In whose interests do university leaders act? In the interests of specific groups: the students, the academics, or the alumni? Or do we act in the interests of industry, the state or the nation? Does the university exist to promote societal change or to maintain the status quo? Clear answers bring strong and consistent decision-making. Lack of clarity brings confusion and drift.

I gave the question much thought when I took office as a university president in 2011. I said at the time:

“Higher education is both a private and a public good since it gives the graduate potentially greater earning power and gives society a return by providing the research that drives economic growth and by educating the doctors, teachers, engineers, scientists, lawyers, artists, and entrepreneurs that society needs.” (Prendergast, 2011)

I tried to strike a balance between private and public interests. I undertook to keep in mind that we must prepare students for rewarding careers in a fast-changing world, while also contributing to a dynamic economy and sustainable society.

In line with many authors, I saw the outputs of higher education in simple terms, with public goods on one side and private commodities on the other (Williams, 2016). But, in retrospect, this is probably the wrong way to see it; universities do not operate to produce one type of output only. They conduct a myriad of different inter-related activities that bring both private and
public benefits. Indeed, it is efficient to do many of these activities simultaneously; most important of all, simultaneous teaching and research provide research-inspired education at the forefront of disciplines — performing in this way is the hallmark of research universities.

This paper is concerned with the changing ownership of the benefits — or outputs — of universities, and how university leaders should respond. As I will show, the shift in ownership is from public benefits to private benefits, and for brevity I term this the “public-to-private shift”.

Daniels (2015), in a paper presented at the Glion Colloquium, discussed a different but related topic, the ownership of universities themselves: public ownership versus private ownership. He argued convincingly that the public/private balance in terms of outputs is similar in both, and is indeed converging. It is a question worth asking: are not-for-profit private universities, because they are not subject to political regulation, better able to produce outputs that enhance the public good?

If the public-to-private shift speeds up, what are the likely consequences? How might the public-to-private shift affect issues such as the composition of the student body; subjects taught in universities; and the prioritisation of research fields by academic faculty.

I begin by examining the example of Ireland before attempting to generalise to other situations.

**PUBLIC-TO-PRIVATE SHIFT IN IRELAND**

**Education**

In the middle of the 20th century, higher education in Ireland, as in most countries, was promoted as a public good. Joining the EEC in 1973 set Ireland along a path of integration with the global economy. Industrialization afforded new opportunities to a young population. In the period 1970–2000, Irish governments, no matter what their political philosophy, responded consistently by funding the growth of universities and widening participation to all socio-economic groups. (According to Clancy [2015], the proportion of the population participating in higher education rose from 5% in the mid-1960s to 66% in 2009.) The Irish university system changed from one of small universities, mainly educating teachers and professionals, to one of research universities competing successfully in European and other research programs. In addition, some 20 Institutes of Technology offering applied education were created, widely distributed around the country.

Throughout this period, Irish people were encouraged to take pride in the country’s graduates and to see them as vital to economic development, and the basis of a prosperous society. Also in this period, students paid significant
fees with a subvention of every student by a state grant to universities. In 1996, with the ostensible aim of further broadening access, Ireland went the way of other European countries by abolishing fees altogether, citing the rationale that “it would remove important psychological and financial barriers to participation at third-level”. There were dissenters at the time, with one university president describing it as “a disastrous decision” (Sunday Business Post, 1997) but the initiative was followed by many years of economic growth during which Irish governments could afford to subsidise higher education. Looking back, this “total subsidization” disturbed the private/public balance that had established itself as acceptable in Irish society. Furthermore, as Denny (2014) has shown, the abolition of fees in Ireland had no appreciable effect on the socio-economic status of those accessing university education — it may even have exacerbated inequality of access by allowing middle-income families to use the money saved to buy private high school education (Denny & Flannery, 2017). Eventually, when the economic crash came in 2008, the public asked why it was paying all the costs, and higher education as a public good was brought into question. Swingeing cuts were made to public funding of universities. Fees were re-introduced, albeit at a limited level, and increased to €3,000 in 2015. And we may note that fees have been introduced around the world, with few exceptions (see Table 1).

When I took office in 2011, public funding per student had been reduced year-on-year for many years, and state investment in capital infrastructure in universities had all but dried up. In 2011, the student/staff ratio was increasing in all Irish universities and our positioning in the global rankings was slipping: in Trinity we went from a QS ranking of 43 in 2009 to 65 in 2011 — a slip of 22 places in just two years. There was no appetite in the political system to confront what was happening or to take preventive steps to halt decline — unsurprising, perhaps, given that the whole country was undergoing a financial crisis. As I saw it, state funding would continue to fall but, for electoral reasons, the government would be disinclined to allow universities to make up the shortfall by levying fees to cover costs. My decision to speak as I did in my inaugural address was because I felt the “private good” argument hadn’t been heard enough in Ireland, and that it was an important counterbalance to the “public good” argument. It put the focus on who was benefiting most from higher education.

Although I was among those kickstarting the debate, I was still surprised when, six months later, the Minister for Education and Skills made a speech in which he referred to students as “consumers” who “could exercise their choice by moving to another supplier of the service”; his ministry “hadn’t a clue”, he said, whether universities were doing their job or not, and “the only people who can tell us that the contract between the lecturer and the institution, the department and the university, is being delivered on the ground, is the student body.” (Sunday Independent, 2012)
I thought this was extraordinary market-economy language from a socialist minister in a state-regulated system, and also extraordinary was the implication that students were the only beneficiaries of higher education. And if students were indeed simply consumers, why was the state preventing universities from charging fees set by the market? Perhaps the minister’s statement was signalling that the state should no longer shoulder the complete burden of the costs of higher education, and that increased private contributions were necessary.

In 2014 the Expert Group on Future Funding for Higher Education was set up. Its report to government confirmed what many of us in the universities had been saying for years: the current funding levels were unsustainable (Department of Education and Skills, 2016). As a result, in the ten months since the report was published, the private good and the economic argument is being made everywhere, and we’re hearing a great deal less about the public or societal good of higher education and research. For instance, a recent editorial in *The Irish Times* had this revealing paragraph: “A recent OECD study measuring the benefits of a third level degree estimated that lifetime earnings for Irish graduates were boosted by about €320,000. It makes sense that those who benefit should pay back a relatively small proportion of their lifetime income in return” (*The Irish Times*, 2016). The editorial ignored, of course, the fact that higher earners pay higher rates of tax, so the matter is one of how to distribute exchequer revenue.

In 2017, we are still waiting for the government to decide whether to re-instate public funding or to allow universities to charge higher fees. In the meantime, Trinity, and other Irish universities, have sought to increase revenue from other sources — e.g. international and postgraduate student fees, philanthropy, industry collaboration and commercial activity.

**Research**

Up to the mid-1990s Ireland had only very small national research programs. In 1999, this changed with the establishment of the Programme for Research in Third-Level Institutions (PRTLI) which awarded €1.2 billion in five funding rounds. Next, in 2000, Science Foundation Ireland (SFI) was launched with a fund of €646 million. The argument for putting state funds into research was an economic one. The Technology Foresight Ireland report, which established SFI, noted that “a world class research capability in selected niches of these two enabling technologies [biotechnology and ICT] is an essential foundation for future growth” (Irish Council for Science, Technology and Innovation, 1999). Therefore the increased research funding was explicitly tied to economic growth. However, other than long-term goal setting, the political system did not influence the award of grants. Peer review of Principal Investigator grants was fully respected, and researchers had freedom to define research topics.
This was a revolution for Irish universities: funding was an order of magnitude higher, and grants were awarded based on scientific excellence as defined by international peers. Whereas previously universities were valued for education only, now a role for universities in directly stimulating innovation and, ultimately, economic growth was envisaged. The reports, focus papers and legal Acts which established the PRTLI and SFI didn’t emphasize individual firms or private interests. The new direction was still being framed within a “public good” argument with the focus firmly on excellent science to ultimately benefit industry.

Since the economic recession that began in 2008, there has been a much greater emphasis on what industry needs to create jobs. The SFI Act of 2013 widened SFI’s remit to include applied research so as “to enable the outcome of oriented basic research funded by SFI to be taken closer to market, which in turn increases the potential of research to yield commercial opportunities and jobs as well as other societal benefits” (Science Foundation Ireland, 2017). SFI has put the benefits of scientific research to industry foremost in its funding strategy. In this respect the “revolution” of the mid-1990s has moved from public benefits to private benefits.

Summary of Ireland’s shift to the private

In post-war Ireland, higher education was funded as a public good. The percentage participation was low and research funding from the national exchequer was almost zero. Now, in 2017, the opposite is the case: participation is high and the arguments about education are almost all related to the private benefits of having a degree. Research is heavily funded, with the largest funding body making grants for “impact” rather than for arguments relating to the long-term benefits to society as a whole.

Implications of the shift to the private

When we try to envisage the consequences of this shift, we need to look at the implications for who we educate, what we teach them, what research we do, and how this translates to societal change.

Who will we teach?

The composition of the student body in universities is changing rapidly. Previously, students were drawn from a university’s immediate hinterland. Nowadays, almost all universities — even small regional institutions — are attempting to recruit students globally. Young people living near Trinity College Dublin are going to Open Days in, for example, the Netherlands or the US, something that was unheard of before. It is stating the obvious
that sourcing university education globally is only open to those who have the means to pay, or can access loans. If this phenomenon accelerates it will lead to a smaller number of elite universities accessed by those with private resources or, for universities with the resources to do needs-blind admission, those with the resources of cultural capital to compete for scholarships. This latter point is important because it is often said that needs-blind admission guarantees admission of students independent of financial means. However, the pre-admission spend on the prospective student (and indeed on their parents’ education a generation earlier, as is seen in migrant families) is the major determinant of who enters universities. Such admission may be needs-blind, but it is not blind to family background and social position. In this respect the shift to the private could stifle social mobility. True elites have always been able to access excellent education globally.

**What research will we do?**

Motivation for conducting research in universities is very diverse. In an attempt to analyse this diversity, in Figure 1 I have plotted the public-private aspect on an X-axis and multi-disciplinarity on the Y-axis, allowing four quadrants of university research to be identified.

Up until very recently the gold standard in university research was basic, single-discipline research published in prestigious academic literature after peer-review. (see Figure 1, lower left quadrant).

However, there are at least two modes for shifting the public benefits of such basic research into the private domain: (a) by establishing intellectual property rights prior to publication — this may be mandated in the contract that funds the research or it may be the wish of the individual Principal Investigator to exploit the results commercially through licensing or spin-out ventures; or (b) by establishing a paywall around the research so that it is no longer a public good (see lower right quadrant). With (a) and (b) the results are privately owned and not released free to everyone.

For complex problems, multi-disciplinary partnerships are created, and industry takes a more hands-on approach to participating in the research (upper right quadrant). Again, the results are privately owned, and often not published at all.

In the fourth quadrant (upper left) is an emerging mode of research which uses multidisciplinary teams to address complex problems, or global challenges (Prendergast & Hennessy, 2016). Often this research is funded philanthropically, and produces results that are made publicly available in open-access repositories.

The trend created by the shift to the private is “to the right and upwards” in Fig. 1 — if this trend accelerates then the focus on creating impact and meeting the needs of industry will also accelerate. However, it is notable that
recent interventions by non-governmental actors and by private philanthropists have advocated addressing global challenges. This has shifted a notable portion of global research activity into the fourth quadrant.

**Figure 1 – Quadrants of university research**

Four related types of university research showing transitions between public and private benefits (X axis) and multi-disciplinarity (Y axis).

1. Traditional basic research is in the lower left quadrant, and the outputs of this research largely define a university’s research ranking in terms of published papers and citations.
2. In the lower right quadrant, the outputs of the research are captured for private gain. This is a goal for many researchers as it can be the basis of profitable licensing agreements and/or the creation of spin-outs.
3. In the top left quadrant, complex industry-defined research problems are addressed by industry/academic teams often set up through university labs or research institutes.
4. In the top right quadrant results of multi-disciplinary studies are collected with the objective of making them freely available at the first opportunity, often in the first of large datasets that other researchers can also use. Often philanthropically-funded, this research is motivated towards solving a global challenge (e.g., malaria, ageing, climate change).

Most universities will be active in all four quadrants.
**What will we teach?**

The disciplines offered in universities have always reflected society’s needs and interests, and have always been subject to change. In addition, in a university where the academic staff are active researchers or scholars the curriculum should keep up with the latest research results even before they appear in mainstream textbooks. Van der Zwaan (2017) presents a detailed discussion of how this happens, calling such universities “research universities”. And what we teach is determined by pressures for change from outside academia: employers, industry and perhaps parents as they aim to maximize the employability of their offspring post-graduation (Prendergast 2015). Davies (2010) summed up such disciplinary transition briskly under three aspects:

“What we teach is
- part tradition,
- part response to emerging fields of knowledge, and
- part industrial practice to control entry to a profession.”

If the shift to the private accelerates then how will each aspect be affected? Private interests will not give much attention to “tradition”. As regards emerging fields of knowledge, these will be predominantly in areas where research is supported in the sciences and technology. Entry to professions will likely be less controlled.

Some acceleration of change in what universities teach is already evident: many new disciplines have appeared relatively recently — such as neuroscience, nanotechnology and bioengineering. Other disciplines are changing into something different: for example, modern languages are becoming more explicitly venues for cultural and political studies, and electrical engineering is spawning a host of new degree programs in “disciplines” such as Internet of Things (IoT) or media engineering.

**DISCUSSION**

Throughout this paper, the shift to the private means a shift to creating an environment where universities “make” private goods rather than public goods. Trinity College Dublin is a public university, as defined by legislation, and is answerable to the Minister for Education and Skills. I have set out to answer the question of how the mission of a public university such as Trinity will change with the shift to the private ownership of outputs.
In Trinity College Dublin we recently articulated our mission as follows:

“We provide a liberal environment where independence of thought is highly valued and where all are encouraged to achieve their full potential. We will:

a) encompass an ever more diverse student community, providing a distinctive education based on academic excellence and a transformative student experience;

b) undertake research at the frontiers of disciplines, spurring on the development of new interdisciplinary fields and making a catalysing impact on local innovation and on addressing global challenges; and

c) fearlessly engage in actions that advance the cause of a pluralistic, just, and sustainable society.”

This mission balances the private benefits with the public good, focusing on both the “student experience”, a private good, and on “sustainable society”, a public good. It makes the economic argument (“a catalysing impact on local innovation”) but also the societal/civic argument (“a pluralistic, just and sustainable society” and “addressing global challenges” which is a reference to major global issues such as climate change, poverty and conflict). The focus on “independence of thought” and “academic excellence” is suggestive of a commitment to knowledge for its own sake, rather than for how it might benefit industry.

Staff in Trinity, as in most not-for-profit organizations, truly have a sense of working for the public good. But, given the changing public/private balance, the next Strategic Plan may need to be different to reflect changing circumstances.

• Will we need to emphasize more the return on investment for the individual student?

• Will we need to downplay the emphasis on “global challenges” and instead emphasize the needs of industry?

• Will we need to make more provision for economic growth, with comparatively less emphasis on pluralism and sustainability?

Such moves would not, I expect, be supported by the majority of the university community. But if the alternative is disconnect and hypocrisy — paying lip service to ideals which we can no longer translate into actions — I certainly wouldn’t be happy with that situation. Fortunately, I don’t think it has to come to this. But to avoid it, we need to better articulate the importance of the public good of higher education and research. Furthermore, we need to articulate that “the public good” is not synonymous with maximum economic growth. It is part of what we do, but it does not define it (see Walsh, 2012).
Table 1: Spectrum of funding arrangements in higher education.
Department of Education and Skills (2016)

<table>
<thead>
<tr>
<th></th>
<th>High State Grant Funding</th>
<th>High State Grant Funding</th>
<th>Moderate State Grant Funding</th>
<th>Low State Grant Funding</th>
<th>Low State Grant Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>No student contribution</td>
<td>Moderate student contribution (€2,000)</td>
<td>Moderate to high student contribution (£6,000–£10,000) (€4,000–€7,000)</td>
<td>High student contribution (£9,000)/ (£12,000)</td>
<td>High student contribution ($9,000/€9,000– median)</td>
<td></td>
</tr>
<tr>
<td>Income-contingent loan for tuition and living costs</td>
<td>Income-contingent loan for tuition only</td>
<td>Income-contingent loan for tuition and living costs</td>
<td>Subsidised and unsubsidised mortgage-type student loans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants &amp; loans for living expenses</td>
<td>Recent removal of universal grants</td>
<td>Grants for low incomes</td>
<td>Recent proposal to remove maintenance grant</td>
<td>Grants for low incomes</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>The Netherlands</td>
<td>Australia</td>
<td>England</td>
<td>US</td>
<td></td>
</tr>
</tbody>
</table>

In Ireland, as I suspect in other countries, creating a public debate about higher education is not a straightforward task. As Clancy (2015) has noted, one of the consequences of a state-funded system in Ireland is that the state aims to set the agenda of who, what and how universities should educate and research. He notes that, over the past decade in Ireland, “the state’s dominant role as funder was progressively used to steer the entire higher education system towards the achievements of its goals [...] Universities have experienced a sharp decline in autonomy in the face of a more interventionist state which seeks to define more precisely what their role should be and how their outputs should be evaluated.” This raises the question: who defines what “society’s needs” are? Who defines the public good? In Ireland, the government represents the choice of the majority of the electorate, but it’s recognized that one political grouping, focused on re-election, cannot be the sole decider of the public good. It is through a partnership between government and independent public institutions, such as universities, that the public good can be best decided. Historically, such independence and autonomy of action was given to the church, to parliament, to the judiciary and to the media, the so-called
“fourth estate”. Today, many would also recognize social actors, businesses and business representative groups, and artists/creatives, as key sectors who bring benefit to society when they act independently. The greater the degree of independence of a higher education institution the greater is its ability, together with government, to make public the benefits of higher education. Perhaps in this we have a paradox: the more private funding a university has, and the more autonomous it is, the greater the benefit it brings to the society of which it is part.

To some extent, therefore, the decline in state investment could enable greater autonomy for public universities, empowering them to operate more in the public good. According to Times Higher Education (2017), the former chancellor of the University of California at Berkeley, the highest ranking public university in the United States, recently said that “it would cause a huge political kerfuffle, but increasingly, in the US context, there needs to be a debate [about becoming a private university] that should be conducted in a serious way”. Considering the matter for British universities, Chan (2017) writes: “The answer is not for British universities to secede from the public sector as in a privatization. The answer is to augment public sector financing with additional resources coming from the private sector. Some may call this the philanthropic sector, or the third sector. It is where private citizens act for the public good. What is required now is a public-private partnership.”

CONCLUSION

At the start of this paper I posed the question: “In whose interests do university leaders act?” If we are clear about the value we bring, the public-to-private shift need not lead to us abandoning our mission or core principles; rather it may provide a leadership opportunity to define them anew. But can university presidents make any difference, given the decentralized organisational structures in universities? Freeland (2017) writes: “Presidents can and do lead by convincing key stakeholders whom they cannot directly control to support their goals. They do so by exerting persuasion, moral force and inspiration and by representing the inherent authority of the office. This is hard, but possible.” In the face of the recent re-appearance of populism, “fake news”, electoral manipulation and terrorist attacks, the question of articulating the public good in education and research has become more necessary than ever. It is essential that universities persuade all of the ultimate greater purpose that lies in the public good, whether achieved by public or private universities, or in a public/private partnership.
ACKNOWLEDGEMENT

I would like to thank Professor Brian Lucey of the Trinity Business School for some comments on a draft of this paper.

REFERENCES

Sunday Independent (2012). “I haven’t a clue if lecturers are doing their jobs’, says minister.” 5 February.