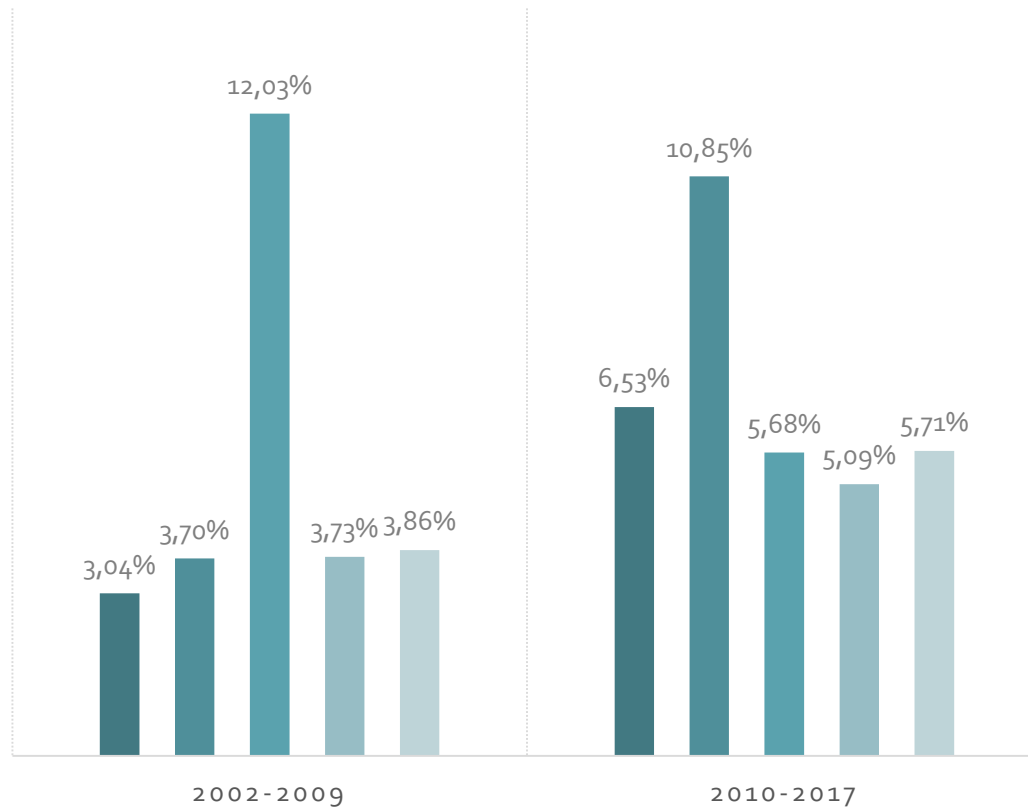
Challenges

- Technical Skills and Skills of the Future in Higher Education
- Retraining of Adults for Digital Challenges
 - Funding and Institutions

PORTUGAL SLOWLY CATCHING UP ON INTERNATIONALIZATION

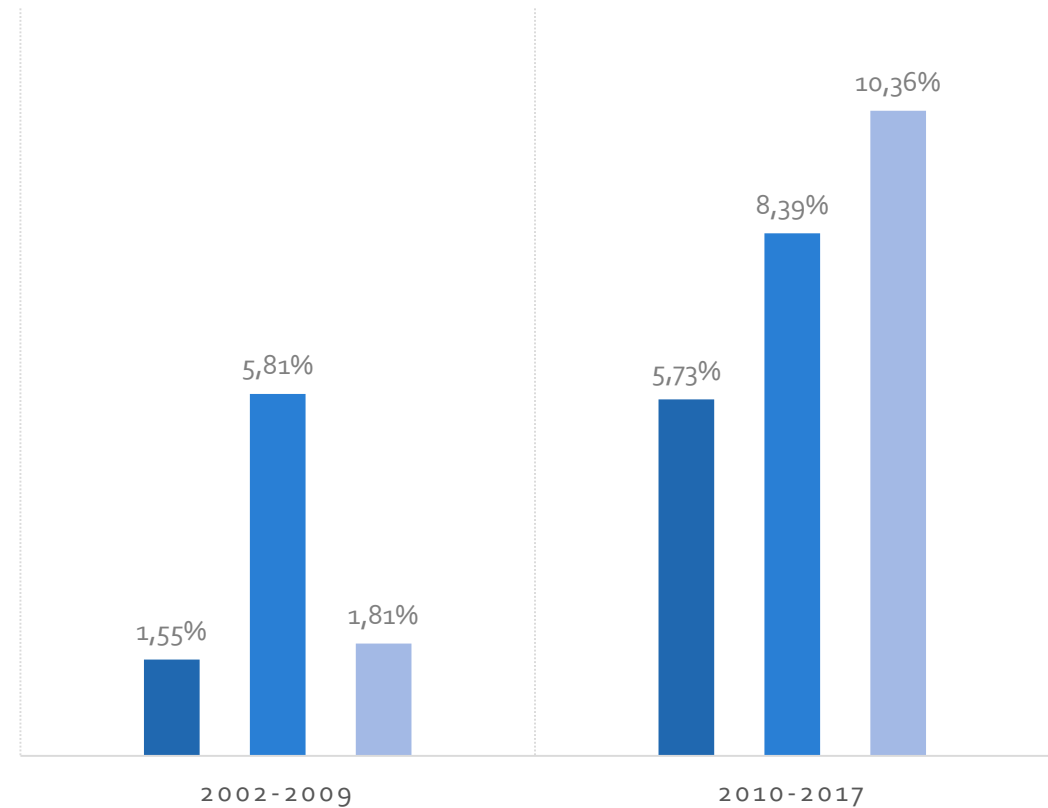
CAGR OF TOTAL G&S EXPORTS, BY COUNTRY

Portugal Ireland Czech Republic Germany EU

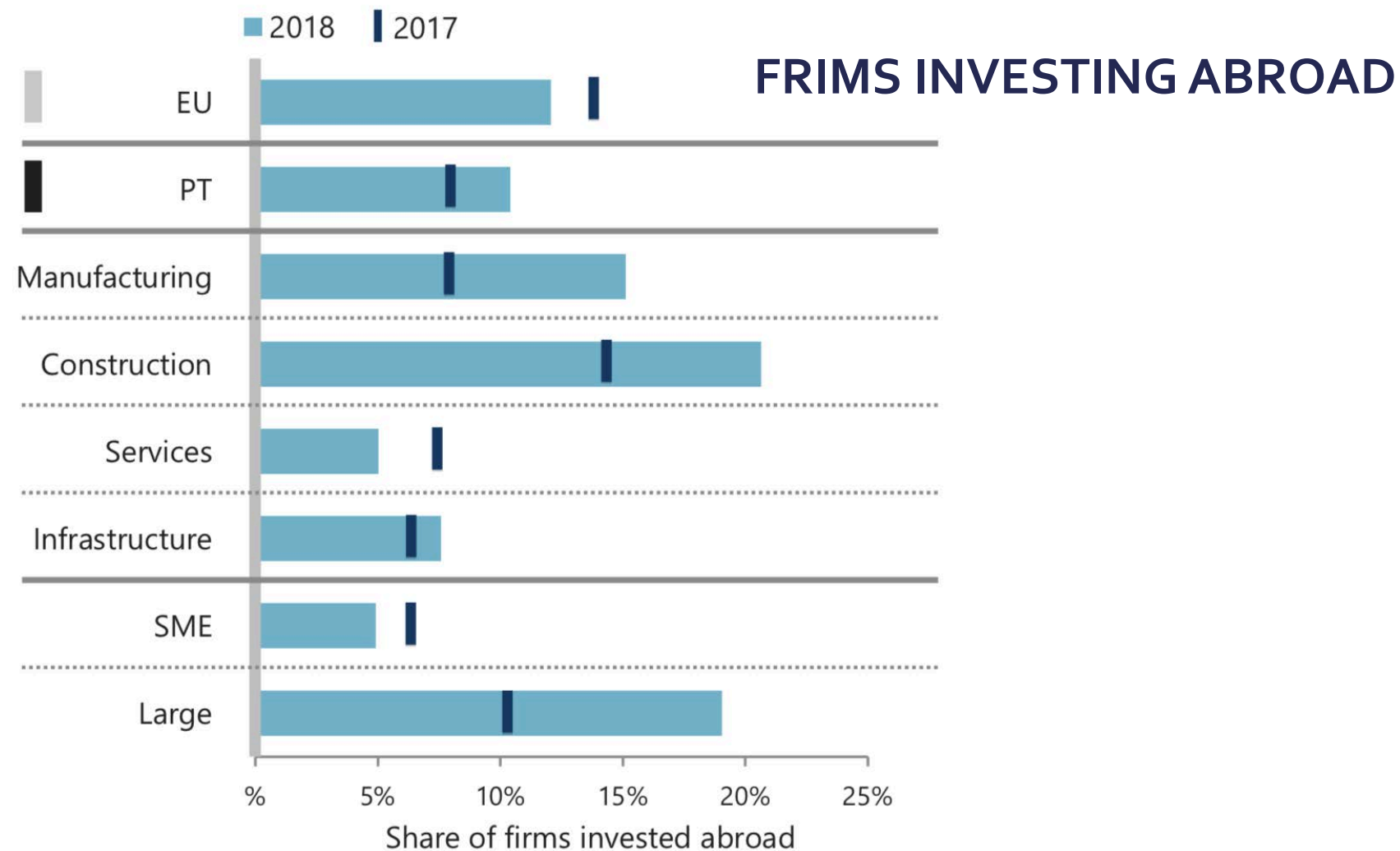


CAGR OF EXPORTS BY TYPE, IN PORTUGAL

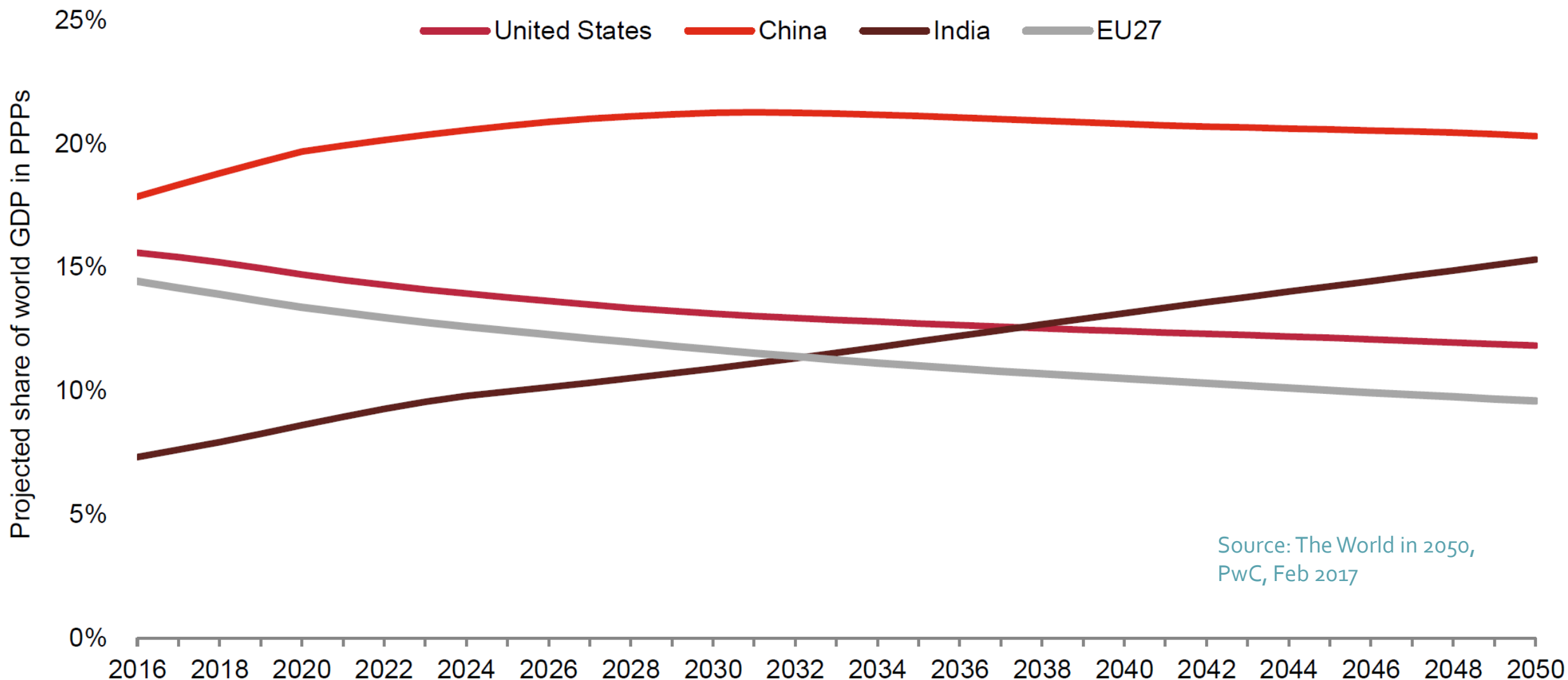
Total de Bens Total de Serviços Viagens e Turismo



BUT PICKING UP PACE



GLOBALIZATION TO ASIA WILL CONTINUE

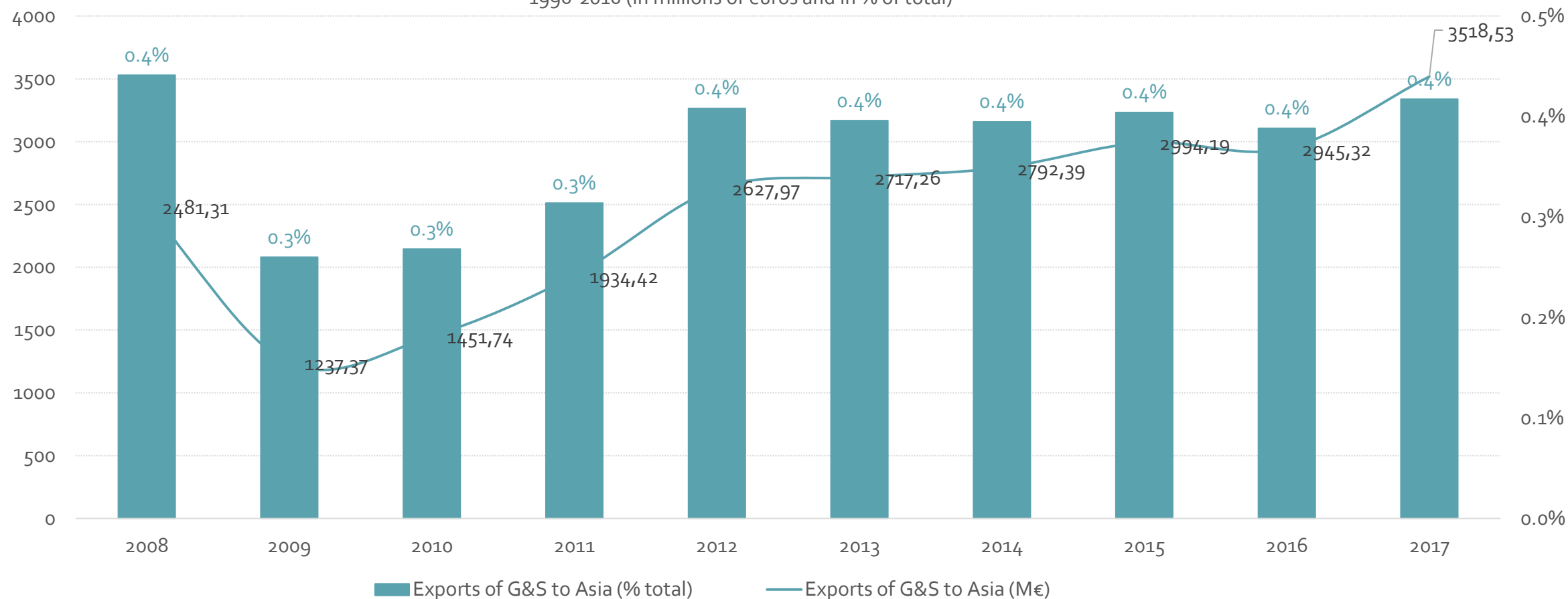


Source: The World in 2050,
PwC, Feb 2017

PORTUGAL TOO SLOW IN ASIA

Exports to Asia

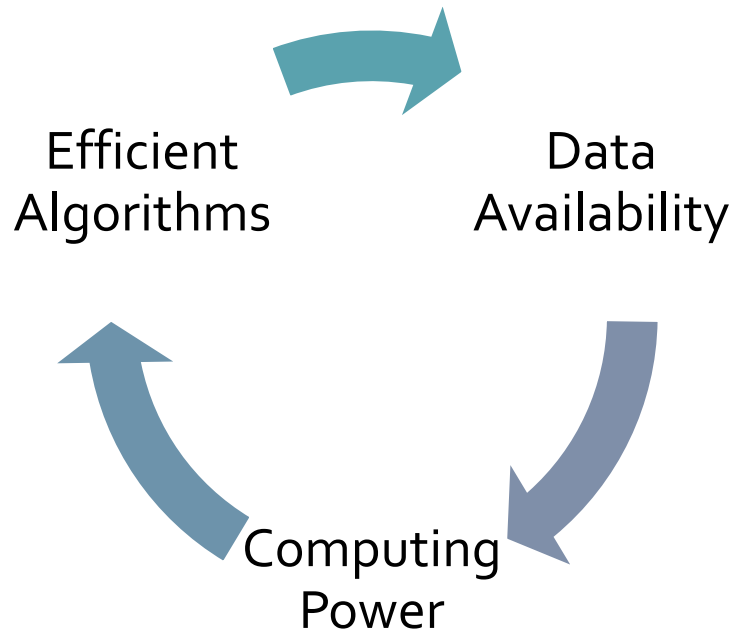
1996-2016 (in millions of euros and in % of total)



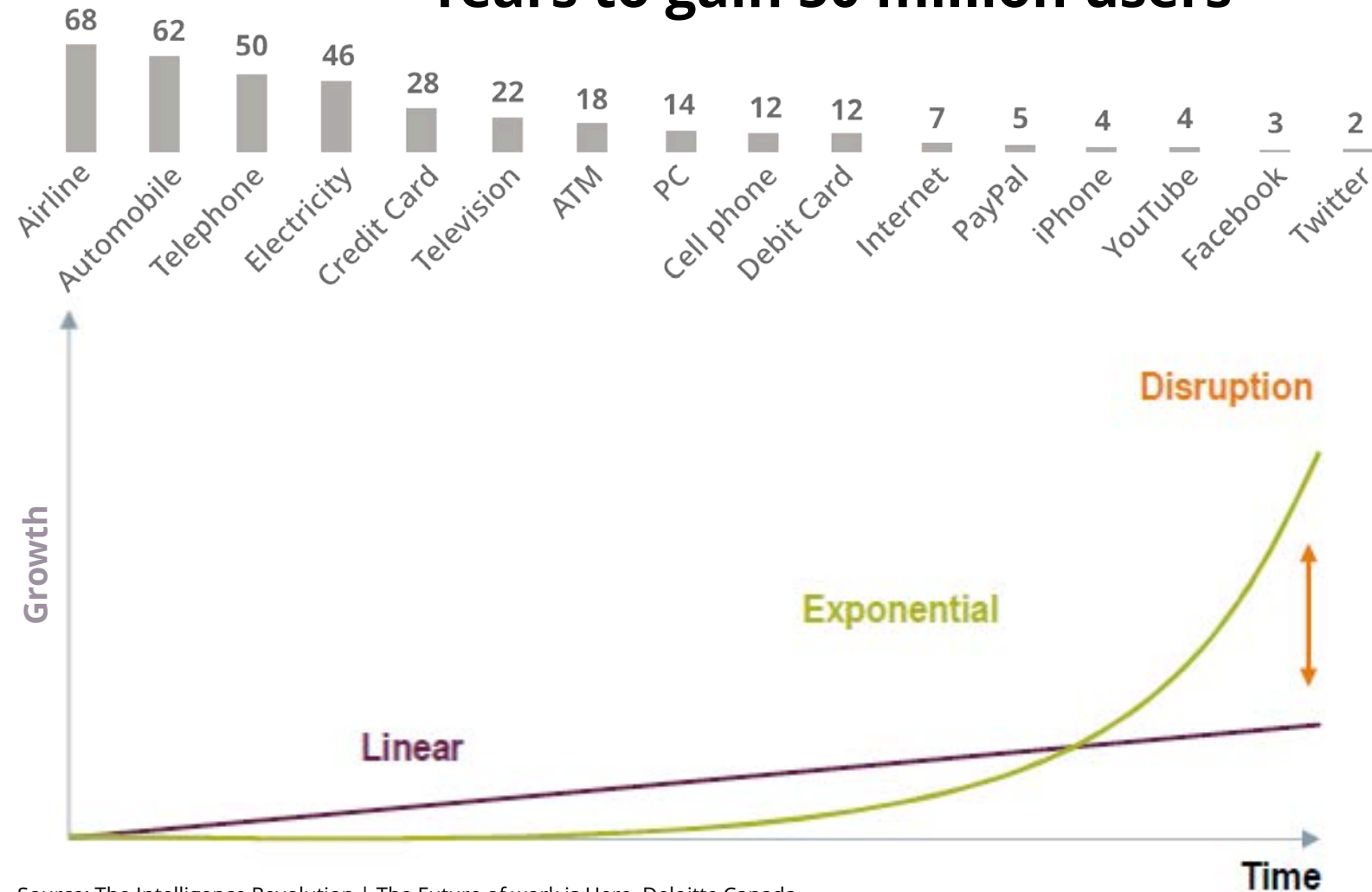
Challenges

- Collaboration among firms
- Investment and lead time in Internationalization
- Economic Diplomacy

DIGITAL TECHNOLOGY IS EXPONENTIAL

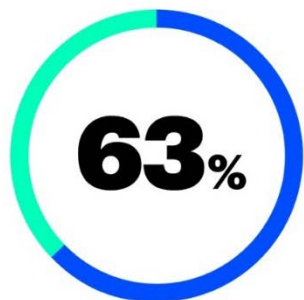


Years to gain 50 million users

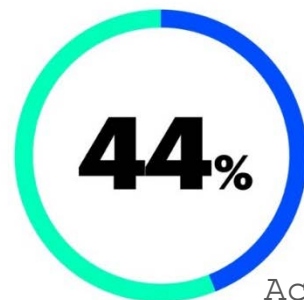


... AND DISRUPTIVE

If the rate of change on the outside exceeds the rate of change in the inside, the end is near.



OF COMPANIES ARE
EXPERIENCING
DISRUPTION



OF COMPANIES ARE
HIGHLY SUSCEPTIBLE
TO FUTURE DISRUPTION

Accenture, 2018

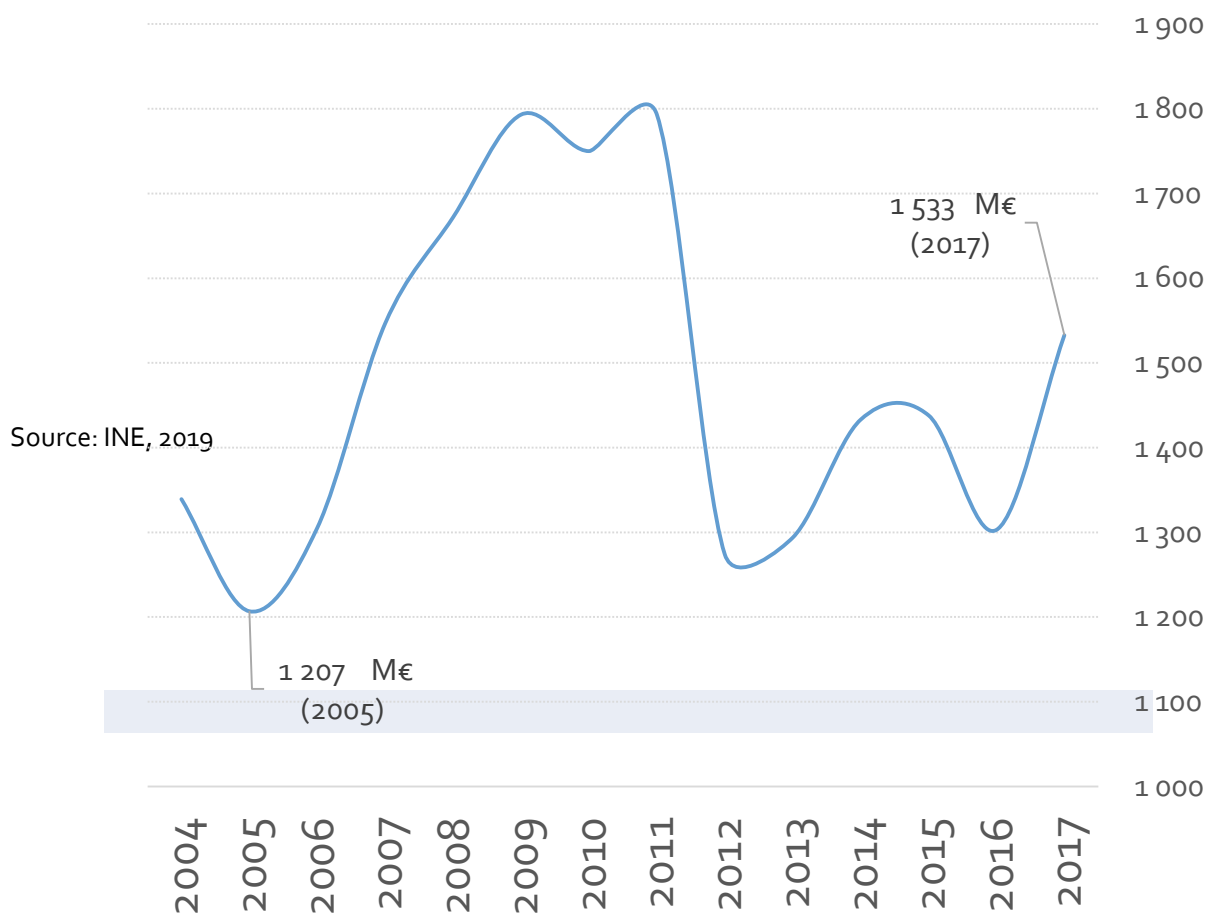


TESLA

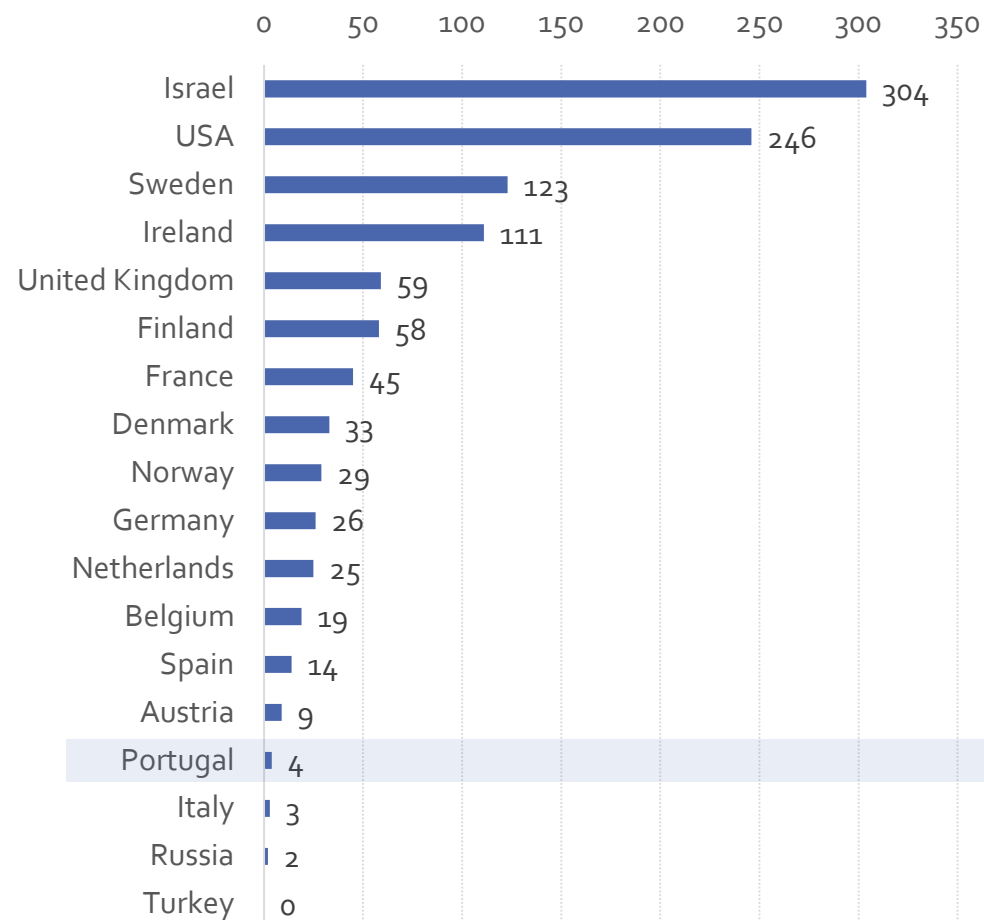


PORTUGAL LAGGING

Evolution of private investment (GFCF) in ICT in Portugal (M€)



Capital Stock in ICT (\$) *per capita*



Challenges

- Leadership and Culture
- Investment in Intangibles
- Digital jobs
- Speed and Stakeholder Partnerships

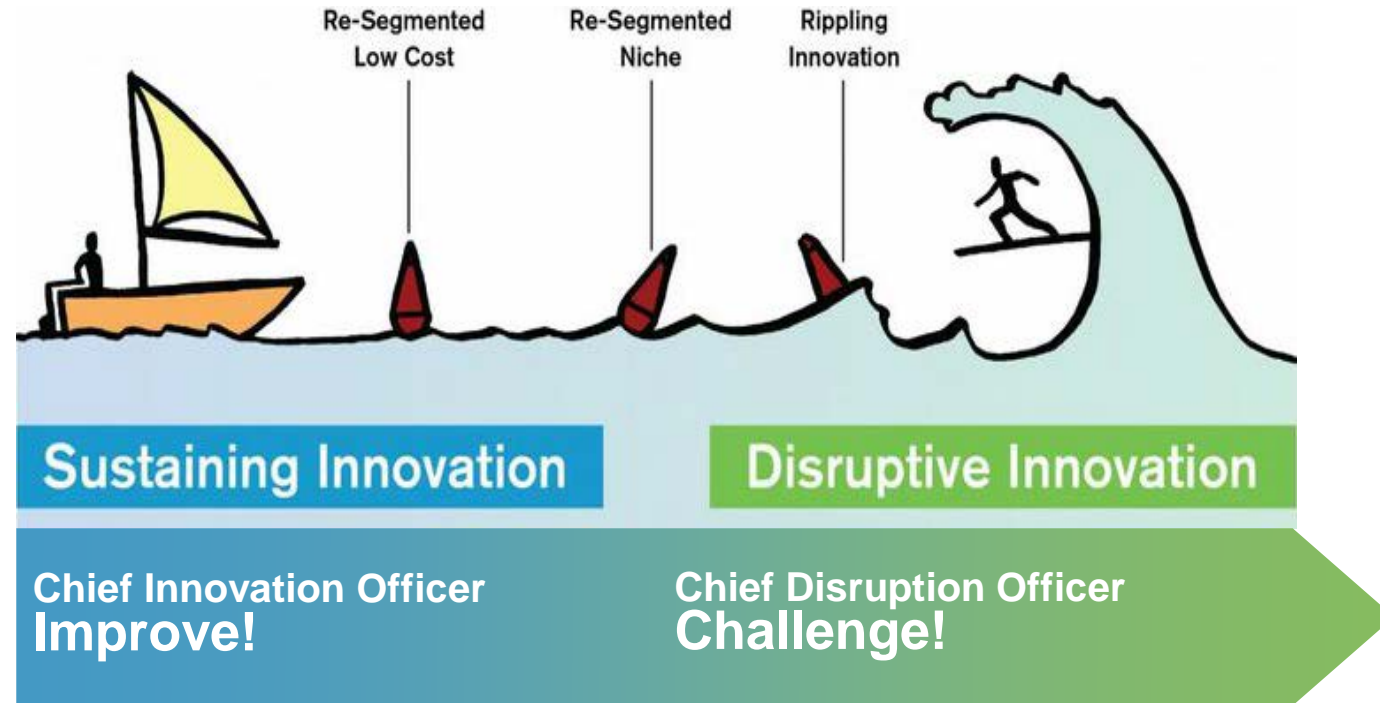
LEADERSHIP and CULTURE

Bureaucratic hierarchies move slowly, and entrenched interests shy away from risk. In the most dysfunctional organizations, signaling that work is being done becomes a better strategy for career advancement than actually doing work (if this

Peter Thiel

Zero to One: Notes on Startups, or How to Build the Future

describes your company, you should quit now).



Disrupt or get disrupted!

LEADERSHIP and CULTURE

"Give employees slightly more freedom and empowerment than you are comfortable with.

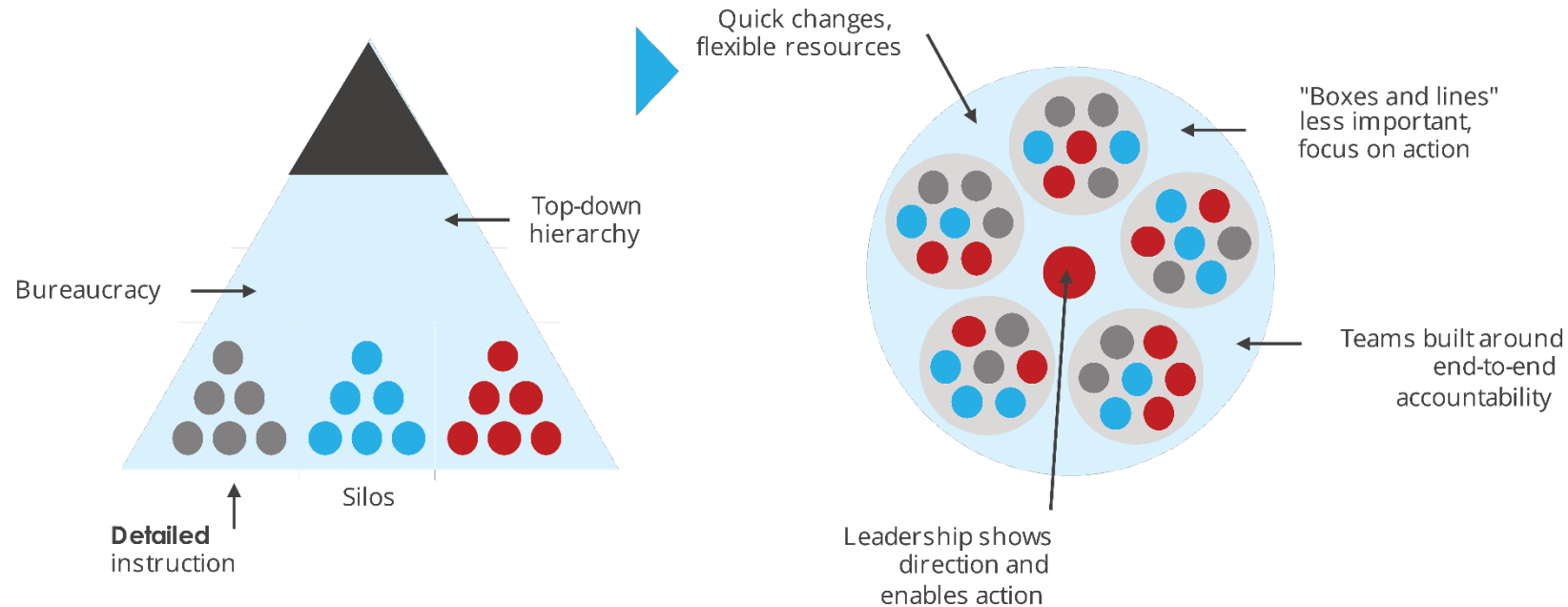
If you are not,

Laszlo Bock
Former SVP People Operations, Google

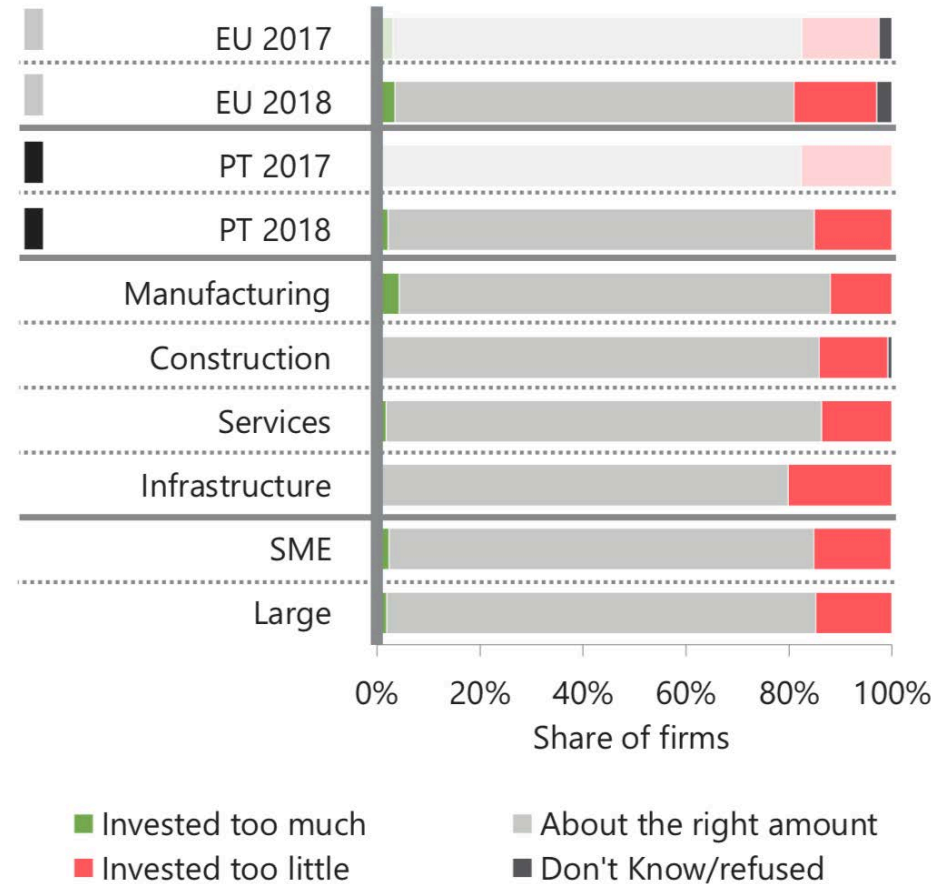
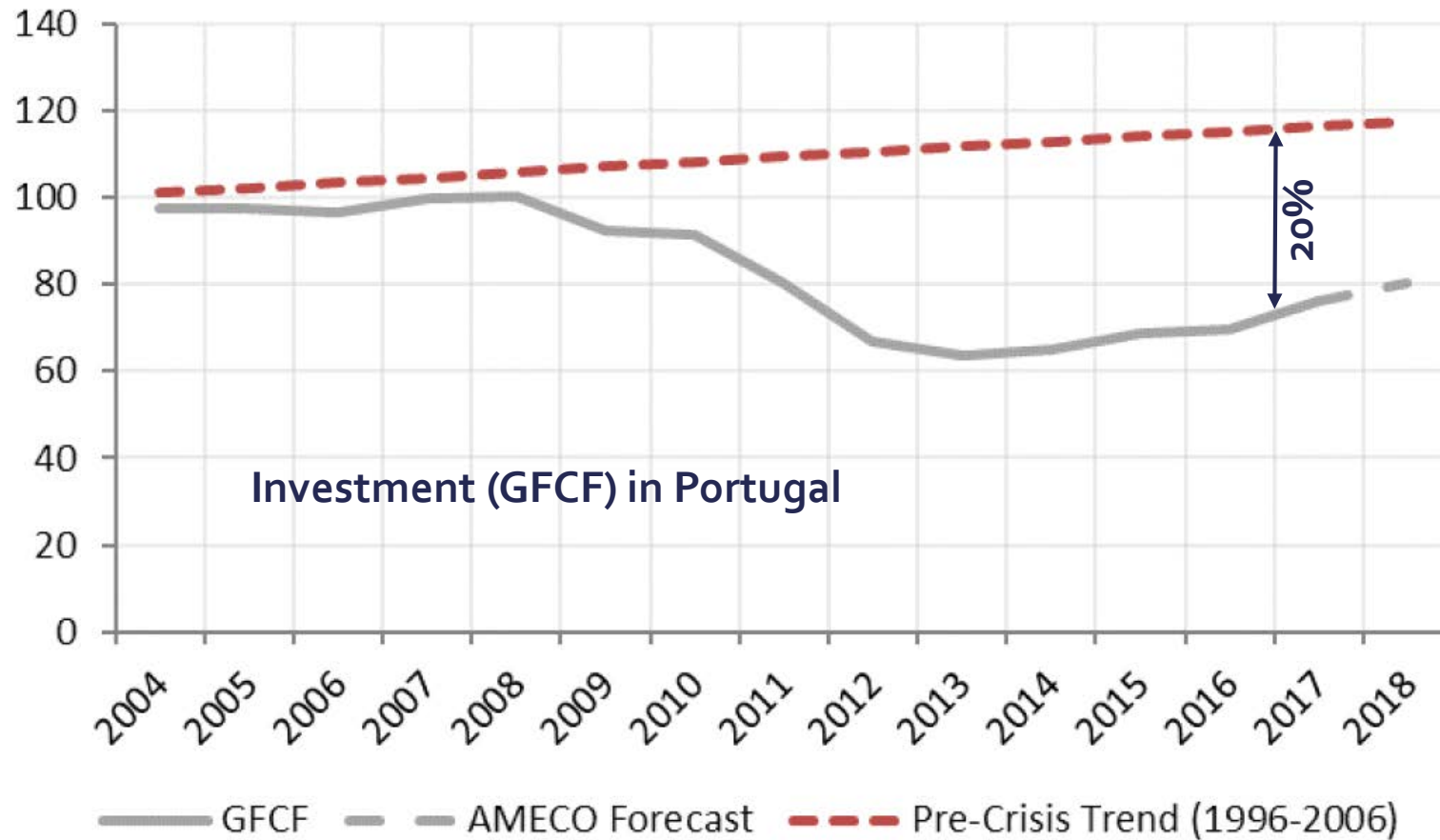
given them

NOVA NOVA SCHOOL OF
BUSINESS & ECONOMICS

AGILITY IS CULTURE

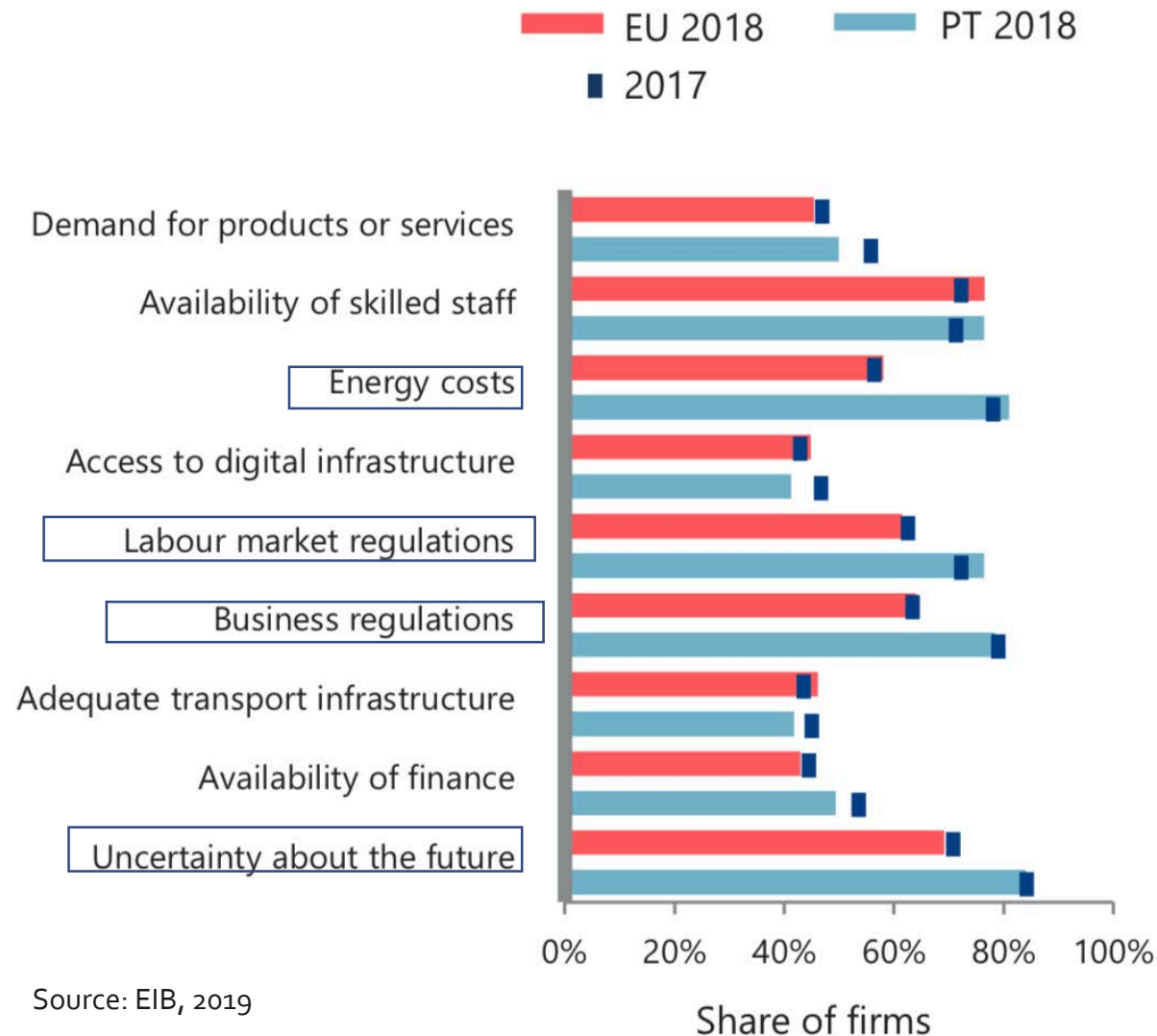


THE INVESTMENT SLUMP



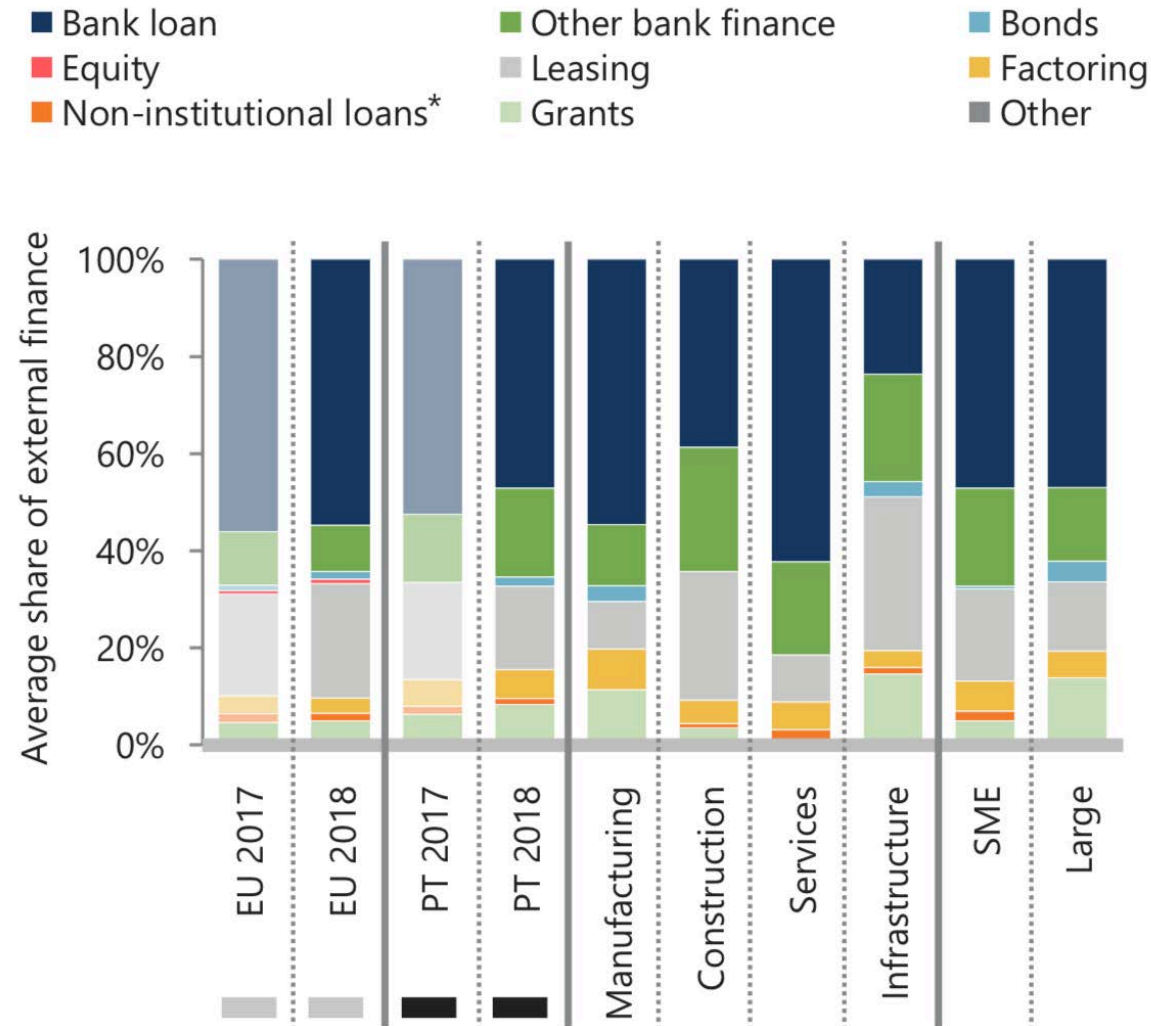
Source: EIB, 2019

LONG-TERM BARRIERS TO INVESTMENT



ACCESS TO FINANCE

Type of External Finance used for Investment

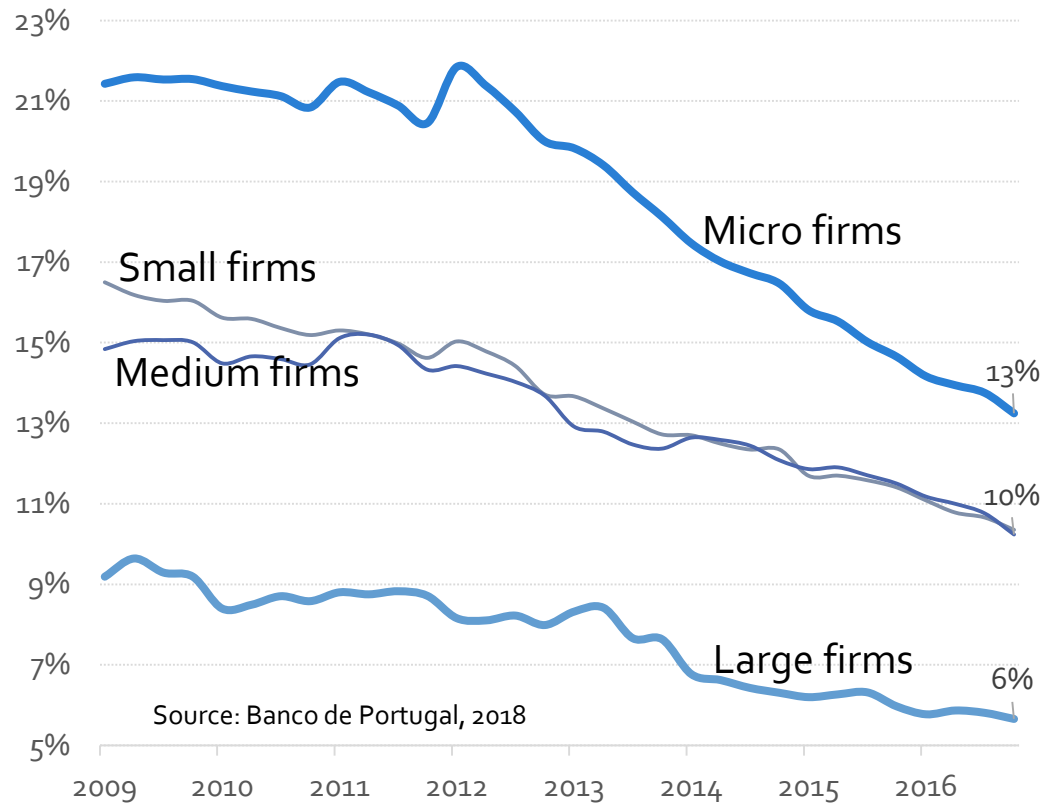




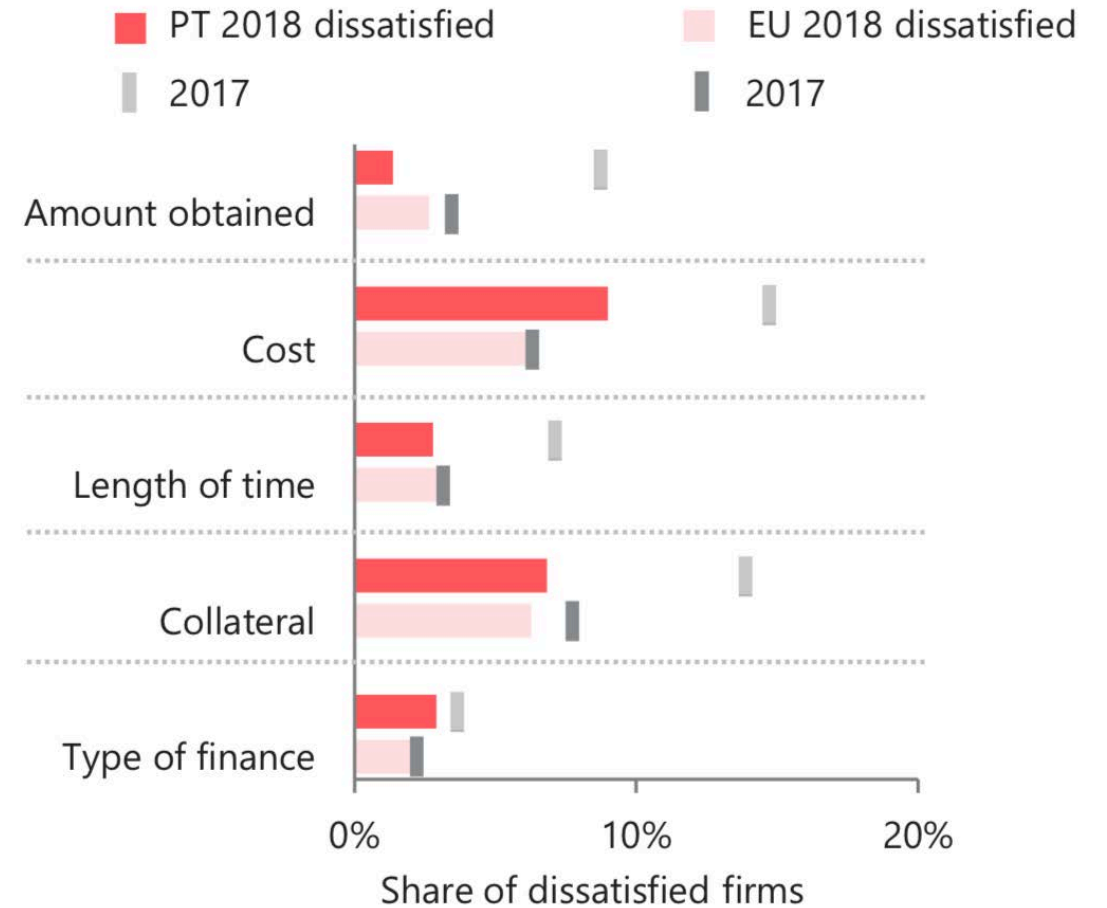
ACCESS TO FINANCE

Dissatisfaction with External Finance

Evolution of credit to non-financial companies (% GDP)
by firm size



Source: Banco de Portugal, 2018



Source: EIB, 2019

INNOVATE FOR GROWTH

**#1 Road to
productivity**



**#2 Continue to
build up skills**

**#3 Internationalize
and leverage Asia**

**#4 Foster
digitalization**

**#5 Convergence
of Stakeholders**

**#6 Access to
Finance**

**#7 Context
Challenges rule**

**#8 Agile,
Leadership**



CHANGING INNOVATION & GROWTH PARADIGMS IN PORTUGAL



DANIEL TRAÇA
JANUARY 2019



NOVA SCHOOL OF
BUSINESS & ECONOMICS