

# Presentation by Dr Jim Browne, President, NUI Galway



*Regional Assemblies Joint Annual Conference on  
'The Contribution of Cohesion and Urban Policy to Economic Recovery'*

***The Contribution the Higher Education Sector can make to Smart & Sustainable growth***



OÉ Gaillimh  
NUI Galway

19 June 2013

# NUI Galway: An Introduction





# NUI Galway



OĒ Gaillimh  
NUI Galway

# NUI Galway: An Introduction

- Established in 1845 - one of Ireland's 7 Universities
  - Arts, Social Science & Celtic Studies
  - Science
  - Medicine, Nursing & Health Sciences
  - Business, Public Policy & Law
  - Engineering & Informatics
- 105 hectare campus
- Located in medieval town on the Atlantic Coast



# NUI Galway in figures

## Our Students

Undergraduates	c. 12,500
Postgraduates	c. 3,600
Other Students	c. 1,200
<b>Total</b>	<b>c. 17,300</b>

## Our Staff

Academic Staff	1,078
Administrative / Support Staff	1,015
Research	448
<b>Total</b>	<b>2,541</b>



# NUI Galway in figures

Student Fees €101m

State Grants €53m

Research Income €58m

Other income €10m

**Total Income €222m**

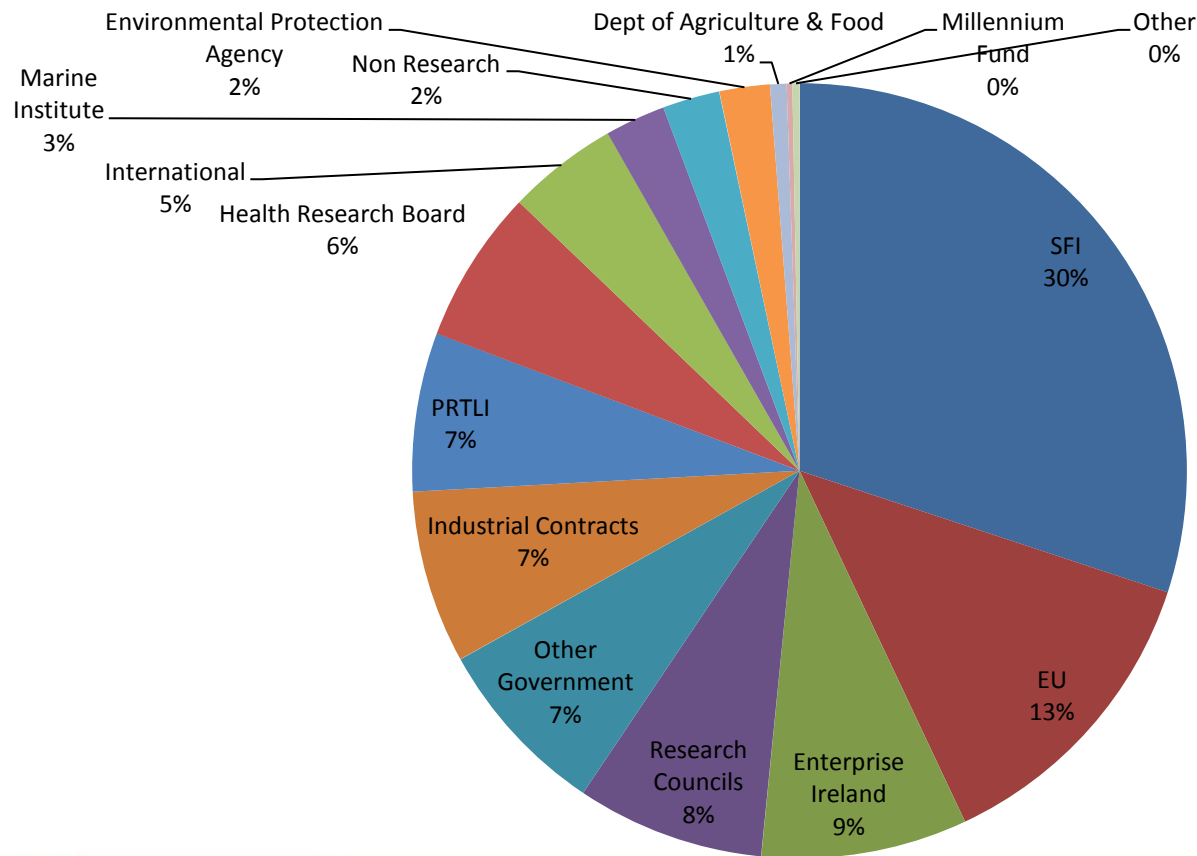
2011-12 Figures



# NUI Galway in figures

## Research Income 2011/12 by funding agency

**Total Income: €59,516,561 - Direct: €50,292,576 Indirect: €9,223,985**



**308 New Funded  
Research Projects  
in 2011/12**

% of Direct Income



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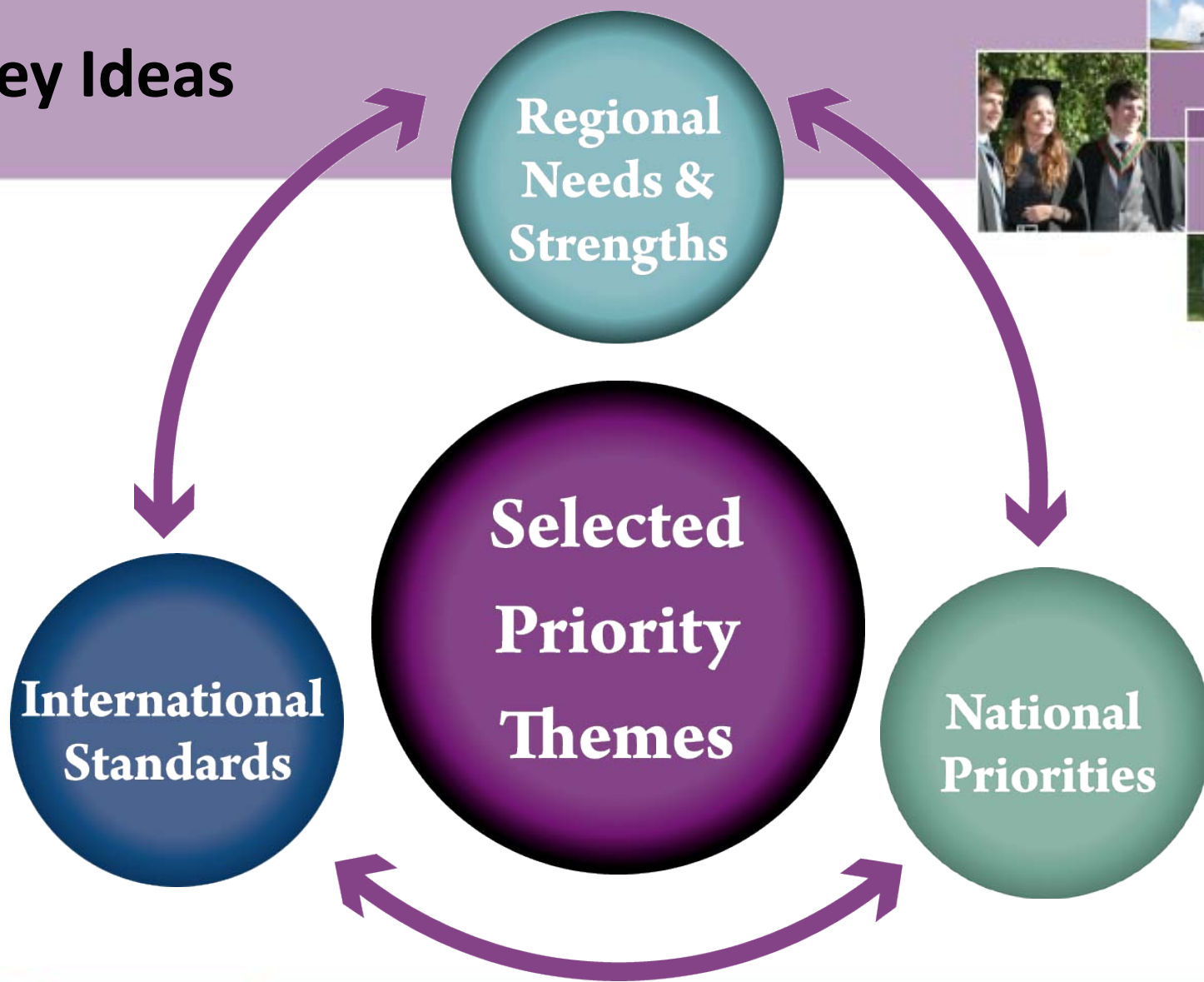
# Our Vision

- A holistic educational and cultural experience for all students
- **Recognised internationally in key areas which contribute to national priorities, build on the strengths and address the needs of our region**
- A commitment to Gaeltacht regions and the Irish language
- **Through effective strategic partnerships with regional, national and international stakeholders**





# Key Ideas



# Our Priority Themes

- **Biomedical Science and Engineering**
- Environment, Marine and Energy
- Informatics, Physical & Computational Sciences
- Applied Social Sciences and Public Policy
- Humanities in Context



# Research Centres in Biomedical Engineering Sciences



## National Centre for Biomedical Engineering Science (NCBES)

- **400 members:** academic staff, full-time researchers and post-graduate students
- **4 major research themes:**
  - Biomedical Engineering
  - Cancer
  - Neuroscience
  - Regenerative Medicine.

## Regenerative Medicine Institute (REMEDI)

## Alimentary Glycoscience Research Cluster (AGRC)

## Network of Functional Biomaterials (NFB)





## Developing our Campus to Support Research

A €400 million capital investment programme includes:

- Ireland's largest **School of Engineering** opened in 2011
- A new **Biosciences Research Building** will open in 2013
- A new **Translational Research Facility** opens in 2014
- A **Clinical Research Facility** opens in 2014





# MedTech sector and the West of Ireland



# The MedTech Sector in Ireland

- One of 5 emerging global hubs for Biomedicine
- Leading cluster for medical device and diagnostic products globally
- Europe's second largest exporter of medical products
- C.250 companies involved
- 17 of the world's top 25 biomedical companies have a major presence in Ireland
- Exports in excess of €7.9 billion annually
- Over 25,000 people employed, over 10,000 in Galway



# Med Tech – Facts and figures – April 2013

There are over 250 medical technology companies in Ireland, 100 of which are indigenous.

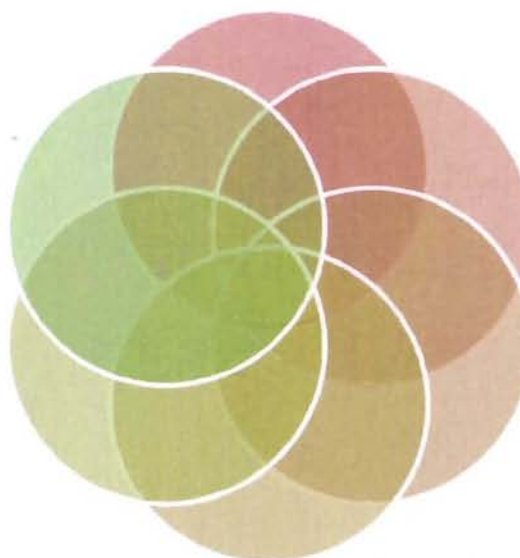
Nearly 1,500 jobs and €200 million in investments been publically announced over the past 2 years.

Ireland is home to 17 of the top 25 global med-tech companies with exports in excess of €7.9 billion annually.

64% increasing spend on R&D over the same period.

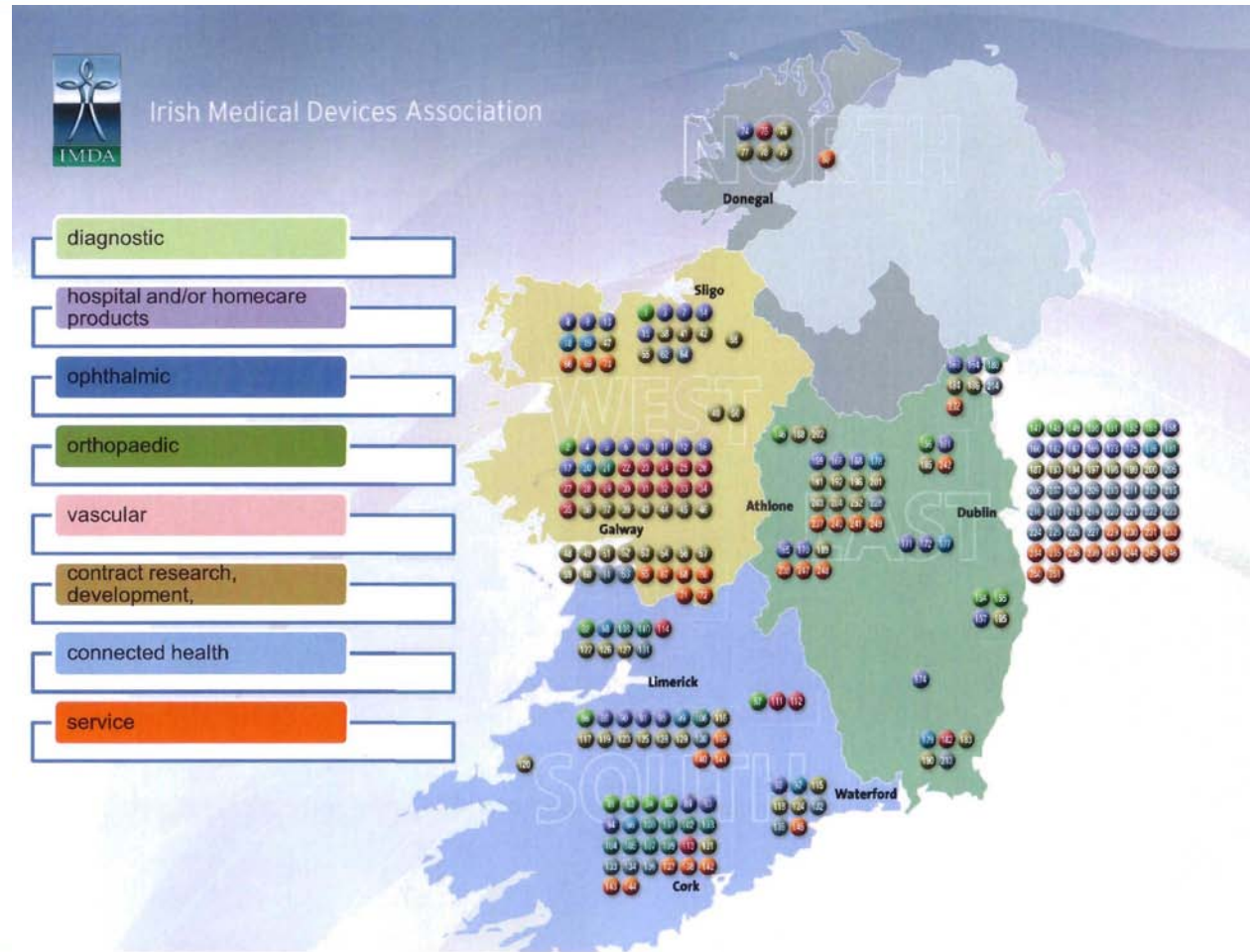
42% expect to recruit additional employees during the second quarter of 2013.

Over 68% of companies expect to increase their customer base,



# Medtech Sector

- Regional distribution of MedTech sector in Ireland
- Correlation with location of HE institutes



# NUI Galway and MedTech

Our unique distinguishing features in biomedical engineering science:

- Leading Clinical, Research and People infrastructure
- Well-developed, dynamic relationships with the medical devices industry, both multinational and indigenous
- A strong co-operative relationship with HSE West
- A proven track record of R & D cooperation and industry partnership
- Disposition and commitment to collaboration and innovation



# NUI Galway's Partnership with MedTech sector

- Successful bids to national and international funding agencies
- Targeted recruitment of the best researchers
- Strategic allocation of University resources towards Biomedicine
- Very significant investment in research infrastructure, including Clinical and Translational facilities
- A complementary range of interdisciplinary research centres within the National Centre for Biomedical Engineering Science (NCBES): REMEDI, AGRC, NFB, CCB
- BioInnovate Ireland & MeTRIC Ireland





- A specialist training programme based on BioDesign programme at Stanford University
- Graduates with knowledge of innovating medical technologies
- A catalyst for product development research and spin-outs
- A unique pathway for knowledge transfer and building enterprise



**Specific Clinical Focus Each Year**

**Year 1 – 2011/12: Cardiology**

**Year 2 – 2012/13: Urology &  
Radiation Therapy**

**Year 3 – 2013/14: Gastro-Intestinal  
& Orthopaedics**



- Research and innovation consortium involving 5 HEIs
  - NUI Galway
  - UL
  - AIT / GMIT / IT Sligo
  - + BMW Regional Assembly and Georgia Tech Ireland (GTI).
- Mission is to provide rapid and effective access to the capacity and capabilities within the consortium, the associate members and the broader HEI sector for enterprises.



## Commercialising our research

One of Ireland's most successful universities for commercialisation of research

- 24 spin-out companies
- 306 invention disclosures
- 99 patents
- 85 licences or options granted

*(Source: NUI Galway Technology Transfer Office for the 5-year period, 2007-2012)*

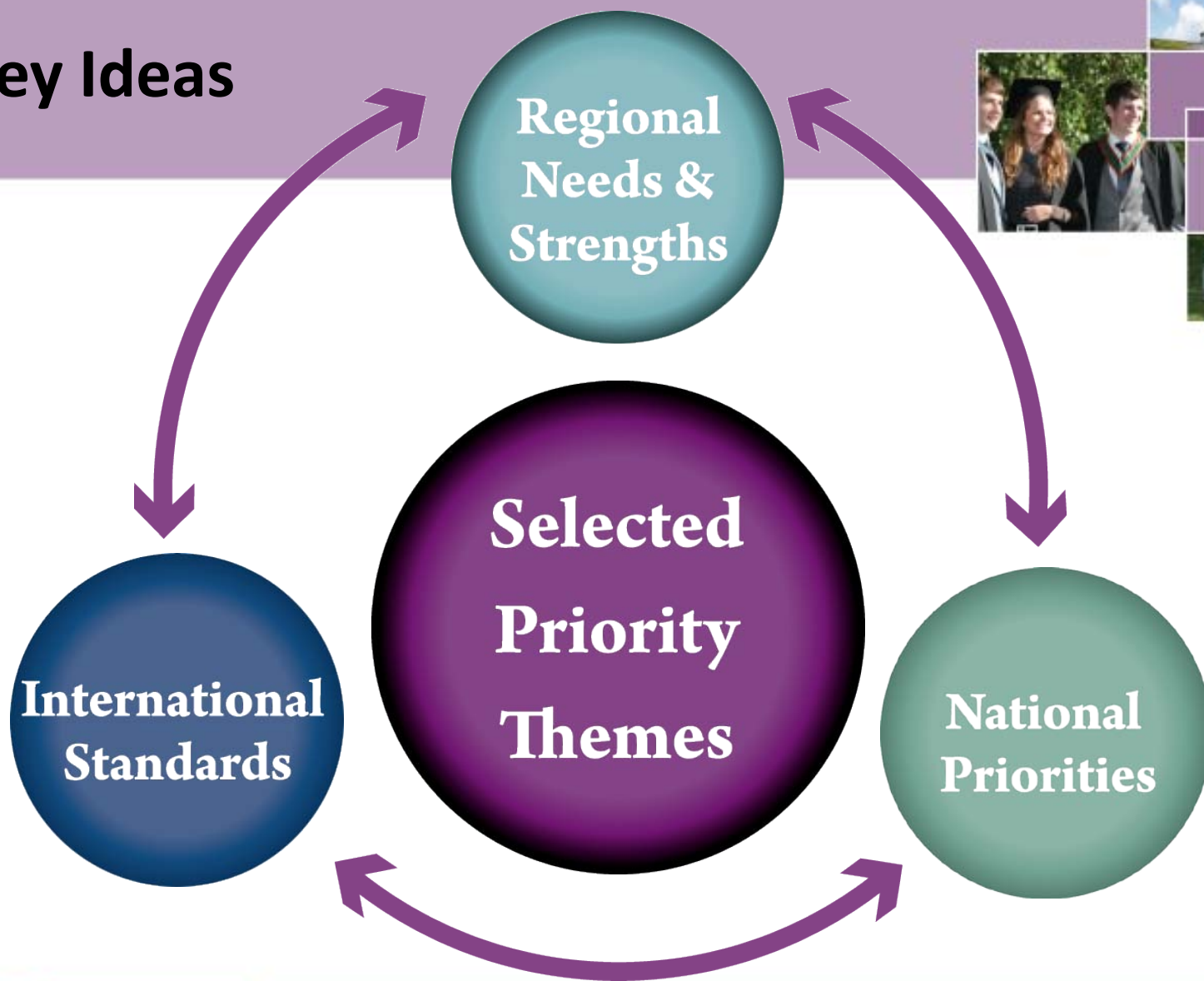
# NUI Galway - Technology Transfer Metrics

Year	2007	2008	2009	2010	2011	2012	Total
IDFs	34	55	58	70	47	42	306
Patents	22	29	17	10	15	6	99
Licences/Options	24	9	16	10	11	15	85
Spin-outs	4	0	7	6	4	3	24
Industrial Collaborations	40	26	36	31	30	31	194





# Key Ideas



# International Ranking



**5 star rating in the 2012 QS  
Global University rating for:**

- Research
- Teaching
- Internationalisation
- Innovation
- Facilities
- Engagement



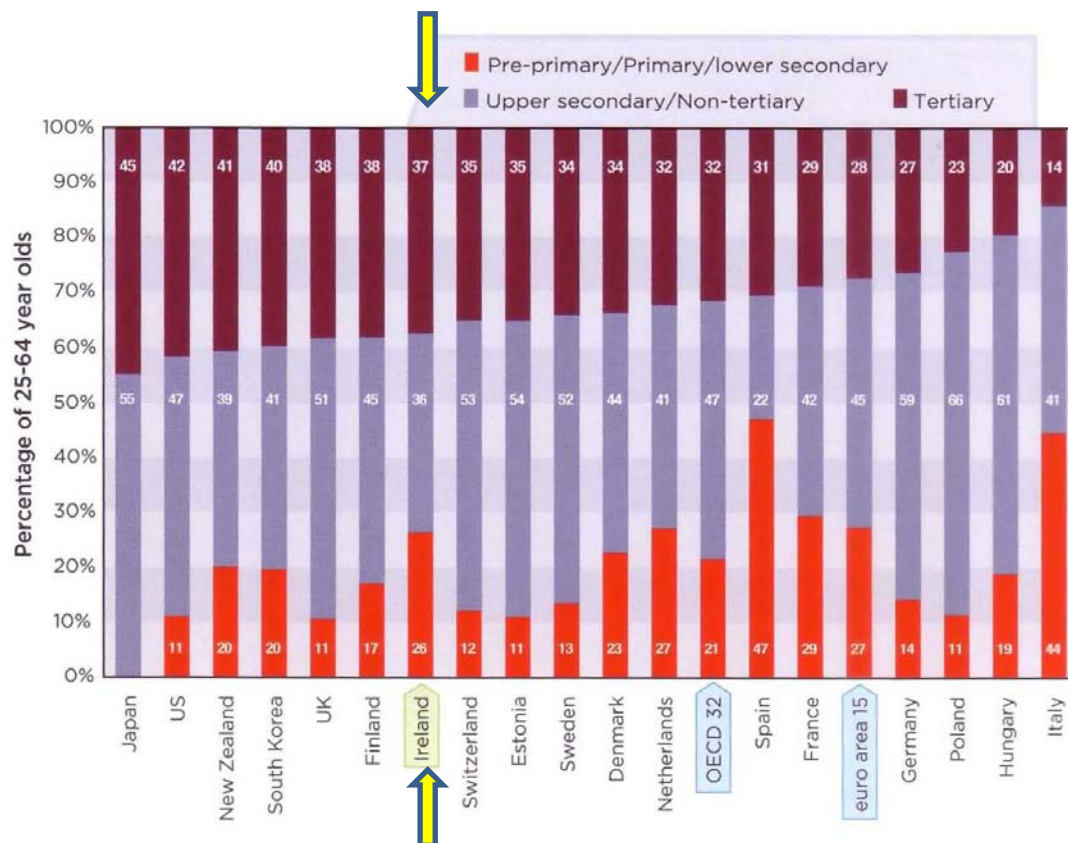
# Smart & Sustainable Growth – Some Positives

- 37% University education
- 36% Secondary education
- 26% Primary education

52

FORFÁS IRELAND'S COMPETITIVENESS PERFORMANCE 2013

**Figure 24:**  
Educational Attainment of Population aged 25-64  
by Highest Level of Education, 2010



Source: OECD, Education at a Glance, 2012



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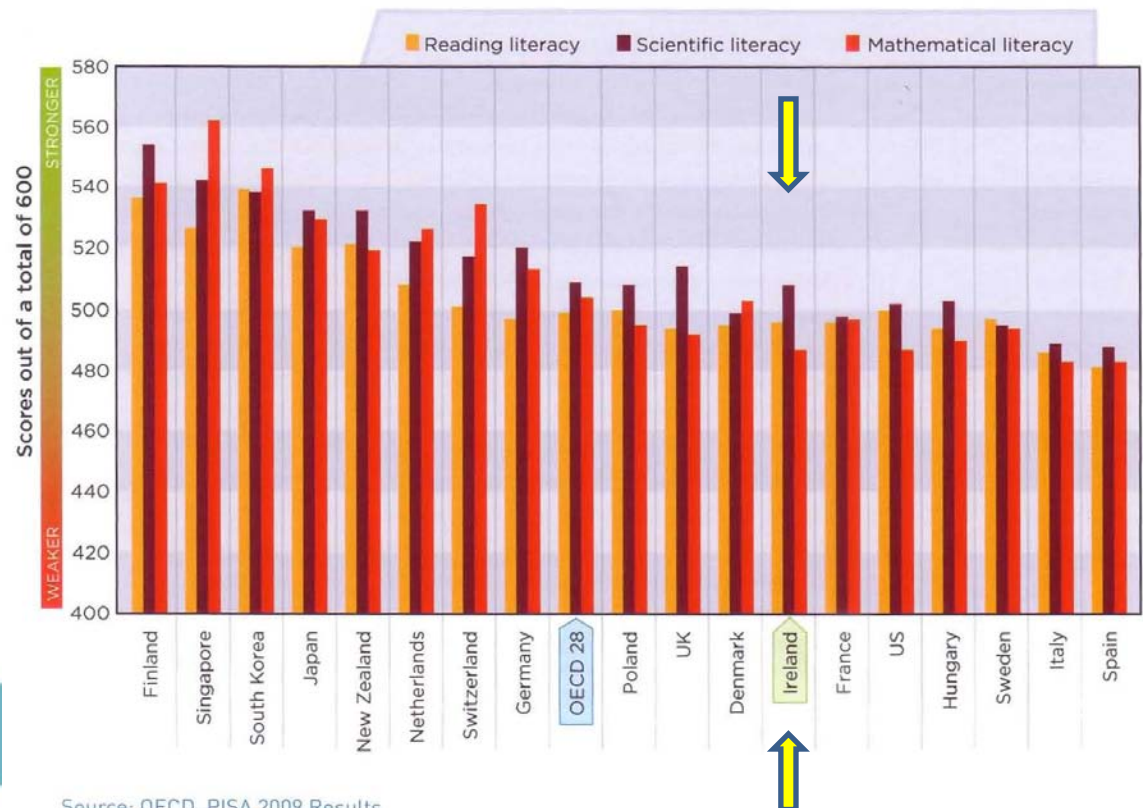


# Smart & Sustainable Growth - Some Concerns

- STEM investment
- Proficiency in Maths & Science

**Figure 25:**

Scientific, Mathematical and Reading Literacy of 15 Year Olds, 2009



Source: OECD, PISA 2009 Results



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