



Irish Federation of University Teachers

Pre Budget Submission 2023





Pre-Budget Submission IFUT July 2023

We, The Irish Federation of University Teachers, representing academics and others across the higher education sector, have developed our pre-budget recommendations for the upcoming fiscal year. As the representatives of a crucial stakeholder group within the education system, we believe it is essential to prioritise and invest in the future of higher education to ensure its continued growth, quality, and accessibility. We are grateful to TASC, the think-tank for action on social change, for the support they have provided to us in gathering the data on which we rely on in this submission.

Note on higher education funding, employment, and PhD Graduates

Context, trends, and the role of higher education

Ireland's system of higher education has undergone significant transformation in recent years, and in the last decade in particular. The number of third-level graduates has grown, as has the number of universities. Not only has access to higher education among the broad population expanded, the ethos, funding, and employment model within the sector have shifted.

The higher education sector makes a major contribution to Irish society. This is most obvious for the students themselves as 46% of those aged between 25-64 have tertiary education compared to an EU average of 31%. This places Ireland in first in the EU and fourth in the OECD.¹ Those with a third level education have an estimated wage premium of 38-43% compared to those without tertiary education. Moreover, over 90% of alumni said that their university has had a positive or very positive impact on their employment prospects, with similar reported gains for productivity. Having a PhD, is particularly beneficial for one's

¹ https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_IRL.pdf

lifetime income and employment prospects, though we will see that there are issues regarding adequate number of academic posts to absorb PhD graduates.²

These issues speak to a broader point of the importance of higher education for the economy. It is well-known that having a young, educated workforce has been a major selling point for Ireland in attracting global and US FDI. Surveys of global executives rank an educated workforce highly in terms of locating multinational investment.³ Aside from skills transfer, universities boost innovation through R&D as they constitute 20% of total research spending. This leads to knowledge spillovers to the private sector, spinout businesses, university-owned patents, as well as joint research between higher education and the private sector. The estimated impact of €631 million in university R&D spending is to generate €1.5 billion in output in Ireland. This spend of €631m will rise to a spending of €1bn in the short term.

The total economic impact of higher education in Ireland is estimated by Indecon to be €8.8 billion - €2.8 billion in knock-on effects of non-research spending, €1.5 billion due to R&D, net graduate income of €2.6 billion, with exchequer benefit of €1.6 billion, and finally an overseas student contribution just under €400 million.⁴ This represents a significant multiplier effect as higher education spending for that year was €1.6 billion, somewhat shy of 1% of national income.⁵ In fact, based on Indecon's estimated exchequer benefit, higher education spending completely paid for itself in 2017.

A review of funding in higher education notes a lack of clarity in funding sources and inadequate data (PBO, 2019). Public funding to higher education institutes (HEIs) comes in the form of block grants, which are based on student numbers, expenses associated with running courses, and sometimes specific purpose grants. There is also performance-based funding, which allocates funds according to the meeting of targets set by the Department of Education and Higher Education Authority (HEA). Up to 10% of the block grant can be withheld based on performance criteria. The remainder is made up of fees and other public and private grants. The most recent, but dated, funding figures suggest that 25% of higher education institutes' funding comes from state grants; 12%

² https://www.iaa.ie/wp-content/uploads/2019/08/Indecon-Independent-Assessment-of-the-Economic-and-Social-Impact-of-the-Irish-Universities_full-report-4.4.19.pdf

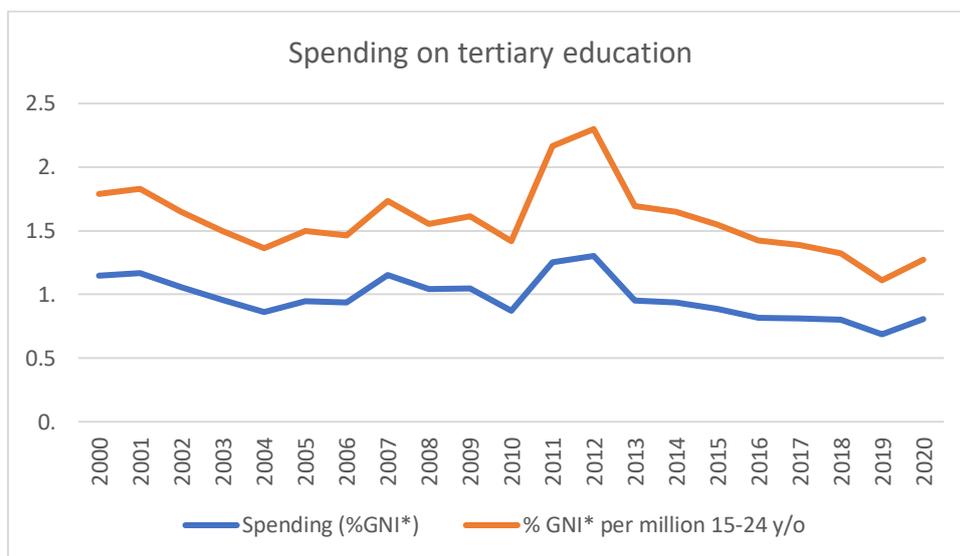
³ <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=40fac5ed224459d61a0f7b629659524711a2cb67>

⁴ https://www.iaa.ie/wp-content/uploads/2019/08/Indecon-Independent-Assessment-of-the-Economic-and-Social-Impact-of-the-Irish-Universities_full-report-4.4.19.pdf

⁵ <https://whereyourmoneygoes.gov.ie/en/education/2017/>

from conventional or ‘exchequer’ student fees; 35% from non-exchequer fees such as non-EU and mature students’ fees; 20% from research and grants and 8% from endowments and private investments.

The high share of university income generated from foreign students points to a broader funding trend – as public spending has fallen, student fees have been plugging the hole, but only partially. Restrictions on international travel during Covid may have squeezed them further. Figure 1 below presents two series. The first series (blue, lower trace) is public spending on tertiary education as a share of national income. The second is the share of national income that is spent on tertiary education per million 15-24 year olds. It adjusts spending as a share of national income for changes in the demographic structure of the population. A focus on only the first series may therefore give a misleading picture.



Sources: CSO and Eurostat.

Funding to the sector was comparatively stable at around 1% of national income up until the financial crisis. When the crisis hit, spending relative to national income peaked as a result of the decline in the latter. The withdrawal of the Irish state from funding third-level education is evident since the recovery as fewer and fewer resources have been devoted to the sector. Between the series beginning to 2019, spending has fallen by around 40% in national income terms. Only a small part of this is related to emigration of young people – on a demographic-adjusted basis, spending has fallen by 38%. In 2020, spending

recovered, in part due to a Covid-induced fall in national income, and in part due to an increase in spending. Some caution is advised in extrapolating from the 2020 figures as it remains to be seen whether this recovery is structural rather than due to the pandemic. Comparing spending to other EU countries, Ireland is 20th out of 27 EU countries and on a demographic basis 23rd – one of the least generous funders.⁶

As public funding is cut, the onus is pushed further onto universities to raise funds elsewhere. Resources are then devoted to making universities appealing, to donors to international students, and so on, which does not necessarily overlap at all with educational quality. There may then be greater emphasis on marketing, improving facilities for non-academic reasons, climbing rankings, and so on. This results in a growing share of administrators and managers. Indeed, at least since 2012 higher education institutions have employed more non-academic than academic staff.⁷ The effect of funding reductions on educational quality is therefore compounded as more resources are devoted elsewhere.

Student-to-staff ratios increased from 16:1 to 20:1 between 2007 and 2018. This means that Ireland has the second-highest ratio in the EU, and the fifth-highest in the OECD.⁸ This points to a broader trend of deteriorating working conditions. An employment control framework, overseen by the HEA, has been limiting the number of staff that HEIs can hire. Based on the Cush report, 58% of academics are on full-time permanent contracts,⁹ of whom perhaps 60% are men.¹⁰ Though part-time work can be voluntary so that non-standard employment need not imply precariousness, the Cush report underestimates the true level of precariousness as the data do not include research staff and tutors.¹¹ Other estimates put the figure considerably lower, such that only 44% of academic staff may be full-time permanent staff.¹² With full-time, permanent positions now less common, PhD students undertake more work traditionally done by faculty, but with fewer chances to enter into their ranks.

⁶ https://www.tasc.ie/assets/files/pdf/tasc_forsa_report_240222.pdf

⁷ <http://www.jceps.com/wp-content/uploads/2015/06/13-1-3.pdf>

⁸ <https://www.oecd-ilibrary.org/docserver/a1ef3bfe-en.pdf?expires=1676476930&id=id&accname=guest&checksum=7070FA6D3A85EA3AAAEE0620C366F9BA>

⁹ <https://www.tui.ie/fileupload/Cush%20Report.pdf>

¹⁰ <https://www.noteworthy.ie/academic-uncertaintypt2-5265743-Nov2020/>

¹¹ <https://journals.sagepub.com/doi/pdf/10.1177/0022185620960198>

¹² https://hea.ie/assets/uploads/2022/03/Gender-Equality-in-Irish-Higher-Education-2016_2021.pdf

Only one-third of full professors are women, whereas the gender distribution of associate and assistant professors is more even.¹³ The main reason is that fewer women apply for top roles – women’s chance of success is significantly higher than men’s when they do apply.¹⁴ This also applies to lower-level academic posts. One reason why women are less likely to apply is a lack of confidence in being successful, which is clearly unwarranted. Elsewhere in the public sector, fewer female applicants for top positions has been associated with work-life balance issues and family commitments, lack of interest in greater pay, and a lack of structured handover by incumbents.¹⁵ The greater pressures on academics and increased reliance on non-permanent staff, especially young academics, bodes poorly for gender equality.

Supply-demand mismatches in the academic job market

The government has stated as a priority its desire to increase access to higher education, including the number of people obtaining PhDs. Demand for places is expected to grow considerably in the coming decade, with one scenario seeing growth of 21% over a ten-year period.¹⁶ The *National Strategy for Higher Education* to 2030 committed to increasing the number of PhDs so that Ireland converges to international averages. It also commits to promoting a clear career path for researchers. This is to be facilitated by greater mobility between higher education, the public service, and the private sector (HEA, 2011: :68-72). The *Irish Universities Doctoral Skills Statement* has reiterated the need to equip PhD students with broad skills that go beyond the requirements for employment in academia (IUA, 2021).

There is, however, a lack of quality data to calculate what share of PhD graduates is absorbed by academia, and what share enters other sectors of employment. The Department of Public Expenditure and Reform database produces numbers on those employed in higher education, most but not all of whom are academics. From this, we can estimate the increase in the number of academic jobs. The HEA provides figures on the number of PhD graduates each year. These are presented in the table below.

¹³ https://www.dcu.ie/sites/default/files/hr_access/2022-07/16970_EDI_Report_16_06_22.pdf

¹⁴ https://hea.ie/assets/uploads/2022/03/Gender-Equality-in-Irish-Higher-Education-2016_2021.pdf

¹⁵ https://www.esri.ie/system/files/publications/RS66_0.pdf

¹⁶ <https://assets.gov.ie/222780/267259a4-1c3f-4597-bd93-553a80f0582d.pdf>

	2016	2017	2018	2019	2020	2021
Δ Third level employment	342	430	599	807	357	617
PhD graduates	1570	1435	1410	1550	1420	1535
Ratio	4.6	3.3	2.4	1.9	4.0	2.5

Sources: PER databank and HEA.

We can see that the number of PhD graduates well exceeds the number of third-level, let alone academic, openings by this measure. There is considerable fluctuation from year to year with most of the variation coming from changes in third-level employment. Accepting the fact that only a portion of PhDs end up in academia, this trend indicates insufficient and erratic absorption.

A number of caveats are required such that the actual mismatch between the supply of places and the demand for them in terms of new graduates is likely understated. The employment figures provided by PER include non-academic staff. According to an Oireachtas Library report, there were 13,166 academics for the year 2015/16, whereas the PER databank put the figure at 17,709 for 2016. Any change or increase in this latter figure will therefore encompass increases in non-academic employment so that the change in places as indicated in the table overstates the increase in academic places. Second, the trend has been for the share of non-academic staff to grow over time, so increases in employment according to the PER databank may further understate the increase in academic employment, although over a five-year period this may not be significant. Third, as discussed above, much of academic employment growth in recent years has been precarious and part-time employment. In the universities alone, part-time employment is 36.6% of employment according to the Cush report (Cush, 2016). Again, this excludes research staff and tutors and relates to total academic employment – part-time work is surely more prevalent among new hires.

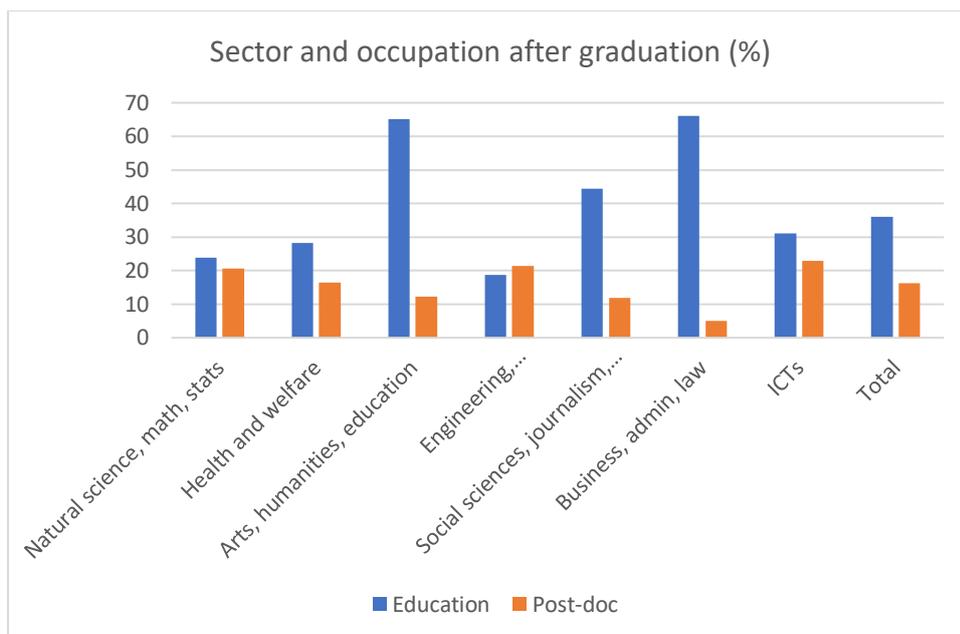
Against this, it should be noted that our proxy for openings, the change in third-level employment, understates actual openings. If somebody exits academia, this post could be filled by a new PhD graduate. Retirements, deaths, and academics moving to different sectors all provide opportunities for new graduates to enter the sector. Of course, some of those vacancies will be filled by academics educated outside of Ireland. It is likely that the net effect of the

table is to overstate the opportunities for absorption of PhDs by academia, especially given the dramatic increase in precarious and part-time work.

After graduation, most students end up in full-time employment. Among all research students, most of whom are PhD students but some of whom are research masters' students, the HEA reports that 82.6% of the class of 2021 are in full-time employment nine months after graduation. Some 3.2% are doing further research. The remainder are most likely working part-time, or are either about to begin a job or are unemployed. There are large differences in the employment prospects of different fields. For example, only 61.8% of arts and humanities graduates are in full-time employment.

At most a third end up in academia, but the precise figures are unclear. The HEA reports that among the 2021 class, 36% end up working in the education sector, though this is not necessarily higher education. The HEA also reports that 19% of the class of 2017, 20.8% of the class of 2018, 12.6% of the class of 2020, and 16.2% of the class of the class of 2021 end up as post-doctoral researchers nine months after graduation. These figures are in broad agreement with Table 1. One-third must be considered an upper estimate as it would imply that one-fifth of research graduates (36%-16.2%), which includes some masters' students, were able to secure positions as lecturers. It would be useful to follow up on where graduates are after five years, given the perception of never-ending, successive, insecure postdoctoral positions.

Breaking down by subject area, the figure below looks at the share of students who end up working in education and, relatedly, the share of students who become post-docs. The figure is arranged from right to left according to the number of students in each discipline. The exact number in each discipline is shown in the notes to the figure.



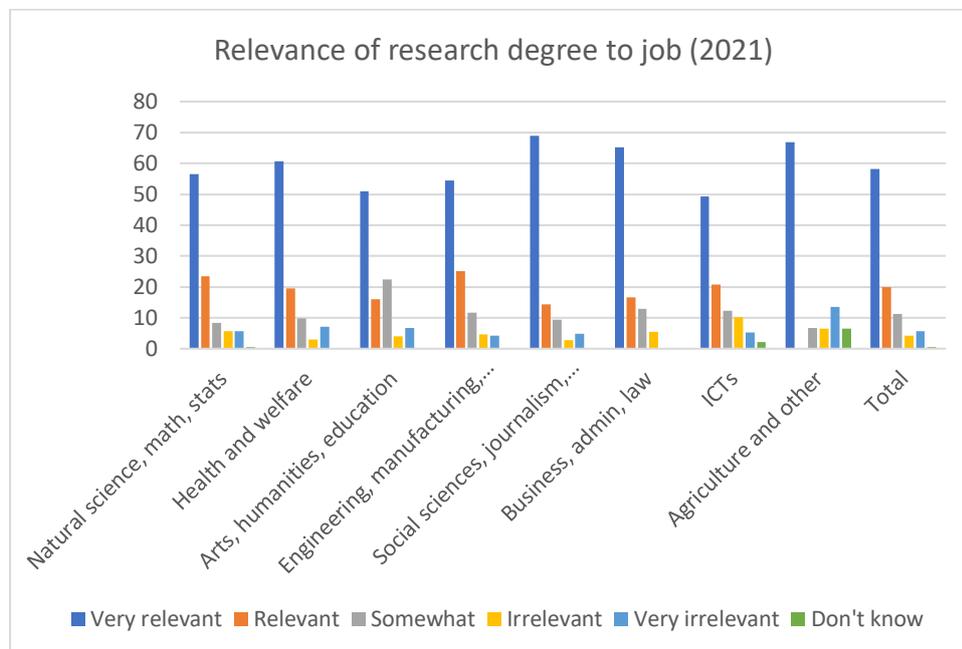
Source: HEA.

Notes: Data cannot distinguish between PhD and masters' students for sector and occupation, whereas the data can identify the number of PhD graduates within each discipline: Natural science, math, stats=335; Health and welfare=305; Arts, humanities, education=240; Engineering, manufacturing, construction=220; Social sciences, journalism, information=220; Business, admin, law=115; ICTs=70; Total=1535.

Focusing for the moment on postdocs, which is a more reliable indicator, the first thing to note is the dominance of the STEM fields. ICT, natural science and maths/stats, engineering and manufacturing/construction, and health and welfare are the fields with the most post-doc opportunities available, in that order. The humanities and social sciences then come next, after which comes business. This shows the emphasis of government has in promoting research in STEM and the relative neglect of non-STEM fields. In total, 16.2% of research graduate are doing post-doctoral research, with 17.4% of women and 14.8% of men doing so.

The fact that business, humanities, and social science graduates are most likely to end up in the education sector but are unlikely to be working as postdocs suggests being in the education sector after nine months is a poor proxy for being in academia. Indeed, as we will shortly see, humanities graduates are most likely to be in positions not relevant to their studies.

The figure below looks at how relevant a student’s qualification is for their current job. It surveys the class of 2021 of holders of research degrees shortly after graduation. It includes both research masters and doctoral students.



Source: HEA.

Looking at the total numbers, 58% believe their qualification to be very relevant, 20% relevant, 11.3% somewhat relevant, 4.3% irrelevant, and 5.7% very irrelevant. It is encouraging that a strong majority of graduates believe their qualification to have been pertinent to their current employment, although almost one in five deem their degree to have been limited or no use to them. The figure is higher still at one in three for those who have been researchers in the arts and humanities, emphasising the more limited career prospects they face outside of academia.

Another point worth noting is that in recent years at least, there has been a decline in the share of enrolled PhD students who are graduating. The table below shows the new PhD graduates as a share of total PhD enrolments. As can be seen, in 2016 almost one in five enrolled students graduated. This is consistent with the fact that a PhD takes around four years working full time, and that a certain share of PhDs are part-time. The decline in graduation rates is most apparent for ICT, natural science and math/stats, and humanities PhDs. It is

unclear why this is the case. It could be due to the pandemic, natural fluctuation, or it could be due to more part-time students. Another possibility is that PhD students are becoming discouraged with the lack of employment opportunities available to them. In so far as it is a trend, probably the most important concern is that students have been unable to sustain themselves due to cost of living and housing pressures. If so, it points to another mismatch between desired career path and the one actually taken.

	2016	2017	2018	2019	2020	2021
Arts, humanities, education	17.7	14.6	12.0	15.7	11.4	12.3
Business, admin, law	10.7	12.6	13.5	15.7	13.1	15.9
Engineering, manufacturing, construction	17.0	18.2	14.2	15.5	15.4	15.9
Health and welfare	22.5	17.7	20.9	19.4	16.7	18.3
ICTs	16.9	14.3	10.7	11.3	12.1	12.1
Natural science, math, stats	21.3	18.0	19.7	19.3	16.3	14.5
Social sciences, journalism, information	19.2	20.4	16.8	19.4	17.3	19.4
Agriculture and other	17.1	13.0	19.1	21.1	14.6	11.1
Total	18.8	16.8	16.3	17.4	14.9	15.3

Source: HEA.

IFUT's Pre-Budget Recommendations

1. Early in 2022 D/FEHERIS identified a need to increase 'core funding' current spending on Higher Education in Ireland by €307m annually. The planned investment of €307 million was aimed at improving the quality of programmes, their outcomes, and providing a third-level education system which is accessible to everyone in society. The full €307m should be applied to 2024's budget.

2. It is not reasonable to assume that all or even a significant majority of PhD graduates will enter into academia. However, there is evidence of a mismatch between demand for and supply of academic places. Students of the humanities in particular are less likely to use their research skills. Greater funding to higher education could enable an expansion of academic posts and improve student to staff ratios. This could be achieved by abolishing the employment control framework as recommended by the Joint Committee on education, Further and Higher Education, Research, Innovation and Science in their report on The Future Funding of Higher Education in July of 2022. An increase in funding should enable students of all disciplines to pursue academic careers, not just those in STEM fields.

3. While we do not have data on the historical composition of administrators versus faculty, we know that at least since 2012 non-faculty staff have outnumbered faculty staff. This is contrary to the spirit and effectiveness of higher education. There needs to be an increased focus placed on recruiting academic staff and this needs to be specifically budgeted for.

The recent motion (24th of May 2023) brought forward by Senators Alice-Mary Higgins, Michael McDowell and Rónán Mullen which was unopposed by the Government parties call, in the first place, on the Government to:

- Urgently engage with representative organisations of lecturers, postdoctoral and PhD researchers in order to begin to address this systemic issue;

We look forward to this engagement.