



JRC SCIENCE FOR POLICY REPORT

# RIO Country Report 2017: Spain

*Research and Innovation  
Observatory country  
report series*

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## EXECUTIVE SUMMARY

After the economic crisis, the Spanish economy is on a positive path of economic growth. The annual growth rate for 2016 was 3.3% and the economy is expected to keep growing at a rate of 3.1% in 2017. Unemployment decreased from 22.1% in 2015 to 19.6% in 2016,<sup>1</sup> but remains at the second highest rate in the EU. Regarding Research and Innovation (R&I), Spain remains a 'moderate innovator' with a declining overall performance relative to that of the EU between 2010 and 2016 (by 1.8%) (EC, 2017b:16).<sup>2</sup> The central government budget for R&I has been growing slightly in nominal terms since 2013, but the relative level remains very low. In 2017, R&I intensity reached 1.47% but remained far from the pre-crisis level (2.7% in 2008). Spanish Business Expenditure on Research and Development (BERD) intensity is modest (0.64% of GDP in 2016; EU-28, 1.3% in 2015). For the first time since the economic crisis, total BERD increased in 2015 and 2016, by 2% and 3% respectively (ICONO/INE-2017).<sup>3</sup>

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### MAIN R&I POLICY CHALLENGES

- **Improving framework conditions for R&I.** The high GDP growth rate over the last two years has not triggered an increase in Research and Development (R&D) intensity. In this context, a number of support schemes have been developed. The consolidation of the governance framework in this regard is essential to stimulate a favourable R&I ecosystem.
- **Improving funding and governance of the R&I system.** Despite the slight increase in total Gross Expenditure on Research and Development (GERD) in 2016, R&D intensity has continued to fall since 2010 and remains below the 2007 level. Fiscal deficit and public debt constraints have limited the action that the government can take regarding R&I funding. Ensuring sufficient investments in R&I and strengthening the governance of the R&I system remain essential.
- **Improving the labour market for researchers.** Human resource constraints were considered one of the most pressing challenges for the Spanish R&I system after the economic crisis. In recent years, a number of policy measures targeting R&I human resources have been adopted. These include the recognition of research as a 'priority sector', which has made it possible to set a special rate for replacement of retirees (maximum of 100% in 2017). While these measures appear ambitious, their implementation has so far affected only a limited number of researchers.
- **Stimulating regional R&I potential and performance.** Spanish R&D activities and funding are highly concentrated in four regions, all of them displaying an R&D intensity below the EU average. Reducing the lack of synergies between regions and improving coordination mechanisms could foster better regional R&I performance.

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### MAIN R&I DEVELOPMENTS IN 2017

- Reorganisation of the Ministry of Economy and Competitiveness, which gained

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<sup>1</sup> The unemployment figures for 2015 and 2016 come from Eurostat. Spanish Institute of Statistics (INE) data for the third trimester 2017 give the figure as 16.4%.

<sup>2</sup> The measurement framework of the European Innovation Scoreboard (EIS) 2017 has been revised. Therefore, the results of EIS 2017 cannot be compared with the results for the previous year (EC, 2017b: 8).

<sup>3</sup> Cites to databases indicate: (source of data/original source-year in with data was extracted).

competences in industrial policy and became the Ministry of Economy, Industry and Competitiveness (November 2016 and May 2017).

- [Recognition of industrial PhD accreditation.](#)
- [Adoption of the Spanish State Plan for Scientific and Technical Research and Innovation 2017-2020 \(29 December 2017\).](#)
- Introduction of the new RED Cervera programme, June 2017.
- New European 'big data' e-infrastructure to support biodiversity research: [LifeWatch](#), the e-Science European Infrastructure for Biodiversity and Ecosystem Research is the first [European Research Infrastructure Consortium](#) initiative hosted in Spain.

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## **SMART SPECIALISATION STRATEGIES**

In 2014, all 17 Spanish regions adopted their Research and Innovation Strategies for Smart Specialisation (RIS3). Many regions focused on similar priorities. Up to now, Spanish regional governments have implemented their RIS3 mainly through public calls for R&I proposals based on their RIS3 priorities and financed by the corresponding Operational Programme (OP). Some regions have also created new R&I instruments, actions and management structures. The European Regional Development Fund (ERDF) budget represents in many Spanish regions more than 40% of planned funding for the implementation of RIS3.



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