



# The European Commission's science and knowledge service

Joint Research Centre



## Higher Education for Smart Specialisation

Portugal case study



**John Edwards, Joint Research Centre, Seville**

Conference on Smart Specialisation in Portugal: Reflection and Update

Faro, 17 May 2019

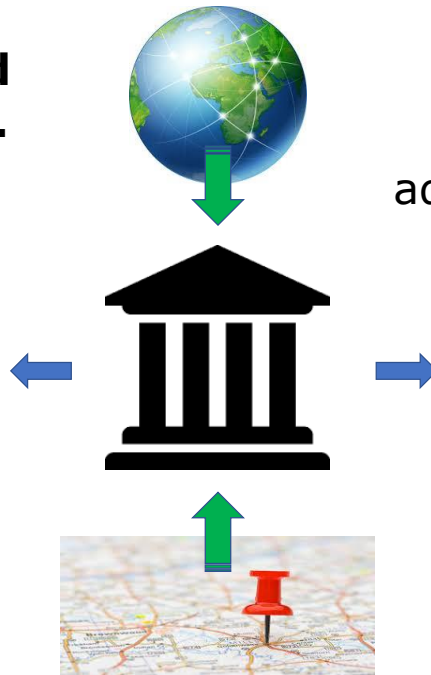


# Models of universities

- Pre-enlightenment
- Newman's Idea of a University / Humboldt
- The Ivory Tower
- The Entrepreneurial University
- The Engaged University
- The Civic University



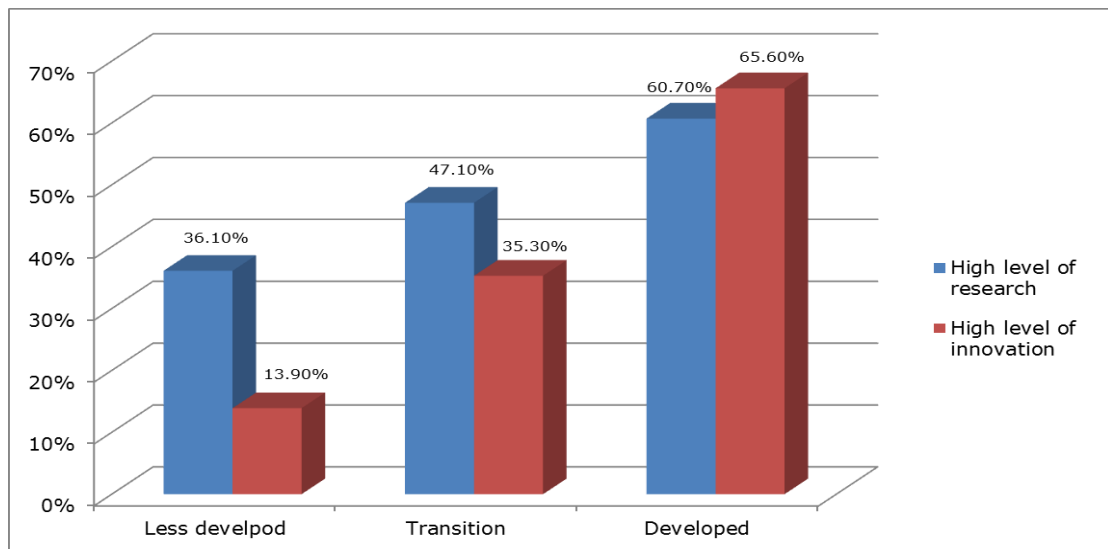
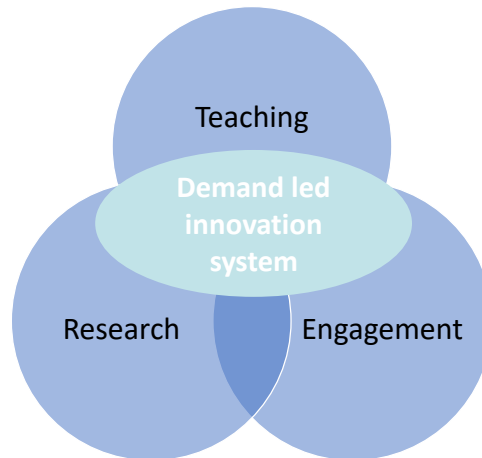
## The Engaged University....



....adapts **global** knowledge to address **local** issues

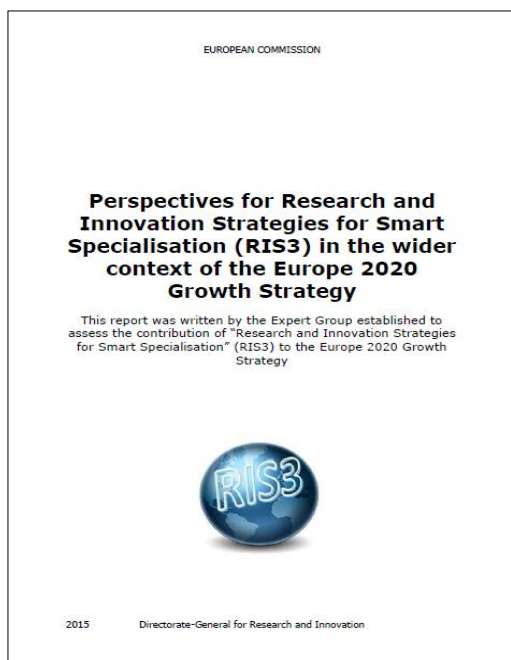


# HESS project – conceptual basis



**Perception of levels of research and innovation in S3 Platform regions**  
(% of respondents giving a score of five or above from seven)





## 2.2. Smart Specialisation – as Research and Innovation (and Education) policy approach

The RIS3 pre-conditionality – having a RIS3 (or existing similar national or regional strategy) in place in order to be eligible for ERDF support for innovation-related measures – applies specifically to two ERDF thematic objectives:

- Strengthening research, technological development and innovation (R&I target)
- Enhancing access to, and use and quality of ICT (ICT target)

This misses, however, the crucial role of (higher) education and foreign direct investments in fostering a major structural changes in the industry of the less developed regions, which the 3% R&D intensity target implicitly calls for. A well-developed RIS3 would need to pay sufficient attention to these two mechanisms to augment R&I capabilities.



- As human talent is the cornerstone of innovation, an enhanced focus on education and training to develop talented people is needed.
- Universities have an essential role in developing, attracting and retaining human talent in their innovation ecosystems.
- The provision of skills for innovation, in addition to technological undertakings, should be one of the main areas of support of the European Structural and Investment Funds.
- Investing in reinforcing the links between education, research and innovation is essential for societal and economic development. The connection should be reflected in all funding programmes and policies aimed at boosting competitiveness and inclusive growth.
- Many initiatives showcased at the EUA annual workshops on Smart Specialisation provide evidence that universities can be effective network builders and strategic partners that play a crucial role in innovation ecosystems.



# A Renewed Agenda for Higher Education

## FOUR PRIORITIES FOR ACTION:

1. Tackling future skills mismatches and promoting excellence in skills development;
2. Building inclusive and connected higher education systems;
- 3. Ensuring higher education institutions contribute to innovation;**
4. Supporting effective and efficient higher education systems.

and...support evidence for policy-making and practice

COM(2017) 247 Final: A renewed EU agenda for higher education

The Commission will :

12. Further roll out Higher Education for Smart Specialisation, to provide advice to public authorities to involve HEIs and, where possible, EIT Knowledge and Innovation Communities (KICs), closely in the design and implementation of Smart Specialisation Strategies.

The Commission will :

17. Optimise synergies between EU evidence tools by creating a Knowledge Hub on higher education.



## Smart Specialisation and Higher Education Institutions

Element of Smart Specialisation	Impact on HEIs
Prioritisation / critical mass	Curricula and research evolution 'Third mission' redefinition
Entrepreneurial Process of Discovery (EDP)	More applied and interdisciplinary research Horizontal skills among graduates
Innovation for all regions – Place based approach	Embedded in regional governance Different models and tools for engagement Importance of the social sciences
Broader understanding of innovation	Respond to regional challenges
Focus on monitoring	Role for social sciences

Source: Edwards et al (2017), *Higher Education for Smart Specialisation: Towards strategic partnerships for innovation*





**The HESS Handbook** (Higher Education for Smart Specialisation) provides guidance on how to involve Higher Education Institutions into the design and implementation of Smart Specialisation Strategies



## Action research in selected European regions

### HESS 1

- Navarra, Spain
- North East Romania

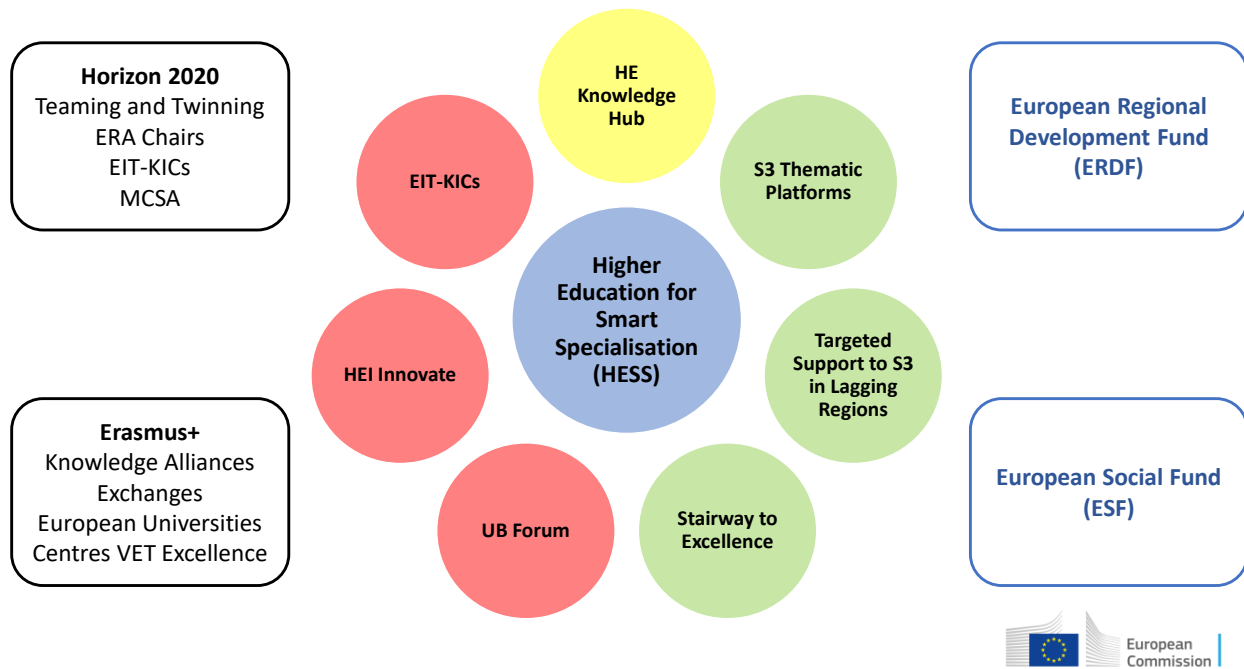
### HESS 2

- Puglia, Italy
- Centre-Val de la Loire, France
- North Central Bulgaria

### HESS 3

- Northern Netherlands
- Portugal
- Lubelskie
- Lithuania
- Two more regions





**€645 278 423**

**Allocated to HEIs across all ESIF so far in PORTUGAL**

# 2.5%

Of all allocated ESIF in PORTUGAL is for Higher Education Institutions

# 1719

Projects under IP 1.1 (out of 2041)

# 39

Projects under IP 1.2 (Out of 1729)



## Number of projects with HEIs mentioning S3 in the description (Portugal)

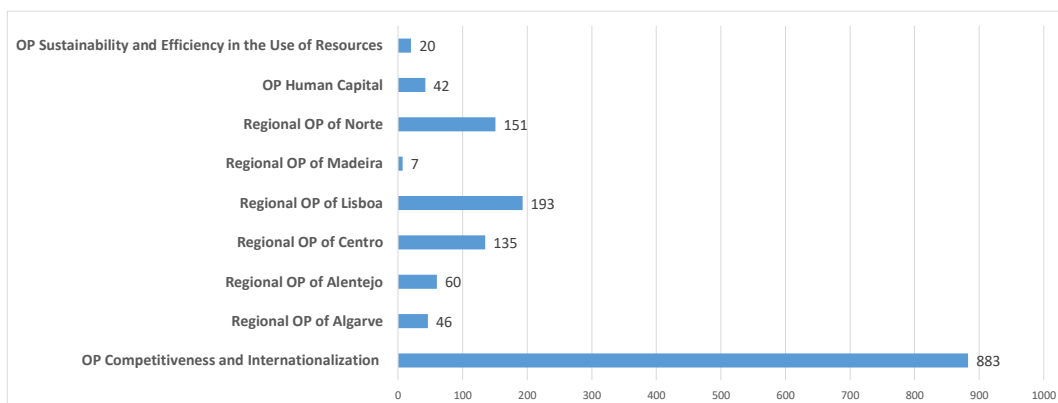
OP	Total de Projetos	Total de Fundo Aprovado (€)
OP Algarve	3	1 115 836,80
OP Alentejo	7	1 691 098,73
OP Centro	15	8 351 928,76
OP Norte	21	19 329 646,83
OP Madeira	1	846 651,02
OP HC	8	15 865 569,68
<b>Total</b>	<b>55</b>	<b>47 200 731,82</b>

Source: Nogueira, C (2019): Analysis of Portugal 2020 data





## Number of ESIF cofunded projects with HEIs as beneficiaries (in Portugal)



Source: Nogueira, C (2019): Analysis of Portugal 2020 data



## Examples of ERDF projects with HEIs under IP 1.2

Name	Description	Beneficiary
<b>CRIA START +</b> Project to Promote and Support Entrepreneurship and the Creation of New Innovative Companies	The CRIA START + Project, promoted by UAlg and NERA, has the strategic objective of supporting the development of innovative business ideas, business initiatives and the creation of new companies within the RIS3 Algarve Specialization Domains.	University of Algarve



## Examples of ERDF projects with HEIs under IP 1.2

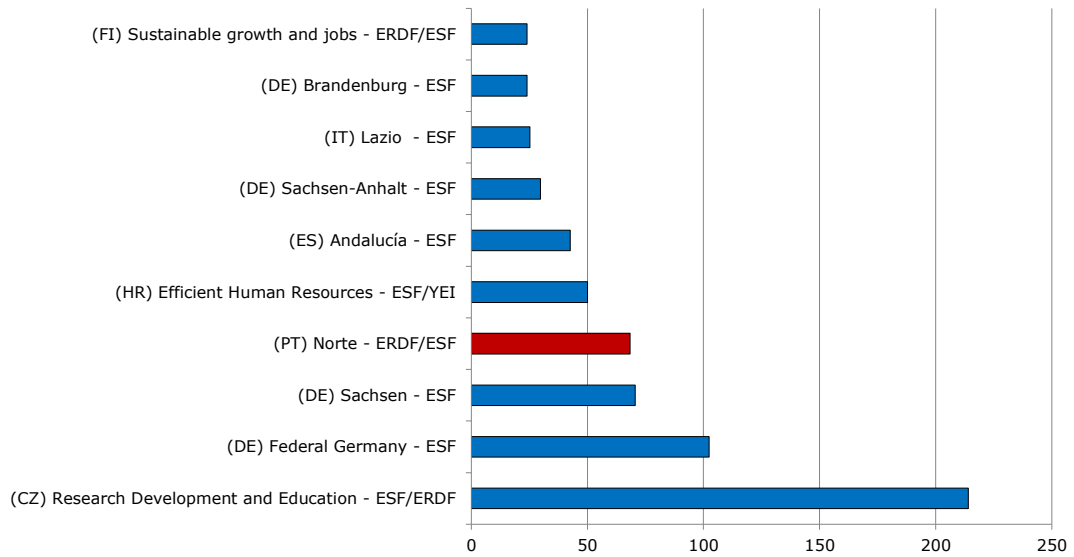
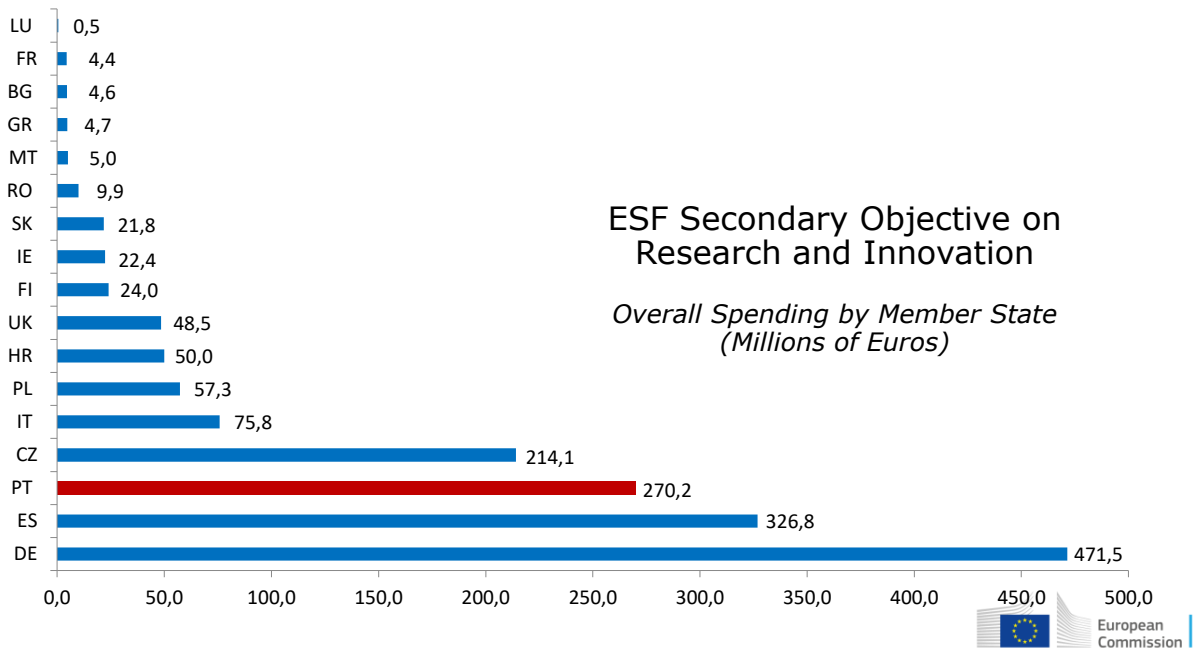
Name	Description	Beneficiary
<b>DiscoveriesKT</b> Promotion of the involvement of the key actors of the Central Region for the transfer of knowledge and creation of new partnerships in the area of Regenerative Medicine and Precision Medicine	The operation aims to leverage and add value to the "Discoveries CTR" application, contributing to its success in Phase 2 of Teaming, aligned with RIS3 Centro. It will include specific innovative scientific priorities and joint activities with industry, promoting knowledge transfer and partnerships between knowledge centers and industry	University of Aveiro



## Examples of ERDF projects with HEIs under IP 1.2

Name	Description	Beneficiary
<b>LAB2FACTORY</b> Strengthening the transfer of scientific and technological knowledge to the agro-food and forestry ranks	The objective of the LAB2FACTORY Project is to transfer scientific and technological knowledge developed at the IPC level to the agro-food and forestry sector, within the framework of the RIS3 Centro, articulating the regional agricultural potential of these sectors with a view to the development of new products, as well as to the development of knowledge and technology transfer projects.	Polytechnic Institute of Coimbra





# Examples of ESF funded calls with S3 criteria in PORTUGAL

## **Regional OPs with S3 selection criteria:**

- Cursos Técnicos Superiores Profissionais (TeSP)
- Cursos de Especialização Tecnológica– Linked to S3
- Formação Avançada – Programas Doutorais

## **Thematic OP with S3 selection criteria:**

- Bolsas Individuais de Doutoramento e pós-Doutoramento



# Thank you

Any questions?

