Spanish Strategy University 2015: New Funding Models for Spanish Universities

Juan José Moreno-Navarro
Director General for University Policies
Ministry of Education - Spain
Spain is Moving around university

- UE Presidency
- Sustainable Economy Law
- Law of Science, Technology and Innovation
- Education Action Plan 2020
- University 2015 Strategy
Role of Universities in the Change of Economic Paradigm

- “Speculative Economy” → “Sustainable, knowledge-based economy”.
- The knowledge triangle as driver for the cultural and economic change.
- University at the hearth of the model change.
- A strategy in line with the European Modernisation Agenda for Universities.
- Key elements: education, cooperation, internationalization, entrepreneurship and the management efficiency and efficacy.
Strategy University 2015: An integral Approach

EDUCATIONAL MODEL

Pre-primary → Primary → Secondary Education → Upper Secondary Education → University Higher Education

Scholarship Certificate → Higher Vocational Training

Medium Vocational Training

Long Life Learning

Firms → Society
Main objective: to strengthen the role of higher education in order to:

- increase the social cohesion
- progress in the change of economic and social model towards a new sustainable model
- participate in the strengthening of the knowledge chain of value
The context: Landscape

Europe

- 4,000 HE Institutions
- 17,000,000 university students
- 1,500,000 people in HE
- 435,000 Researchers

Expenditure in education in % GDP EU (27): 1,2

Spain

- 77 Universities (50 Publics)
- 1,504,276 university students ('08/'09)
- 54.4% of undergraduate students are female
- 105,021 teachers & 55,774 personnel (2007-08)

Expenditure in education in % GDP 1,1

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PLA New Funding Models – U. Murcia 2010
The context:
Population with HE

Population with Higher education 2007

Source: Education at a Glance 2009

www.educacion.es

PLA New Funding Models – U. Murcia 2010
The context: Global Figures

Expenditure per student
- Expenditure per HE student vs GDP per capita (EAG 2009)

Fellowships
- Public expenditure in HE fellowships vs GDP (%) (EAG 2009)

Foreign students
- Inflow of foreign EU students vs the total number of students (EUROSTAT)

R&D Expenditure
- R&D Intensity (EUROSTAT)

<table>
<thead>
<tr>
<th>Country</th>
<th>Expenditure Per Student</th>
<th>Public Expenditure</th>
<th>Inflow of Foreign Students</th>
<th>R&amp;D Intensity</th>
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<tbody>
<tr>
<td>OECD</td>
<td>45</td>
<td>0,27</td>
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<td>Europe</td>
<td>40</td>
<td>0,22</td>
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<td>Spain</td>
<td>38</td>
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<td>2,2</td>
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<td>France</td>
<td>38</td>
<td>0,10</td>
<td>1,2</td>
<td>1,85</td>
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<td>(*)</td>
<td>38</td>
<td>0,08</td>
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<td>1,27</td>
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</table>
The context

- Student mobility below the EU and OECD average: 6.2% of EU students (vs 7.1% OECD)
- Low number of foreign students: 7.4% EU (vs 8.7% OECD)

- US universities dominate EU in global rankings (ARWU, THES) in the Top-100
- The EU invests too little in HE (€ 10,000 per student vs € 35,000 ps in the US)
• EU-25 spend in HE: 1.3% GDP (3.3% in the US, 1.1% in Japan).
• EU 90% public funds (< 40% in the US)
• EU: 31% of expenditure on R&D (12% in the US).
• Positive correlation among expenditure per student and position in global rankings
Policy background:


Universities

- key stakeholders in the process towards a knowledge based economy
- interface between the EHEA and the ERA
- at the hearth of the knowledge triangle,
- key role in the need to achieve a sufficient supply of competent researchers & make the ERA/EHEA more attractive to the world

But, some challenges are still ahead...
Modernization Agenda

• Breakdown the barriers. Geographical and inter-sectorial mobility
• Provide the right mix of skills and competences for the labour market. Employability
• Ensure real autonomy and accountability for universities
• Reduce the funding gap and make funding work more effectively in education and research
• Structured partnerships with the business community, other RTOs and local authorities
  ○ Activate Knowledge through interaction with society
  ○ Reward excellence at the highest level
  ○ Enhance Inter- and Trans- disciplinarity in the research and training agendas
  ○ Smart specialisation.
Higher Education in Spain – Main Facts

- 77 Universities (50 public)
- More than 165 campus
- 35 university scientific and technology parks
- 16M square meters in buildings
- 223 historic and cultural buildings

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PLA New Funding Models – U. Murcia 2010
Higher Education in Spain – Main Facts

Scientific Production - 1992-2006

Número de publicaciones científicas

Número de publicaciones/Número de investigadores

Porcentaje producción mundial

Años

0 0,5 1 1,5 2 2,5 3 3,5

30.000 35.000 40.000

10.000 15.000 20.000 25.000 30.000 35.000 40.000

2002 2003 2004 2005 2006

www.educacion.es PLA New Funding Models – U. Murcia 2010
Spain produces around the 3% of world publications (0.7% in 1981)),
Spain occupies the 9th position in the global ranking.
68.42% coming from Universities.
66% of the public research made by Universities
33% of the total research activities.
Higher Education in Spain – Main Facts

R&D STAFF – w.r.t EMPLOYED POPULATION 1990-2006

Per thousand employed population (0/00)(*)

![Graph showing the trend of R&D staff and researchers per thousand employed population from 1990 to 2006. The graph indicates an increasing trend in both categories over the years.](image-url)
R&D STAFF – BY SECTOR

Percentage

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<td>40,9</td>
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<td>% p. personal (EII)</td>
<td>33,9</td>
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<td>38,3</td>
<td>37,5</td>
<td>38,6</td>
<td>41,0</td>
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Enterprises  Higher Education  Public adm.  IPSFL
Higher Education in Spain – Main Facts

VII programme framework

- 24.6% Universities
- 15.6% Centres of Innovation
- 5.5% Other Public Research Centres
- 8.9% Associations
- 2.8% Administration
- 5.7% CSIC
- 36.9% Companies

% de retorno
Talking About Future

Back to the Future

JUL 06 2010:01:21
DESTINATION TIME
OCT 26 1985:01:22
PRESENT TIME
OCT 26 1985:00:20
LAST TIME DEPARTED

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PLA New Funding Models – U. Murcia 2010
What is it?

- An initiative to impulse a higher compromise of the Spanish University System with the social challenges and the economic changes of the Spanish Society.

- A large social pact between universities, administrations, social and economic agents and society at large to confront the globalization challenges with the time horizon “2015”.

- A way allowing to advance towards the future to overcome the change and modernization of the Spanish University system.

II. Global objective

- To ensure that the Spanish university system continues its advance towards excellence in the international context, so that Spanish universities will be placed among the best of Europe in 2015.
Council of Universities
- Coordination Body, proposal, report & advice on university matters.
- Verification of studies.

Council of Students
- Students representative Body.
- Development of the Statute of the University Student

General Conference of University Policy
- Concertation Body on university policy issues.
- Accreditation criteria.
- Financial planning.
- Promotes university – business partnerships.

General Administration of Spain

Universities

Autonomous Communities

Social Councils

Social & Economic Agents

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PLA New Funding Models – U. Murcia 2010
### Main areas and action lines

#### Missions
- Education
- Adaptation to the EHEA
- Lifelong Learning
- Research
- Third mission
  - Knowledge exchange
  - Social Responsibility

#### People
- Professors and Researchers
- Students
- Administrative & Services Personnel (PAS)

#### Strengthening of capacities
- Governance
- Funding
- Internationalization
- Evaluation (individual & collective)
- Communication

#### Environment
- International campus of Excellence
EU2015. Action Lines: Missions

**Action Lines**

**Education**
- New organization of university degrees (Bachelor = Grados, Master & Doctorate)
- Lifelong Learning

**Research**
- Lisbon Strategy (ERA) & LOMLOU
- New Law of Science & Technology: research career
- Doctorate

**Knowledge & Technology Transfer**
- Plan of Knowledge and Technology Transfer
- Programme of valorization & commercialization
- Intellectual Property Rights management offices
- Time leaves to launch spin-offs

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PLA New Funding Models – U. Murcia 2010
EU2015. Action Lines: People

**TEACHERS & RESEARCHERS**
- Regulation of rights, duties, functions and dedication of university professors, activities and profiles (new profiles of university leadership and management)
- Exploitation of the research results and leave to participate in technological based firms (EBTs)

**STUDENTS**
- Charter of the Student & Council of Students
- Modernization & assurance of the university values and public service character

**ADMINISTRATIVE PERSONNEL**
- Professional career
- Adaptation to modern university management (mobility and teaching in English)
- Training
EU2015. Action Lines: Environment

International Campus of Excellence
EU2015. Action Lines: Environment

INTERNATIONAL CAMPUS OF EXCELLENCE

Territorial environment, geographical space where Universities develop their missions
University – Campus XXI century

Develop teaching, R&D and Innovation strengths
Indicators of excellence
Masters of excellence
Quality of life

Higher international visibility of campuses
International mobility
Students, Academics, Researchers

AGGREGATION
EXCELLENCE INDICATORS
INTERNATIONAL REFERENCE
International Campus of Excellence

- Improve competitiveness of Spanish university campus in order to make them an international reference.
- Improve of quality and excellence
- **Quality**: In all, by stimulating competence and modernisation
- **Excellence**: In certain campus, by reaching the highest international standards
- Change of the paradigm of university funding
- Starting point and Final point of the proposed campus (Director Plan with indicators)
- What it is not:
  - Ranking of universities
  - Assessment of universities independent of the transformation project
○ Identification of specialization areas for leadership
○ Search for adequate stable and deep alliances: Aggregation
  • Other universities    • Companies
  • Research centers (public, regional, private)
  • Foundations, hospitals, …  • Research and Technology parks
• Internationalization strategy
  • Attraction of talent (students, researchers, docents, …)
  • Participation in international research programmes and projects
  • International cooperation and communication
• Cooperating with the social and economic development of its region.
2009 Call

- Two phases: Preselection + final selection
- Public presentation: Around 600 attendants
- International and highly reputed selection committee.

- Political representatives (State and regional level – senators, presidents and education counsellors from CCAA and political parties), University representatives (rectors of the main Spanish universities), Business representatives (presidents of large companies) and social and economic agents (Unions, Social Councils,...)

- High impact on media
Qualification Campus de Excelencia Internacional "CEI 2009": High potential to reach the int. excellence level at the end of program

Technical University of Catalunya & Barcelona University

- Life sciences,
- Social sciences and
teachnology

Scientific parks, city council, CSIC, chamber of commerce, research infrastructures, ...

Sincrotón, Network of institutes, CSIC, Centers of Research, Technology Park, ...

- Materials & Nanotechnology,
- Biotechnology
CSIC, Madrid Scientific Park, INDRA, IMDEA Nano, Lily, Roche, ...
Global change and Energy, Sustainable development, and Environmental sciences

Ciemat, CSIC, INIA, Hospitals,
Qualification "CEI 2009 regional": High potential to reach regional excellence level at the end of the program
Consolidation
- Doctoral schools
- Attraction of talent
- Vocational training within Universities

Private-Public Cooperation
- European Foundation for Information Society – IP TV
- ONCE: Accessibility

Trans-border International Cooperation

Inter-ministry - modernization
- Ministry of Science and Innovation
- Ministry of Housing
### Cluster members vs Project name

<table>
<thead>
<tr>
<th>Cluster members</th>
<th>Project name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universitat de Les Illes Balears</td>
<td>Campus Internacional de Sostenibilidad Turística e Investigación Avanzada</td>
</tr>
<tr>
<td>Universitat Politècnica de Catalunya</td>
<td>Campus ENERGÍA UPC: Energía para la Excelencia</td>
</tr>
<tr>
<td>Universidad de Salamanca</td>
<td>Studi Salamanca</td>
</tr>
<tr>
<td>Universidad de Sevilla, Málaga</td>
<td>Andalucía TECH</td>
</tr>
<tr>
<td>Universidad de Castilla la Mancha</td>
<td>CYTEMA. Campus Científico y Tecnológico de la Energía y el Medioambiente</td>
</tr>
<tr>
<td>Universidad de Zaragoza, Navarra, La Rioja, Lleida</td>
<td>CAMPUS IBERUS: Campus de Excelencia Internacional del Valle del Ebro</td>
</tr>
<tr>
<td>Universidad de las Palmas de Gran Canaria, Universidad de la Laguna</td>
<td>CEI CANARIAS: Campus Atlántico Tricontinental</td>
</tr>
<tr>
<td>Universidad de Vigo, Santiago, A Coruña</td>
<td>Campus do Mar “Knowledge in depth”</td>
</tr>
<tr>
<td>Universidad Pablo de Olavide de Sevilla, Almería, Huelva, Internacional de Andalucía, Cádiz, Córdoba, CSIC</td>
<td>Campus de Excelencia Internacional en Medio Ambiente, Biodiversidad y Cambio Global</td>
</tr>
<tr>
<td>Universidad del País Vasco, Tecnalia, DIPC</td>
<td>EUSKAMPUS. Una Universidad, un País, un Campus</td>
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<tr>
<td>Mondragon Unibertsitatea</td>
<td>MONDRAGON UNIBERTSITATEA, la Universidad de la Transferencia</td>
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<tr>
<td>Universidad de Barcelona</td>
<td>Health Universitat De Barcelona Campus (HUBc)</td>
</tr>
<tr>
<td>Universidad de Murcia, Politècnica de Cartagena</td>
<td>CAMPUS MARE NOSTRUM 37/38</td>
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<tr>
<td>Universidad de Extremadura</td>
<td>ReNaC.ES: Campus de Excelencia Internacional de la UEx en Economía Sostenible de los Recursos Naturales y Culturales</td>
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<tr>
<td>Universidad Pompeu Fabra, UOC</td>
<td>Campus UPF - Icària Internacional</td>
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<td>Universitat Rovira i Virgili de Tarragona</td>
<td>Campus de Excelencia Internacional Catalunya Sud</td>
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<tr>
<td>Universidad de Navarra</td>
<td>Universidad de Navarra, Horizonte 2015</td>
</tr>
<tr>
<td>Universitat de València,, Politècnica de València, CSIC</td>
<td>VLC / Campus</td>
</tr>
<tr>
<td>Universitat Ramon Llull , Deusto, Comillas</td>
<td>ARISTOS Campus Mundus 2015</td>
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<tr>
<td>Universidad de Granada</td>
<td>CEI Granada</td>
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<tr>
<td>Universidad Politècnica de Madrid</td>
<td>CEI Montegancedo I2Tech</td>
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### EU2015. Action Lines: Capacities

<table>
<thead>
<tr>
<th>Action lines</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>GOVERNANCE</strong></td>
<td>Updating of the governance systems</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td><strong>FUNDING</strong></td>
<td>New Commission (ME, CGPU &amp; Council of Universities). Development of a new funding system</td>
</tr>
<tr>
<td><strong>INTERNACIONALIZATION</strong></td>
<td>New DG of International Relations</td>
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<td>Foundation Universidad.es</td>
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<td></td>
<td>Fellowships &amp; international mobility grants</td>
</tr>
<tr>
<td><strong>INDIVIDUAL &amp; COLLECTIVE EVALUATION</strong></td>
<td>Role of Evaluation Agencies (ANECA, y CNEAI)</td>
</tr>
</tbody>
</table>
Towards a New Funding Model

1. Working procedure
2. The Context of Spanish University Funding
3. Outline of the Funding Document
EU2015: Reflection procedure to develop a document for the improvement and follow-up of University funding policies in order to promote academic excellent and the increment of the socio-economic impact of the Spanish University System

- Road-map for the modernization of universities and well as the needed improvements for university funding and accountability
- In accordance with the competence distribution between the State and the regional Administrations.
- Work developed by a working group with components from both University Cameras: CU: University Council – Rectors, CGPU: University Policy Conference – Responsible for regional governments.
Towards a New Funding Model


2. EL CONTROL INTERNO PARA LA UNIVERSIDAD PÚBLICA ESPAÑOLA
   Observatorio de la Financiación de las Universidades de la CRUE (Conferencia de Rectores)

3. CONTROL ECONÓMICO FINANCIERO ANUAL DEL SISTEMA UNIVERSITARIO ESPAÑOL por el TRIBUNAL DE CUENTAS. Informe anual de la Comisión Mixta Congreso-Senado-Tribunal Cuentas
University Reform Law:
“Incremental” Funding Models
Movement from a dependency of the State Government to the transfer to Regional Governments (Autonomies)

Model based of “Agreement Programmes”
“Report on University Funding” (University Council 1995)
Compromise of funding relating Public administration and Universities, based on goal satisfaction
Model based of “Agreement Programmes”

Example – Andalucía

Public funding: 100%
- Basic funding 90%
  - Structure: 3.5%
  - Demand: 75%
  - Offer: 7.5%
- Conditional funding: 10%
  - System goals: 2.5%
  - University goals: 5%
  - Additional plans: 2.5%
**Organic University Law**
Committee that develops a broad study of the Spanish University Funding. 
*Document: “FUNDING OF THE SPANISH UNIVERSITY SYSTEM”, April 2007*

**Modification of the Organic University Law**

8.10 Public Universities will have economic autonomy. Adequate resources for basic quality operation must be guaranteed.

8.11: Universities will develop programmes for multiannual periods that can be agreed with Regional Governments, including goals, funding, and the evaluation of them.
Working group: Reflection for the development of a document for the improvement of University funding Policies:

- Academic excellence
- Socio-economic impact

Crisis

- Spanish Stability programme 2009-2013:
- Austerity plan 2001-2013: Adjustment in public spending to bring the public deficit at 3% of GDP in 2013.
- The investment in education will be maintained.

José Manuel Durao Barroso, President of the European Commission (EUA 2009 meeting) "... Could be a mistake to cut the public and private spending on education and research during the present economic crisis because it could have a negative effect on future growth, noting that the increase in investment in education and research will help Europe out of the crisis in a faster and better way"
To transform the economic crisis into an opportunity to accelerate the modernization process funding of universities and increasing the efficiency and effectiveness of the Spanish University System, we need to:

1. Overcome the inefficiencies of our university system
2. Social dimension: Implement an advanced system of scholarships and grants
3. Education and Training to meet the future needs of labor market
4. Enhancing academic R & D and encourage transfer and innovation processes
5. Having a robust information system that stores main data and facts and allows for decision making
6. Develop an Analytic Cost Accounting Model for Universities
7. Availability of management tools that allow economic and financial aggregation of all institutions under the university (foundations, trusts, ...)
8. Reflecting on the governance model of the Spanish University System
Document for the improvement and monitoring of policies for financing universities to promote academic excellence and increase the socioeconomic impact of the Spanish University System

- Approved by both university cameras (CU, CGPU) in common session on April 26
- Presented to the Spanish Ministry Council on April 30
Document for the improvement and monitoring of policies for financing universities to promote academic excellence and increase the socioeconomic impact of the Spanish University System

Goal: To propose a financial improvement plan to the year 2020, with consensus between regional governments and State Administration, in return for the commitment to improve efficiency internally and management efficiency, transparency of information on the horizon 2015.

• Roadmap for necessary improvements of both the Spanish university funding as the modernization and improvement of accountability of the Spanish university system.
PLA New Funding Models – U. Murcia 2010

Social Dimension:
Grants

Institutional Equity

Human Resources

Infrastructures for EHEA & ERA

R&D:
Improvement & incentives

Effectiveness and efficiency in management. Accountability.
Contribution to an improved model of student grants

- Renew the current social framework to the new structure adapted to the EHEA. Monitoring conducted by the Observatory of Scholarships, Grants and Academic Achievement, which will be fully operational during 2011.
- Develop a new model of scholarships and grants, customized for Masters degree and for building up gradually in 2010-2015. The model responds to:
  - the social dimension of education,
  - the new training model,
  - the impetus to mobility and
  - An effective social contract
Analysis of the different regional models to fund universities

- Three main aspects: equity in financing, goal-based funding, and the efficiency of the regional university system.
- Progress in the definition of structured financial instruments to serve the four main objectives: financial stability, Adequacy, Efficiency and Institutional Equity.
- Resource allocation according to objectives and results
<table>
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<tr>
<th>Components</th>
<th>Instruments</th>
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<tbody>
<tr>
<td><strong>RESULT-BASED FUNDING</strong></td>
<td>Teaching results</td>
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<td>R&amp;D Results</td>
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<td>Technology Transfer and Innovation Results</td>
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<tr>
<td><strong>STRUCTURAL FUNDING</strong></td>
<td>Fixed amount</td>
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<td>R&amp;D Capacity Amount</td>
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<td>Additional costs for state and regional regulations</td>
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<tr>
<td><strong>QUALITY IMPROVEMENT FUNDING</strong></td>
<td>Quality improvements based on strategic plans</td>
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Multiannual Funding Programme: Structure
Costs of improvements in the areas of HR, differentiating actions to modernize the teaching and research career and improving the career development of Administrative and Service staff:

- PDI Statute
- Law of Science, Technology and Innovation
- New Regulation for Doctorate
Adaptation of university infrastructure. Adequacy of funding for universities based on changes and improvements to the adjustment to EHEA and ERA.

- Improvement of spaces: Healthy campuses
- Teaching infrastructures
- Postgraduate and doctoral schools
- Changes in the spaces to facilitate interactions: learning study
Costs induced by an increasingly expensive and competitive academic research.

- Complementary funding pot: increasing project overheads
- Institutional Strengthening Program: R&D results recognition
- Personal incentives for technological innovation:
  - Six year salary complement based on research production and impact evaluation
  - Novelty: Including innovation and technology transfer activities
Efficiency and effectiveness of economic and financial management of universities and actions designed to promote accountability and public information (transparency):

- Availability of public information on 3 missions.  
  Development of an ambitious University Information System with indicators for quality, efficiency and effectiveness

- Economic accountability:
  Development of an Analytic Cost Accounting Model of the Spanish Public Universities

According to the 2003 Report of Court of Auditors and recommendations of Ministry of Economy (IGAE)
Spanish Strategy University 2015: New Funding Models for Spanish Universities

More is not more, is different  
Wired Magazine

Muchas gracias  Thank you very much

Director General for University Policies
Ministry of Education - Spain

dgu@educacion.es