

# OECD reviews of HE in regional and city development

Mobilising universities for Catalonia's  
development

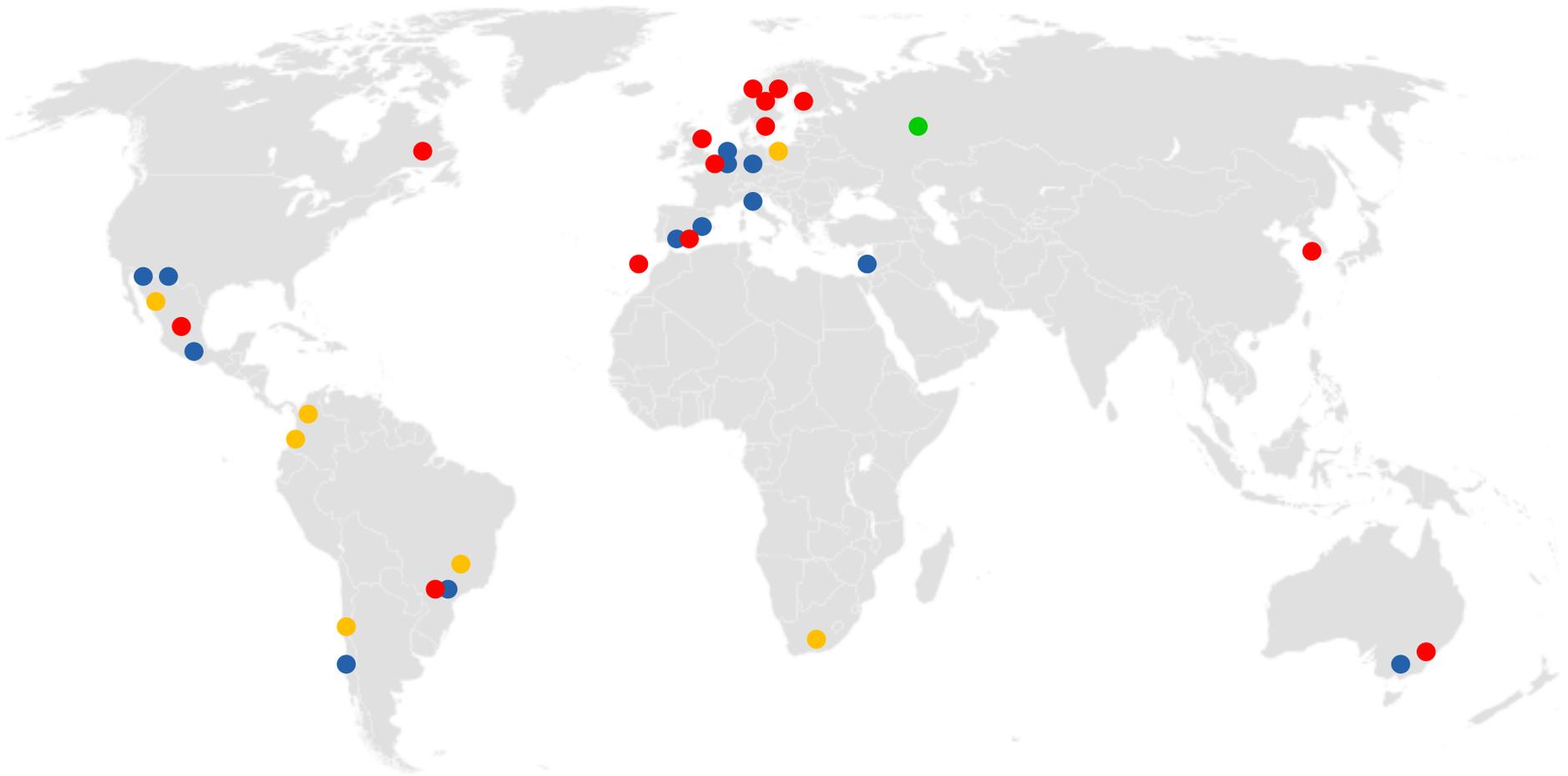
**Key conclusions for Catalonia**  
Barcelona, 8 April 2010

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**OECD's tool to mobilise Higher Education for Economic, Social and Cultural Development of their Cities and Regions and to enhance regional partnership building:**

**... the Reviews of Higher Education in Regional and City Development**

# Regions under review



2005 - 2007



2010 - 2012



2008 - 2011



Kazan 2007 with World Bank

# What is under review?

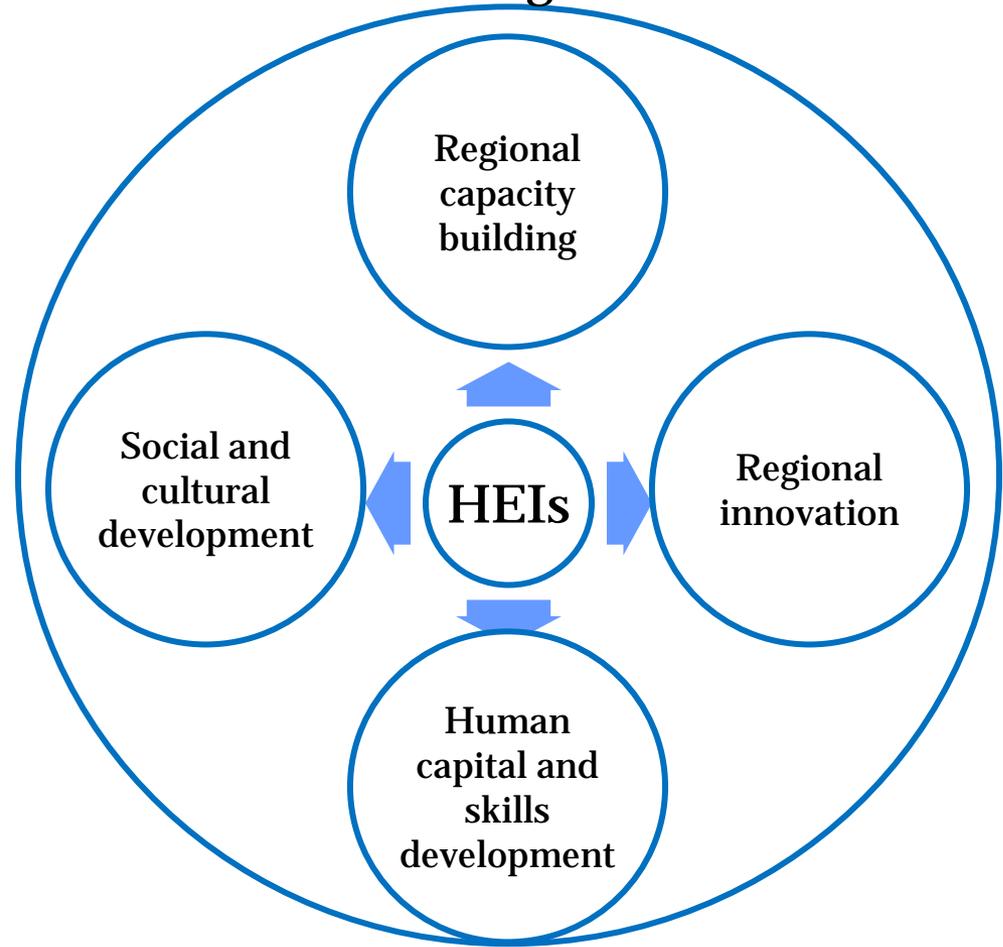
## Partnership building

The OECD reviews draw together HEIs and public and private agencies to identify strategic goals and to work towards them.

## Importance of context

The reviews take account of different national and regional contexts within which the HEIs operate.

## National and regional context



Focus of analysis of the OECD review

# Catalonia



## **Review visit 1-5 March 2010**

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**One of Spain's most prosperous states:** 19% of Spain's GDP. The GDP per capita is higher than the EU-27 average.

**Second most populous region** in Spain with 7.5 million inhabitants (16%) and a **magnet for migration** (1 million) with acknowledged strengths in design and urban development.

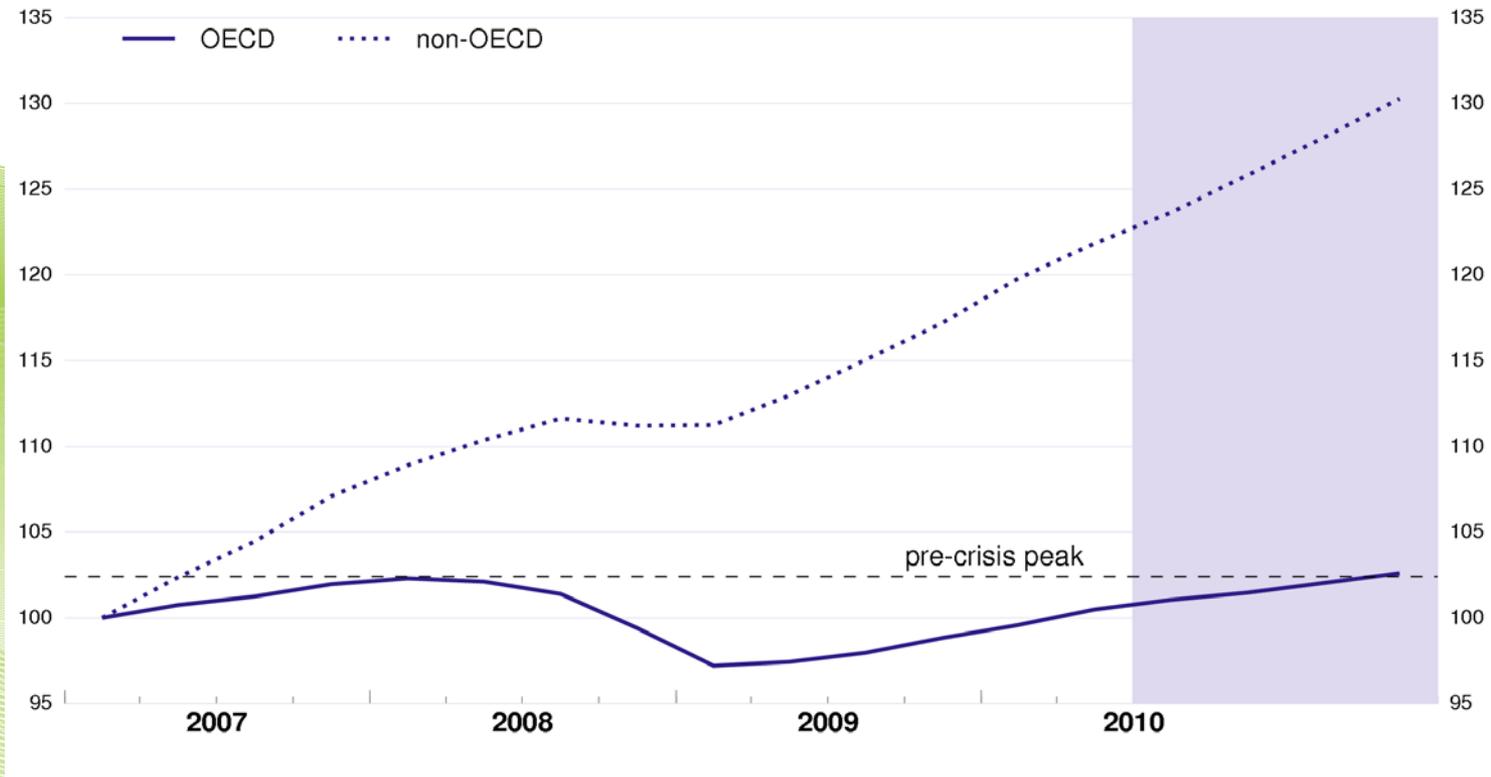
**Diversified economy** but productivity (GDP per worker) slipping relative to the rest of OECD, decreasing from 115% of the OECD average in 1995 to 91% by 2005.

**Unemployment 17.98%**, highest among the young (39.72%) and low skilled population.

# Catalonia: Pointers for post-crisis development

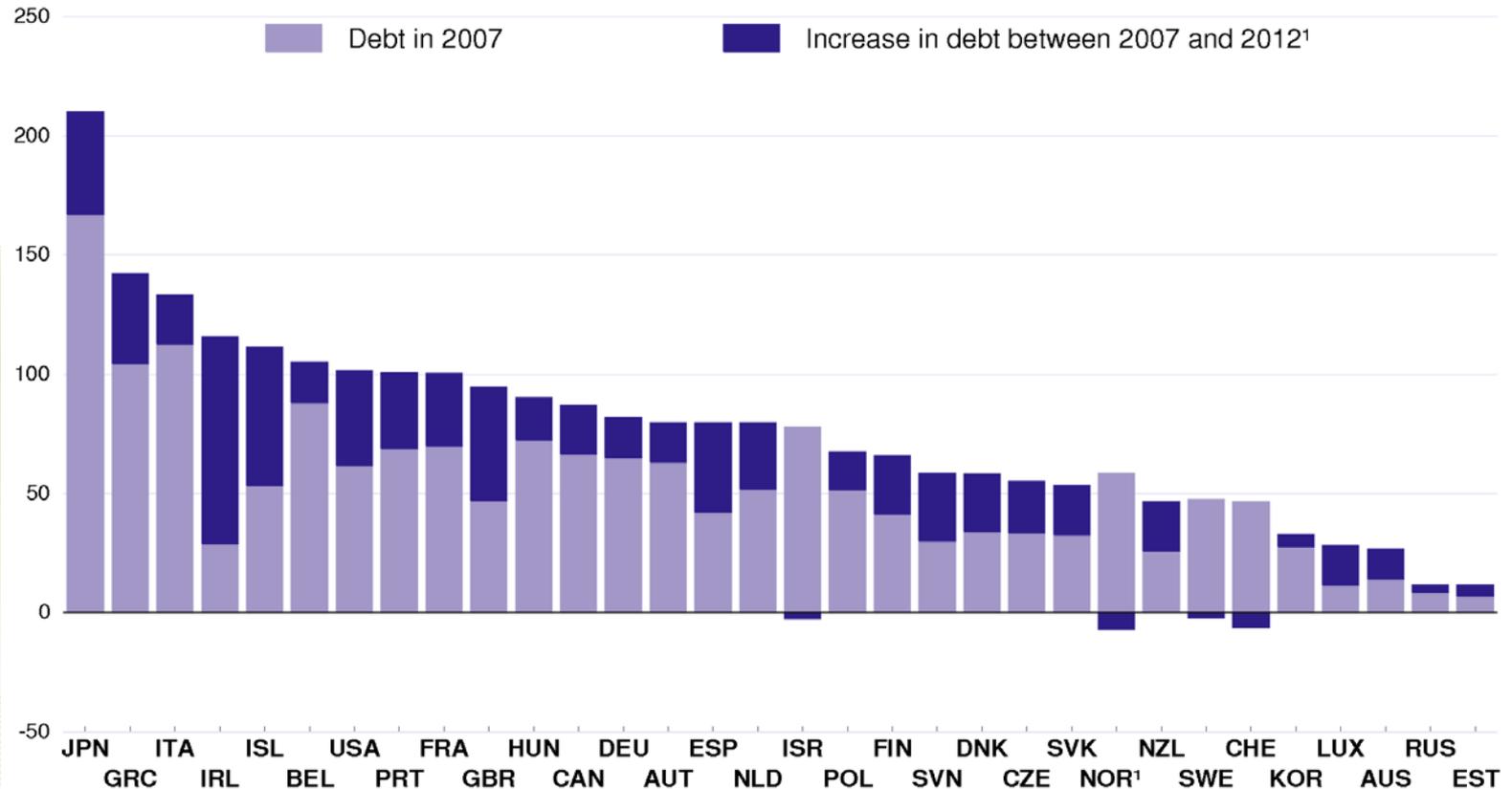
OECD countries have barely recovered to pre-crisis levels of output while emerging economies continue to surge

### Real GDP, index 2007 Q1 = 100



Source: OECD Economic Outlook 88 database.

# Government debt is reaching historical highs in many OECD countries (% of GDP)



1. This includes cumulated deficit for 2008-12, debt-increasing equity participations in companies and the impact of GDP growth.

2. Cumulated deficits correspond to mainland only.

Source: OECD Economic Outlook 88 database and Secretariat's estimates.

# In the time of financial stringency, How to?

- **Create quality jobs, address unemployment and improve the flexibility of the population** to face the rapid changes in the labour market
- **Transform the economy** through upgrading/diversifying established industries and SMEs and through building new market opportunities
- **Address inequalities, needs of the diverse population** with a large number of immigrants and a growing number of ageing citizens
- **Reform the governance and management to unleash the potential of universities** for local and regional development and greater efficiency and productivity

# Long-term achievements in human capital development

- **Significant growth and transformation** of the Catalan Tertiary Education Sector over the last 20-25 years.
- **The average years of education** for the working population has doubled, and the population with tertiary education qualifications has grown almost 7-fold.  
1/3 of total working population has received some form of tertiary education.
- **The Catalan University System** 8 public universities incl . the Open University, and 4 private universities.  
177 000 undergraduate and master's students in Catalan universities, representing 12.5% of the Spanish university system.
- **Recent rapid growth of the vocational sector:** 43 500 students enrolled in vocational education in 300+ centres.
- **Success in talent attraction:** international students & researchers

# .... But great challenges

- **Sharp deterioration of the labour market**, especially for the young. High unemployment (17.98%) and youth unemployment (39.72%) rates.
- **Large proportion of population with low skills**: 9.6% is illiterate or without schooling. 47.5% of the workforce (25-65 years) had not completed post-compulsory education (in 2007).
- Poor - albeit improving - **learning outcomes and high dropout rates in secondary education**:  
Catalonia's PISA scores have improved but are only slightly above the Spanish and OECD averages.
- **Dropout from universities, long duration of studies and decreasing graduate employability** point to inefficiencies in tertiary education system
- ***Catalonia has improved educational attainment levels in the long term, but a large proportion of population has low skills and a large proportion of young age group is outside of education, training and labour market.***



# Prepare for post crisis economy

- **Create a strategy for human capital development to**
  - define Catalonia-wide goals, policies and priorities extending from primary to tertiary education and beyond
  - strengthen pathways between universities and vocational education sector and different levels of education
  - improve learning outcomes at schools
  - develop mechanisms to reach out to under-served populations such as immigrants
- **Improve efficiency, equity and relevance of university education**
  - Provide effective academic, social and financial support services for students.
  - Develop Catalonia-wide and institution-specific data about student progress and graduate employment.
  - Strengthen the labour market relevance of university education and align education provision with the needs of Catalonia.
  - Develop forms of cost sharing in tertiary education through means-tested scholarships, income contingent loans or other funding packages to complement the existing loan and grant schemes for students.
- **Prioritise lifelong learning to shift the focus from “life-long employment” to “life-long employability”**
  - Enhance re-skilling and up-skilling activities.
  - Develop flexible programmes for those who combine work and study

# Engaging students into knowledge transfer

## Problem-based learning in Aalborg, DK

In Aalborg University, Denmark, up to 50% of the study work consists of problem-oriented project work: students work in teams to solve problems which have been identified in co-operation with firms, public organisations and other institutions.

At any one time there are 2000-3000 ongoing projects that ensure the university's engagement with the surrounding society.



# Providing free employer-specific training:

## Georgia Quick Start, US

Launched in 1967, GQS was revamped in the 1990s due to increasing global competition.

GQS is part of the 33-campus Technical College System of Georgia. It has centralised staff and resources to develop and deploy customised training anywhere in the state. GQS teams of analysts examine the workflow process, develop a customised training programme and materials. For new projects, QS pre-screens potential hires for the company.

By early 2010, QS has conducted 6 000 projects involving 780 000 trainees.

The budget is USD 22 million a year.



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TECHNICAL COLLEGE SYSTEM OF GEORGIA



# Innovation in Catalonia

- Catalonia has led strategic investment in R&D and has successfully attracted research funds from Spanish and EU sources. But priorities defined outside Catalonia.
- STI policy has a focus on knowledge generation (publications) and “academic route” by providing funding to universities and research centres. But innovation is not something that happens in university laboratory unless it is taken to the market and it creates jobs and businesses.
- Proliferation of research entities, networks and science parks has resulted in complex governance of regional innovation system.
- ***Good progress in knowledge generation, but scope for improvement in knowledge transfer & diffusion to drive the Catalanian economy.***

# How to improve innovation outcomes

- **Rationalise** overlapping intermediary organisations, agencies and initiatives and focus on a fields relevant to Catalonia.
- **Adopt a wider innovation concept** to balance the science and technology-push model with incremental innovation in fields relevant to Catalonia (tourism). **Promote greater territorial specialisation** in STI.
- **Improve data reporting and analysis.**
- **Encourage universities to engage in long-term collaboration with local industry/industry association** to support the human capital development and SME needs. **Provide incentives for uni staff**
- **Reduce bureaucratic burden on companies, new business formation and development.**

# Creating demand-pull in SMEs: Small Business Innovation Research Program, US

SBIR was launched in 1982 to facilitate new technology absorption by SMEs.

SBIR provides up to USD 850 000 in early stage R&D to small technology companies or to entrepreneurs who launch a company. The principal investigator works in the firm at least half time.

SBIR funds proof of concept and prototypes. It helps SMEs cross the “valley of death” and attract private capital or win public contracts.

SBIR is the largest US Innovation Partnership Programme. It has a stable budget: 2.5% of Federal Agency R&D budget have been set aside for SBIR grants. In 2009 the total budget was USD 2.3 billion.

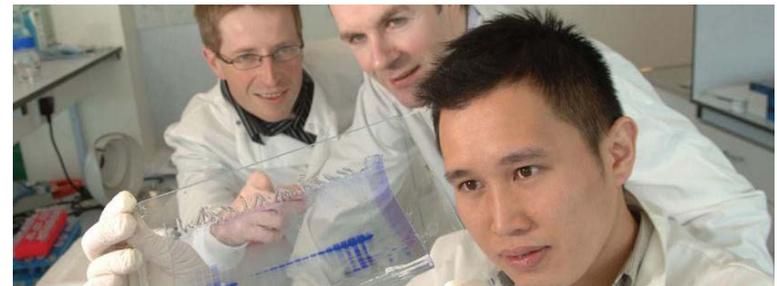


# Creating a one-stop-shop for industry contacts: Knowledge House, NE of England, UK

In the North East of England, 5 universities have set up Knowledge House to offer expert solutions for developing ideas and solving problems through collaboration, consultancy, training and R&D.

In 2007 it generated GBP 4.7 million for the participating universities by delivering 364 completed projects from over 800 business enquiries. Business growth is 25%.

University staff are becoming engaged with the Knowledge House activities.



# Finally...

- ***The relevance of universities depends on their ability to be responsive to the socio-economic needs of their regions.***

***It is necessary to strengthen the institutional autonomy of Spanish universities, provide incentives and establish accountability schemes.***

**At the same time the Catalan Government can:**

- Further develop the university funding model to improve their **accountability, quality, relevance, specialisation and efficiency.**
- **Improve university-government interface** for policy design.
- **Provide incentives for uni collaboration and greater alignment of universities' research, learning programmes and community service with the needs of Catalonia** and its labour market by introducing “challenge-driven” competitive funds.