



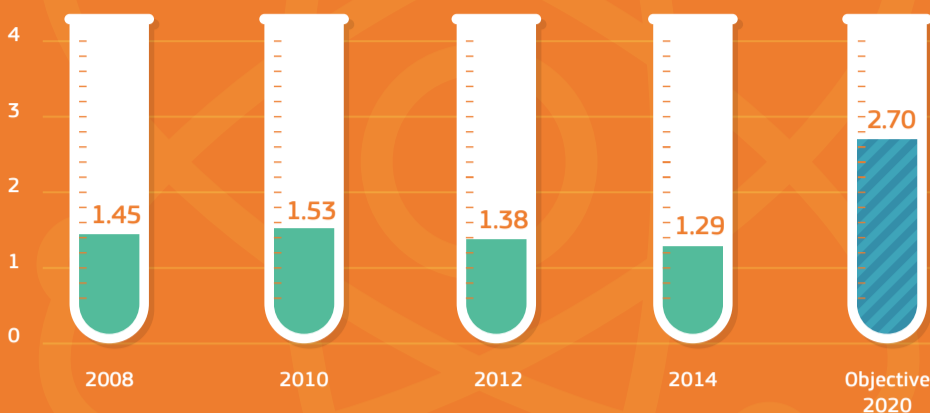
Portugal

Promoting innovation-friendly framework conditions and stronger interaction between science and business

INVESTMENT IN R&D

R&D SPENDING

Portugal strongly expanded its research and innovation system from a very low base, but its R&D intensity has been declining since 2009



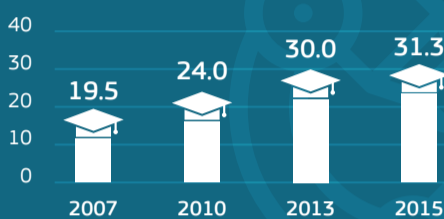
R&D intensity (total R&D spending as % of GDP)

STRENGTHS OF R&I SYSTEM

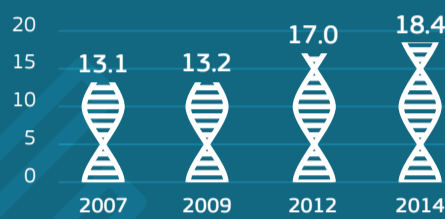
TERTIARY EDUCATION

SCIENCE & ENGINEERING SKILLS

Portugal has shown significant progress over time in building its research and innovation capacity and human resource base



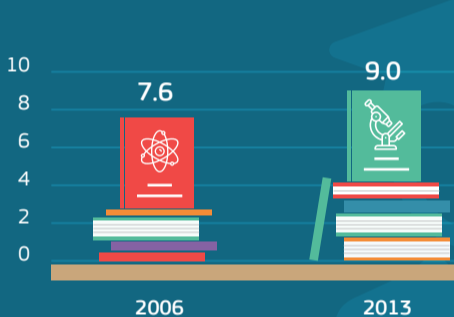
% 30-34-year olds who have graduated from tertiary education



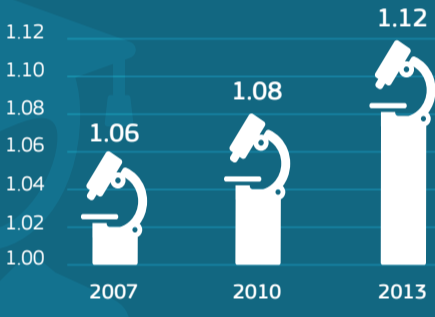
Share of new graduates (per thousand aged 25-34) in science and engineering

QUALITY OF RESEARCH SYSTEM

This evolution has had a positive impact on Portugal's scientific production and level of scientific excellence



% of scientific publications that are highly cited (top 10%) in other publications

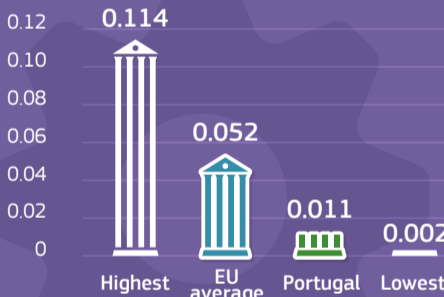


Average impact factor (ARIF) of scientific publications

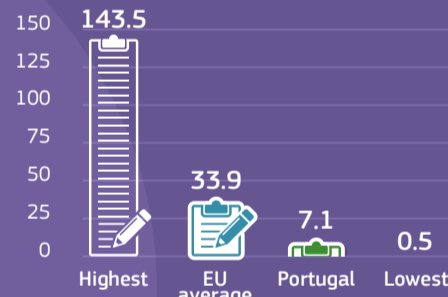
KEY CHALLENGES

PUBLIC-PRIVATE COOPERATION

Weak academia-business cooperation does not incentivise R&D investments by businesses



Public-performed R&D financed by business, as % of GDP (2013)

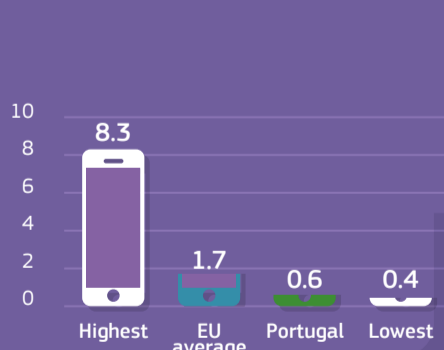


Number of public-private co-publications per million population (2014)

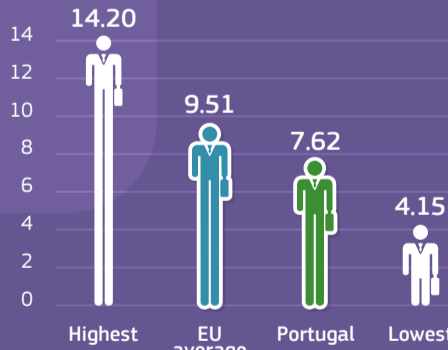
HIGH-TECH MANUFACTURING

FAST-GROWING COMPANIES

The business environment is not conducive to the creation and scaling-up of fast-growing SMEs in innovative sectors and to structural change towards a more innovation-driven economy



Value added in high-tech manufacturing as % of total value added (2013)



% of total employment in high-growth enterprises (2013)

RECOMMENDATIONS

2016 EUROPEAN SEMESTER - COUNTRY SPECIFIC RECOMMENDATION



Incentivise cooperation between universities and the business sector



Portugal has participated in the **Mutual Learning Exercises on Administration and monitoring of R&D tax incentives, Alignment and interoperability of research programmes** (phase I: national coordination) and **Performance-based funding of public research**