



National Risk Assessment Consultation 2016

Submission by University College Dublin

Executive summary

UCD suggest that the decline in the funding and standing of Irish Universities poses a significant risk to Ireland's international competitiveness. Mitigation of this risk requires

- ❖ Resolution of the funding crisis in Irish higher education
- ❖ Capital investment in higher education buildings and equipment
- ❖ Implementation of Innovation 2020
- ❖ New flexibility for higher education institutions

Third level institutions contribute graduates across all sectors of society, and UCD plays a particularly significant role as Ireland's largest, most research-intensive and most globally-engaged university. Studies in Ireland and internationally have captured the significant economic multiplier associated with investment in higher education. For example, a study in 2015 showed that UCD and its students in Ireland deliver an annual economic output of around €1.3 billion, and support around 9,000 jobs. A recent ranking of the global competitiveness of world economies indicated that a highly educated workforce is the most important factor for attracting FDI after the tax rate. However, the funding crisis is progressively reducing our ability to maintain this contribution.

1 Impact of research-intensive universities

World-class research-intensive universities such as UCD are vital to Ireland's success in a number of respects:

• Education

Bright, flexible, adaptable, creative, innovative and entrepreneurial graduates are vital to meeting Ireland's skills needs. UCD educates the largest national cohort of these graduates across the broad range of disciplines required by employers and by society. Through our research-intensive environment we ensure that all students graduate with an excellent disciplinary knowledge and skill base and a comprehensive set of transferable workplace skills that will enable them to contribute to the flourishing of Ireland in today's global society.

• Research and Innovation

Internationally, the countries succeeding in the knowledge economy understand, prioritise and invest in research and innovation within higher education. Through our research and innovation we generate and commercialise knowledge for the benefit of enterprise and society, deliver advanced research training to postgraduates and postdoctoral researchers and underpin the education of undergraduates.

• Global engagement

UCD educates students as global citizens, support the Irish network internationally and attract top global minds to Ireland. There are also immediate economic benefits: by attracting international revenue in the form of student fees, research contracts and other services, and including the off-campus expenditure of international students, UCD delivers around €100 million in annual export earnings.

• Public policy

University faculty play a central, independent and authoritative role in advising on public policy. UCD's long-standing leadership in this area includes the provision of expertise in areas directly

relevant to the Department of Education and Skills, such as our recent work on early childhood education. A recent assessment found over 1500 UCD staff engaging in pro bono activities, delivering over €10 million worth of services to local, national and international communities.

- **Culture and society**

Universities enhance culture and inform public debate in a multitude of ways. One recent and highly visible example has been the leading role of UCD and our academics in informing the public commemoration of 1916.

2 Our plans

- **Sector-leading undergraduate education**

Our flexible Horizons approach to undergraduate education already leads the way in Ireland towards reducing entry paths while maximising the scope for students to combine depth in particular disciplines with breadth of studies. We are further enhancing this approach through an extensive review of our curriculum to ensure our graduates continue to meet national skills needs, flourish as active citizens, contributing to the economic, social and societal needs of the country.

- **Research in areas of national and global need**

We are seeking to build on our existing research strengths and expand into newer areas such as the bioeconomy, offering significant potential for rural jobs, and next-generation manufacturing, underpinning national competitiveness in that sector.

- **Innovation and enterprise**

A major funding stream has been secured for start-ups from university research, and we plan a significant expansion in the sector-leading incubation facilities for companies at NovaUCD.

- **Capital development**

We have an ambitious capital development plan aimed at providing the facilities needed to support our education and research, including a student accommodation development of some 3000 beds.

- **Effective and efficient operations**

We plan to implement a substantial change and people agenda across UCD focussing on the productivity, growth and development of all our employees which will improve our reputation on a domestic and international stage as both an employer and university of choice. We are also reviewing our processes and procedures with an intention to drive effectiveness through the institution through a process called 'UCD Agile'.

3 The challenge

- **The funding crisis**

Reductions in the funding of Irish universities of 28% over the period of austerity together with increases in student numbers of 18% have threatened our ability to maintain our existing success and deliver on new opportunities, and in particular to deliver on emerging national skills needs.

- **The consequences – loss of competitiveness in education**

We currently educate Irish students at a loss, and rely on the fees paid by international students and income from commercialisation and philanthropy to compensate. Our competitors outside Ireland who are funded for their home students at the level necessary to pay for a world-class education are able to use the fees of international students to build up faculty numbers and to invest in infrastructure for research and education. Without appropriate funding for Irish students we are at best holding ground while our competition is going forwards, and our competitiveness in the international student market will be negatively impacted.

- **The consequences – loss of ability to react to new skills demands**
Significant deterioration in staff-student ratios continues to erode our ability to deliver a world-class educational experience to our students, threatening in particular the small-group and project-based learning opportunities which develop the generic skills so valued by employers. The funding crisis and HR constraints render us unable to invest in new areas of skills demand immersing in the national economy.
- **The consequences – loss of competitiveness in research**
Deterioration in the student:staff ratio also erodes our capacity for research and innovation, which impacts in turn on our ability to win external funding. Changes to research funding mean that the capacity of much of our research base is under-utilised, and threatens our ability to respond to new areas of challenge and opportunity. Obsolescence of our research infrastructure hinders our ability to compete for international research funding.
- **The consequences – deterioration of infrastructure**
Laboratory equipment has not been replaced, our research equipment is falling further and further behind the state of the art, and we have fewer technical staff to maintain and support the equipment. Maintenance for buildings has been cut back, leading to a deterioration in condition. Library holdings have declined, and postponement of scheduled upgrades to IT equipment has put our IT infrastructure in a vulnerable situation.
- **The consequences – loss of autonomy**
The imposition of severe restrictions on university autonomy further separates us from our international peer institutions and reduces our ability to compete and to conduct our business efficiently and effectively.
- **The good news**
This crisis facing the Irish universities is now accepted by stakeholders across academia, enterprise, government departments and the Irish media. The question is how we respond.

4 Our response to date

UCD has been highly entrepreneurial in our attempts to maintain the quality of our educational offerings and of our research and innovation, despite the austerity cuts which have put our level of funding well behind all of our international comparators.

- We are educating more students, and have introduced a range of innovative degree programmes.
- In particular we have increased our engagement with international education markets, increasing the number of international students being educated in Ireland, and increasing the number of students we are teaching outside Ireland.
- We have increased the use of our facilities and accommodation during summer, hosting a range of summer schools and conferences in facilities that would otherwise have been unused during this period.
- We have increased our engagement with industry and increased the commercialisation of our research, with a number of successful spin out companies.
- We have also dramatically increased our engagement with our alumni and other supporters to build philanthropic support for the university. This enabled a building programme to be continued throughout the recession, contributing to the preservation of the Irish building industry.

However, these steps have not been enough to compensate for the funding cuts we have suffered. They are depleting resources built up in a better funding environment, and every new step undertaken erodes capacity in other areas, which are already under-resourced.

5 Risk mitigation opportunities for the Partnership Government

• Resolution of the funding crisis in Irish higher education

The Cassells Group report will identify the funding gap they see in the system. It is vital that this funding gap be addressed and that funding for the university education of Irish students is increased to internationally competitive levels.

- Such an increase in funding would enable UCD to reduce student:staff ratios with a corresponding improvement in student experience, the development of generic and transferable skills, research performance and world ranking. The distribution of funding should recognise both the increased costs and increased benefits which education in research intensive universities involves.
- An increase in funding would also provide UCD with flexibility to adjust the mix of programmes being offered, for example by reducing the number of students in areas of low demand (hence improving the student:staff ratio in these programmes) and increasing the number of students and programmes in areas of high demand, hiring additional faculty in these areas (improving the student:staff ratios in these programmes also).

• Capital investment in higher education buildings and equipment

There is a need for a significant injection of capital funding, something also identified by the Cassells Group. We have a critical need for funding for both building and research infrastructure. The use of funding schemes which provide matching funds, but which require institutions to raise 1/2 to 2/3 of the funding for a project themselves, would ensure maximum leverage of public money and would also ensure that only worthwhile projects in which others were willing to invest received public money.

• Implementation of Innovation 2020

Many of the challenges to the Irish research and innovation system are addressed in *Innovation 2020*, Ireland's 5-year strategy for research and development, science and technology, launched by An Taoiseach, Minister Bruton and Minister English in December 2015. This strategy lays out an ambitious but achievable vision. The involvement of the Department of Education and Skills will be key to successful implementation.

• New flexibility for higher education institutions

We strongly welcome the Government's indications of new flexibility for appropriate higher education institutions. UCD has a pressing case for such flexibility, underpinned by our responsible financial management, entrepreneurship in raising non-exchequer income and continuing demonstrable excellence in education, research and innovation.

We suggest that the risk of reduced international competitiveness as a result of a decline in funding and standing of Irish universities is significant enough to be included on the National Risk Register under the Competitiveness heading (Section 2.2). The issue of third level sector funding is already noted within Section 5.2 (Human Capital), but would have more visible and direct impact within Section 2.2. Underfunding the tertiary sector also impacts our ability to lead and/or to react to technological trends (Section 6.4).

The UCD University Management Team
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