













# INVESTING IN IRELAND'S FUTURE TALENT AND INNOVATION

IUA BUDGET 2020 PRIORITIES





# **EXECUTIVE SUMMARY**

The Irish Universities Association, on behalf of its seven member universities, calls on the government to make a decisive step to address the growing funding crisis in third-level education and research following a decade of under-investment. A three-pillar programme of investment to sustain the talent, research and innovation needs of the knowledge economy is required in Budget 2020.

#### **CORE FUNDING**

Increase the core funding provided through direct grants and supports to universities and other third-level institutions by at least €117m. While this is still significantly short of the direct State funding requirement identified in the Cassells Report, it would signal a real intent to fix the funding crisis.

#### INVESTING IN RESEARCH AND INNOVATION

An immediate **increase in research funding of €50 million is required**, ring-fenced for investigatorled / frontier research that is critical to the needs of a developing smart economy. In addition, substantial investment is needed to upgrade out-dated and obsolete equipment and facilities as part of a Capital Investment Recovery Fund (see below). It is essential that national research funding is increased in view of Brexit and to enable greater leveraging of EU Horizon funds. The inadequate funding of indirect costs of research that are currently being cross-subsidized by universities must also be addressed.

#### **CAPITAL FUNDING**

**A multi-year investment programme is needed** to provide sufficient capacity for a surging student population and to replace out-dated equipment and facilities including digital infrastructure. This has two key components:

- A **Capital Investment Recovery Fund** targeted at replacing out-dated research infrastructure and laboratories, addressing 'red-letter' health and safety related issues, upgrading teaching facilities to make them fit for the 2020's and major upgrades and development of IT and digital infrastructure. A year 1 allocation of **€110m** is required as part of a 7-year recovery programme across the 7 universities.
- A **New Capital Co-Fund Programme** of **€100m** designed along the lines of the successful HE Strategic Infrastructure Fund in 2019 aimed at expanding capacity to provide for the known growth in student numbers over the next decade.

**Note:** The funding requirements above for core funding and research refer to the total third-level sector while the capital funding refers to universities only.

# NEW DECADE, NEW OPPORTUNITIES

Ireland's economic policy is centred on the development of a smart knowledge-based economy driving research and innovation, developing talent and creating high value jobs. Universities are fundamental to such a policy as key providers of the talent pipeline and centres for innovation and ground-breaking research. As we stand on the cusp of a new decade, the importance of talent and innovation is all the more relevant in the face of global competition and changes to the tax regime.

The recent independent report by Indecon International Economic Consultants *'Delivering for Ireland - An Impact Assessment of Irish Universities'* clearly defines the direct contribution of Irish universities to the economy but also to wider society, (https://www.iua.ie/the-irish-universities/universities-impact/). Indecon conservatively estimate an annual €9 billion contribution to the economy by the seven universities represented by the IUA, a very significant return for the State's investment of approximately €1 billion.

Without significant investment, that positive contribution to the economy is at risk. State funding per third-level student for core activities, as reported by the Higher Education Authority, has fallen from almost €9,000 per student a decade ago to just over €5,000 now. Some modest increases in funding have been provided over the last two budgets. The IUA is now calling for a dramatic acceleration in funding to universities / third-level in order to prepare for the challenges and opportunities of the next decade.

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# UNIVERSITIES CHARTER FOR FUTURE TALENT

Indecon have found that the universities deliver a net monetary return to the State in addition to their core 'public good' contribution in the form of skilled graduates and world-class research and innovation.

The Irish universities are committed to playing a central role in nurturing the future talent bank and creative capacity of the country. Our 6-point Charter (https://www.iua.ie/publication/ irelands-future-talent-a-charter-for-irish-universities/) sets down a series of commitments based on a partnership between the university system and government. These include:



Delivering on these commitments is crucial to the future success of the country and the economy. Securing the future talent and resources is fundamental to the success of Ireland and is key to retaining the country's position as a leading attraction for foreign direct investment.

# HUMAN CAPITAL INITIATIVE

The announcement of the Human Capital Initiative Fund in Budget 2019 was very welcome.

The first €60m of the 5-year €300m HCI Fund is due to be provided for in Budget 2020. This Fund, drawn from the substantial reserves in the National Training Fund is generated from levies collected from employers. The IUA has welcomed the opportunity to work with the Department of Education and Skills to determine how universities can best partner with government to draw down these funds with the objective of providing additional capacity through innovative programmes to meet priority skills needs for enterprise.

The HCI Fund should be focused on driving innovation in third-level and providing universities with the resources to develop the agility of students, researchers, staff and graduates to respond to the changing needs of the workforce and of society. The IUA is working with the universities to identify what is required for effective digital transformation and to harness the technologies and systems to support that.

Whilst very much welcome, the HCI funding is time-limited and targeted at specific objectives. Further investment is required however to address underlying deficiencies in the funding of core university activities.

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### **CORE FUNDING NEEDS – THE CASSELLS SCORECARD**

Direct state funding for higher education fell during the economic crisis from €1.4bn in 2008 to €0.9bn in 2015. The recovery in State funding since 2015 has been modest as the recovery in the economy and public finances has become well established. Direct State funding for higher education in 2019 was €1.1bn, an increase of €189m since 2015 but still 20% down on 2008 on a like-for-like basis.

All of this happened during a period of significant growth in student numbers which has seen the funding per student fall by 43%. The decline in state funding has directly impacted on universities as evidenced by a fall in international rankings arising primarily from comparatively poor levels of investment in the sector and declining student-staff ratios as student numbers continue to grow.

The Cassells report, *Investing in National Ambition*, published in July 2016, identified the funding challenge facing our higher education system and set out the scale of the investment required to deliver on our national ambition. An additional investment of €1bn per annum over and above 2015 levels is required by 2030 (€600m per annum by 2021). This Cassells projection is based on a 'real' increase exclusive of general inflation or salary increases arising from national pay rounds.

Under option 2 in the Cassells analysis (increased state investment with student contributions retained), the option which most closely aligns with the current funding model, **2019 state funding should be €225m greater in real terms than in 2015**. By 2020, the required funding increase will have grown to €281m based on Cassells projections.

THE DECLINE IN STATE FUNDING HAS DIRECTLY IMPACTED ON UNIVERSITIES AS EVIDENCED BY A FALL IN INTERNATIONAL RANKINGS The table below sets out the actual increase in direct state grant funding to third-level (as defined by Cassells) since 2015 when the national pay round funding is excluded.

#### THE CASSELLS SCORECARD

Actual v Required Direct State Grant Funding for Third Level 2015-19 (€m)

	2015	2016	2017	2018	2019	Cumulative Change 2015-2019
Direct State Grants <sup>1</sup>	923	928	979	1,044	1,112	
Increase in direct state funding on prior year		5	51	65	68	189
of which pay restoration <sup>2</sup> accounts for		8	33	41	20	102
Increase in funding net of pay restoration/pay awards		(3)	17	25	48	87
Funding required per Cassells Option 2						225
Deficit in Direct State Grant Funding 2019						(138)

<sup>1</sup> As reported by Higher Education Authority. Includes additional National Training Fund related funding 2018 & 2019
<sup>2</sup> As reported by Higher Education Authority/Department of Education and Skills

The Cassells Scorecard shows *a real deficit in 2019 of €138 million* as against what is required to cater for rapidly expanding student numbers and at least partially addressing the existing funding deficit.

## THIRD-LEVEL CORE FUNDING REQUIREMENT: BUDGET 2020

The IUA is now calling for a real and sustained increase in core funding in 2020 to cater for the known growth in student numbers and to underpin the quality of our university and third-level system.

Specifically:



This equates to a cumulative increase in the core funding allocation for third level of €117m in Budget 2020. This is still significantly short of the direct State funding requirement identified in the Cassells Report, but a provision for core funding at this level would signal a real intent to remedy the decade-long funding crisis.

THERE IS A NEED FOR AN INCREASE IN THE CORE FUNDING ALLOCATION FOR THIRD LEVEL OF €117 MILLION IN BUDGET 2020.

# **RESEARCH FUNDING: BUDGET 2020**

The seven IUA-member universities are at the centre of the research and innovation ecosystem in Ireland, accounting for 83% of research investment in higher education. The Indecon Impact Report estimates that the universities deliver a total impact of €1.5 billion per annum arising from research activities. Investing in the development and expansion of the research system is fundamental to the ambition of Ireland to be a lead player in the smart economy.

The impact of Brexit highlights the core strategic importance of research investment. While Brexit presents challenges, it also offers unique opportunities to Ireland to advance its position as a research and innovation hub in Europe and thereby attract greater levels of EU funding under the existing Horizon 2020 and the Horizon Europe programme which will follow in 2021.

To date, the seven universities have drawn down €345m from H2020, accounting for 48% of the total drawdown across all sectors and 88% of the drawdown by the HE sector.

To achieve our national ambitions in terms of European Programme success and Government strategy more broadly from Future Jobs to Project Ireland 2040, there is a need to re-balance the research investment programme in Ireland. In particular, greater priority must be given to directly supporting the work of the world-class researchers in our universities that not only feed the innovation pipeline but create the talent and knowledge for tomorrow.

The over subscription and low funding rates of recent competitive investigator-led funding calls demonstrate the dearth of investment in this space. There were 140 applications to the IRC Laureates call with 48 proposals deemed fundable but only 12 received funding due to budget restrictions.

Greater priority must be given to directly supporting the work of the world-class researchers in our universities that not only feed the innovation pipeline but create the talent and knowledge for tomorrow.



It is particularly worrying that a number of our top scientists in Ireland, many of whom have achieved major global research breakthroughs, are currently getting no national funding for their research programmes which negatively impacts their international competitiveness. This must be addressed as a matter of urgency if Ireland is to improve its EU funds drawdown and attract and retain the best talent from around the globe.

If Ireland is to position itself as an innovation hub, there is an urgent need to invest in the upgrade of the core research infrastructure in the Irish universities that form the nucleus of the country's R&D network. This infrastructure has been severely neglected over the last decade due to funding shortages. That investment deficit must now be closed. Funding of the indirect costs of research activity, which has been demonstrated to be grossly inadequate, also needs to be addressed as part of the suite of initiatives to ensure the sustainability of the research and innovation ecosystem in Ireland.

Accordingly, the IUA is calling for:

- An increased allocation of funding for investigator-led / frontier research by our top research scientists to enable Ireland to compete effectively as a global innovator. We propose a multiannual programme of investment with an additional €50 million in the first year, expanding to €70 million by 2022 and €80 million by 2025.
- A sustained programme of State investment in the out-dated research infrastructure and facilities in Irish universities. This is part of a 7-year investment programme and is included below in the Capital Investment Recovery Fund for capital funding.
- Measures to be taken to address inadequacies in the funding of indirect costs of research.







If Ireland is to position itself as an innovation hub, there is an urgent need to invest in the upgrade of the core research infrastructure

# **CAPITAL FUNDING: BUDGET 2020**

Project Ireland 2040 has provided for exchequer-funded capital expenditure on third-level of €2.2 billion over the period from 2018 to 2027. This is an important and welcome commitment to the needs of the sector. However, it needs to be considered in view of the overall capital expenditure needs.

The Cassells Report concluded that €5.5 billion in capital expenditure is needed by the sector up to 2030. The Cassells projection is based on the need to cater for "increased student numbers, capital upgrades, health and safety issues, equipment renewal and ongoing maintenance".

Given the understandable paucity of state contributions for capital investment over the recession decade, universities were forced to borrow to fund essential capital needs. Borrowings among the seven universities are now approaching €800m with current annual capital repayments of c. €20m in addition to interest payments of €14m. By 2022 annual capital repayments will have grown to €43m and interest costs to €24m. The capacity for universities to continue to borrow to fund capital requirements is, therefore, now becoming constrained.

Furthermore, while new buildings have been financed through borrowings, there has been little or no investment in upgrading existing facilities. Critical upgrades of existing infrastructure are now a priority. It is not possible to borrow and difficult to raise funds through philanthropy for such upgrades. But, without it, our universities will be unable to provide the standards of teaching and research that are fundamental to the needs of a modern university in the 2020's.

#### **Capital Investment Recovery Fund**

The IUA proposes the establishment of a Capital Investment Recovery Fund to address critical capital infrastructure needs across the universities. This is proposed as a 7-year once-off fund to cater for the backlog of a decade's under-investment and to develop a fit-for-purpose teaching, research and support infrastructure that matches the needs of the knowledge economy.

It is untenable to expect universities to adequately prepare students for the workforce in the 2020's with facilities and equipment that are now decades and, in some cases, more than half a century old.

Ireland's universities are also central to the national ambition for technological change and digital transformation with responsibility for developing talent and preparing tomorrow's entrepreneurs and innovators with the skills necessary to thrive in the smart economy. This can only be achieved if the necessary enabling digital infrastructure is in place to exploit the possibilities that technology presents.

The Capital Recovery Fund will be used to address a range of key needs in the universities including:

- Upgrading teaching facilities appropriate to the future needs of students;
- Replacing and upgrading seriously neglected research infrastructure including out-dated laboratories and critical research equipment;



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- Urgently addressing 'red-letter' health and safety-related issues to be dealt with in university facilities.
- Major upgrades in IT and digital systems and infrastructure to provide the necessary foundational infrastructure and ensure that systems are fit for purpose to support universities in the digital age.

The reality is that there is a significant and growing infrastructure gap in our universities both in terms of the physical buildings and the essential technological infrastructure required in modern universities. Targeted funding is required to address this gap. The universities propose that capital refurbishment requirements should be prioritised in Budget 2020. Failure to address these extensive capital investment requirements at this point will inevitably lead to far greater costs in the medium term as capital stock may deteriorate beyond repair and may ultimately require complete replacement.

The **Capital Investment Recovery Fund** for the seven universities will cost €775m over a 7-year period. **We propose a multi-annual fund with an initial investment of €110m in 2020.** This is an absolutely essential enabling measure for universities to respond to growing demand and to provide facilities capable of educating key talent and seeding the research and innovation needs of the knowledge economy and to underpin the provision of e-learning, customised student supports and other innovations essential for the student experience in the 2020's.

#### New Capital Co-Fund Programme

The capacity constraints of universities and the wider third-level sector are well known. The Cassells report projected an increase in the third-level population of 40,000 by 2030 from a 2015 baseline. We have already seen the first phase of this student surge with 224,000 students now in the third-level system as compared with 209,000 in 2015. Significant investment is required to cater for this demographic bulge over the next decade.

The capacity for universities to continue to borrow to fund capital expansion is becoming constrained and consequently Exchequer support is being sought to support capital requirements to cater for growing student numbers. Recognising the constraints on public funding, universities propose that a co-funding programme similar to the successful Higher Education Strategic Infrastructure Fund in 2019 would be appropriate.

#### We propose that a New Capital Co-Fund Programme

with an Exchequer contribution of **€100m** be provided for the university sector in 2020 to cater for capital requirements arising from the known growth in student numbers over the next decade.

This Fund would give our universities the capacity to accommodate increasing numbers of students and produce more work-ready graduates using the latest technology and facilities.

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#### Irish Universities Association

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