



Going for the higher fruit: Universities post peak public funding

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These days we often hear commentators wistfully recalling the reformist achievements of the Hawke-Keating period or the relative smoothness of government in the Howard era, but while “reform” is still touted as an unceasing necessity, the impact and durability of change is not what it used to be, and every problem seems to be a wicked one. And, in many areas, the limitations of either government or market-driven delivery of public services are increasingly apparent.

This is not to deny the necessity for ongoing reform. We clearly cannot ignore the need to deal with pressing matters such as the delivery of electricity, allocation of water rights and provision of services such as health care and education. However gains appear to be increasingly marginal and easily disrupted in a febrile political climate, and these circumstances bode ill for our capacity to deal with truly grand challenges such as energy policy, climate change, global conflict, or the disruption of societies and economies by technology and globalisation. The rise of the internet and developments in robotics and automation since the 1980s promise, or threaten, revolutions in the workforce not seen since the Industrial Revolution and the spread of electric power. In retrospect the decades following the end of the Second World War, which saw the rise of egalitarian social democracy and the development of high standards of seemingly free public services, involved quite different challenges to those we face in the first half of the 21st Century.

Universities are widely, and rightly, seen as part of the answer. They are, potentially, engines of innovation, sources of enlightenment and understanding, and vehicles for enabling people, industry and society more generally to adapt successfully to ongoing change. The higher education sector has grown rapidly in Australia, particularly since the advent of the demand-driven system which allowed universities to accept as many undergraduate entrants as they wished. This system began formally in 2012, but controls were loosened from 2009, and even before that time there were clear signals that a shift was underway towards higher levels of education. This shift also has been seen in many other nations.

However university research and education are not cheap, and the paths from input to outcome are long and complex. Universities have at times been seen, including by people in government, as opaque, unaccountable, self-indulgent and disconnected from everyday life. As the system has grown it has been subject to unceasing review, calls for fundamental change, and now faces the prospect of meeting higher expectations within significantly tighter financial circumstances.

Meeting this challenge will require new thinking and engagement from both universities and governments. The low hanging fruit of government reform of universities has been plucked, and what remains is simply a search for savings, oftentimes in the form of “efficiency dividends” which seek to skim university budgets. This is not catastrophic, but in isolation it could erode the ability of universities to deliver the value society needs from education and research. Nor is there likely to be much mileage from contrived national-level financial incentives designed to push or pull universities in directions favoured by the government of the day. For their part, universities have harvested their own low hanging fruit, such as recruiting overseas students and hiring casual staff, and can no

longer avoid making hard decisions about prioritising resources and rethinking fundamentally the way they operate and deliver services.

Financial considerations are not the only reason that the status quo is unsustainable: to a large degree universities are supported because they prepare people for the world of work, and that world is changing fast.

The changing nature of work

We would all be familiar with the tectonic shifts that have been taking place in the workforce in developed economies over the past few decades, and in particular the decline of manufacturing and trade unions and the shift to services such as finance and health. In more recent years we have seen some occupations disappear, such as typists and video store owners, and major companies and industries disrupted, including newspapers, music outlets and, most recently, the taxi industry. Analysts have pointed to technological development and globalisation as major forces at work. While both have led to considerable increase in productivity and value for consumers, they have done so at a cost to the stability of many jobs. And while globalisation, outsourcing and offshoring have had the greatest overall impact on employment to date, computers and the internet have clearly also posed a profound challenge to retailers of commodities that can be digitised or delivered via online order, and this challenge is rapidly increasing in scale and scope.

It is important to note some caveats about such change. Despite talk of a “fourth industrial revolution”, economists Robert Atkinson and John Wu have observed that there is little empirical evidence of large-scale or accelerating occupational change or technological intensification in the US over recent years. The various estimates that 40 or even 80 per cent of jobs could disappear or be disrupted rely on projections about the future of artificial intelligence, robotics and the internet that, at this stage, are speculative. However such speculation is informed by vigorous global research and development, including here at QUT, and it would be foolish to be complacent about the scale of change we are facing.

It should also be noted that there is general agreement that the greatest risks are for those with lower levels of education. The premium associated with higher education is not simply about getting a job and earning, it is being prepared for change.

The growth of higher education

Prospective students and their parents have long ago absorbed this message, and there has been a steady shift to higher levels of education in Australia, well before the demand-driven system came into play. In 2001 there were only 70 per cent as many 25-34 year old people with university degrees compared to VET qualifications, but by the time of the Bradley review in 2007 this had risen to nearly 90 per cent and it crossed over in 2009. University is now the major destination for those who complete Year 12. There is considerable variation

around Australia, and among various groups of young Australians, but nationally 48 per cent of those who complete Year 12 go directly on to university, and a significant number go to university after a delay of a year or more. University is now a mainstream aspiration.

However government support was slow to match this growth in aspiration. In the eight years to 2008, domestic undergraduate enrolments only grew by 7 per cent, giving rise to considerable unmet demand, while overseas enrolments grew 61 per cent. The latter growth was in part a commendable aspiration to internationalise our education, but it was also spurred by government caps and falling income per government-sponsored student after cuts had been made in the late 1990s. In the seven years after caps on enrolments were loosened and later removed altogether, domestic enrolments leapt by 30 per cent, and overseas enrolments only grew by 5 per cent.

For universities, income per student rose slightly with the introduction of a higher HECS amount in 2005 and a small increase in government grants from 2007, and also from the full funding of some places which had been enrolled but not funded beyond the caps. However today's funding per student, from government and students combined, remains in real terms almost exactly where it was twenty years ago. This is unlike the situation with other service sectors reliant on skilled human labour, such as health, school education or legal services.

The changing nature of government

Of course governments never intended to underwrite such expansion in direct proportion to student growth. Since the early 1990s university research funding has increased greatly and domestic student numbers have doubled, but government university expenditure, including for research, has remained around 1 per cent of GDP. This feat has been achieved through the transfer of some of the government share of funding to students, as well as keeping price control on the amount paid for each student.

The introduction of HECS, and its current form as HECS-HELP as part of a suite of loans that are repaid on the basis of income earned, has the great virtue that it defers student cost and protects those who have not been successful in finding well-paid employment. Until this year the debt was not repaid until the debtor earned around 70 per cent of the average full-time wage (around \$56,000 for 2016) and debt does not accrue real interest. The level of student debt in Australia is not politically sensitive, there is no strong evidence that it deters students from study, and it enables a large share of the cost of higher education to be moved off the budget.

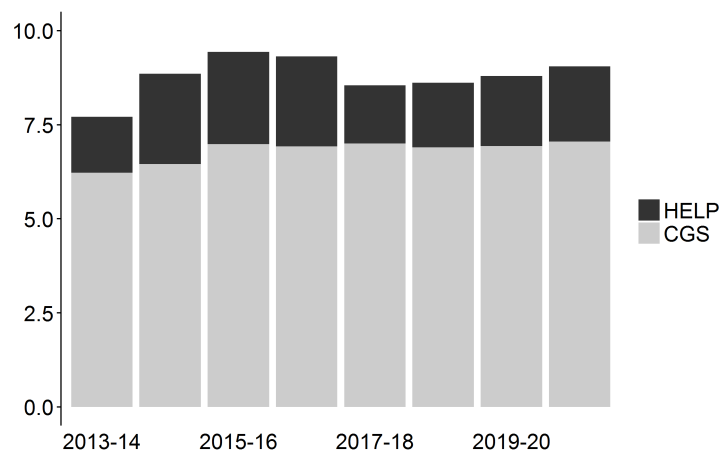
The virtues of HELP loans undoubtedly encouraged policy makers to continue unbridled expansion of higher education, and the arrangement was extended into the VET sector, fueling a rapid expansion in enrolments and debt. Unfortunately this development also enabled a significant number of shonky private providers to access public funds.

There is still a public cost to HELP loans, comprising the debt that is never repaid because some debtors do not earn an amount above the repayment thresh-

old, and the interest rate difference between the cost of borrowing money and not charging that component to students. By mid-2016 the total amount loaned under HELP was around \$52 billion, of which \$14.5 billion was expected to not be repaid and \$1.2 billion amounted to the interest rate subsidy.

The combined cost of HELP and direct grants (known as Commonwealth Grants Scheme or CGS) as shown in the Budget papers is shown in Figure 1, which illustrates the rise in government grants in recent years and the projected levelling off if the current budget measures are passed. It may be noted that the direct cost of teaching grants, in the form of the CGS, is currently around 58 per cent of the total income received by a university for each government-sponsored place. The 2017 reforms propose reducing this share to around 54 per cent.

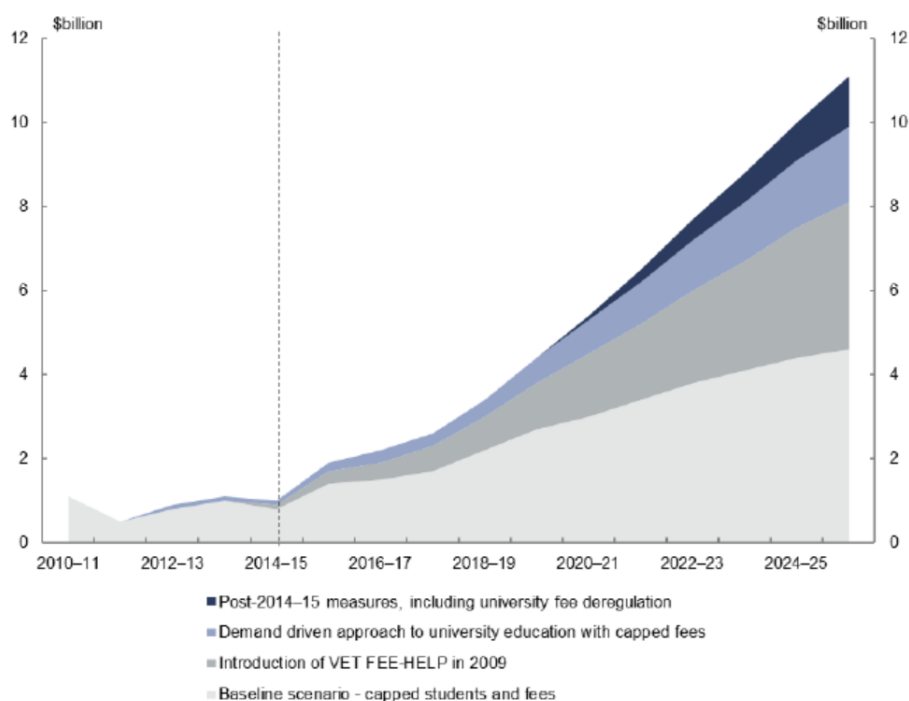
Figure 1: Total Commonwealth university teaching contribution 2013-14 to 2020-21. (\$billion actual prices)



Some might wonder what the problem is with the relatively small burden of HELP loans portrayed in Figure 1. However the estimate in the Budget papers is not a measure of the accumulated doubtful debt and interest rate subsidies, but instead of the costs of administration and exemptions. Budget accounting rules mean that the presentation of HELP costs in the Budget papers is complex and opaque, and this is part of the reason that Australia has paid less attention to the public share of this cost than has the UK, where much larger loans to fund universities were introduced in 2012. In 2016 the Australian Parliamentary Budget Office criticised the lack of transparency in accounting for HELP loans costs, and produced estimates of the underlying cash balance related to these loans, which captured the key costs associated with doubtful debt and interest rate subsidies, shown in Figure 2. This underlined how significant the growth could be, including an assessment of deregulation which at that time was still on the table. The current level of around \$2.4 billion can easily blow out as more non-repayable debt is issued, and the impact of the VET-FEE-HELP debacle

is particularly significant. It is worth noting that in moving from grants to loans the government might be able to reduce deficit-related expenditure, but it has traded certainty for complexity and uncertainty, since estimates of the cost and sustainability of income-contingent loans depend not only on the policy settings such as threshold levels and repayment rates but also, crucially, on future earnings growth of graduates as well as abstractions such as the rate at which the value of future debt levels are discounted to present values.

Figure 2: The projected public cost of HELP loans



Source: Parliamentary Budget Office 2016

This year's Budget measures are intended to scale back the growth depicted above.

The political limits of HELP-style loans are being tested both here and in the UK. A recent report in the UK noted that lower income students, who can also access HELP loans for living costs, can graduate with debts in the order of £57,000 (near the politically sensitive \$100,000 mark in Australian terms). The conditions are somewhat different there, for example they charge interest but loans are forgiven after 30 years while here we have contemplated recovering student debt from deceased estates. But the recent shift in political mood in the UK has been reflected in debates about the high level of student fees and the impact of student debt. We have yet to see higher education funding register as a major political issue in Australia, even when full deregulation was contemplated.

Indeed, a reduction of around 8 per cent in the repayment threshold was agreed to late last year with so little fanfare that the government was emboldened to push for a reduction of 25 per cent in this year's May budget. This low profile may not last. We are seeing rising public costs associated with the demand-driven system and the expansion of student loans, and we are also facing the prospect of growth in graduate debts. Together with evidence of government willingness to rewrite the conditions of debt repayment, these factors may well move us closer to the UK political climate on these matters.

Public funding for research has also been wound back. Figure 3 shows the trend in real terms over the past decade.

Figure 3: Commonwealth real research funding
\$billion 2016 prices

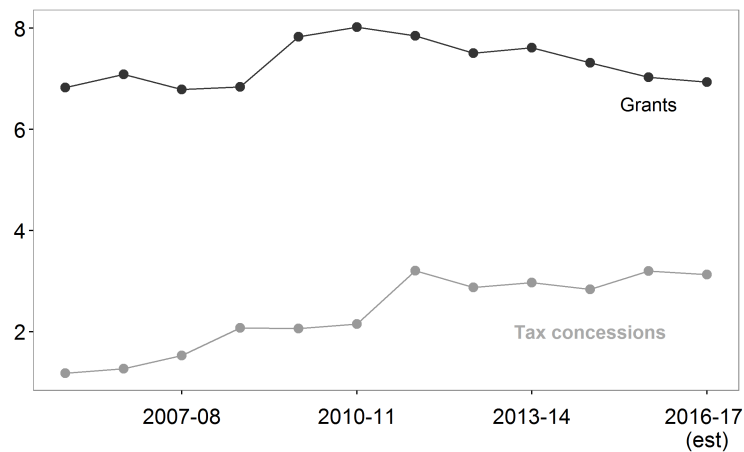
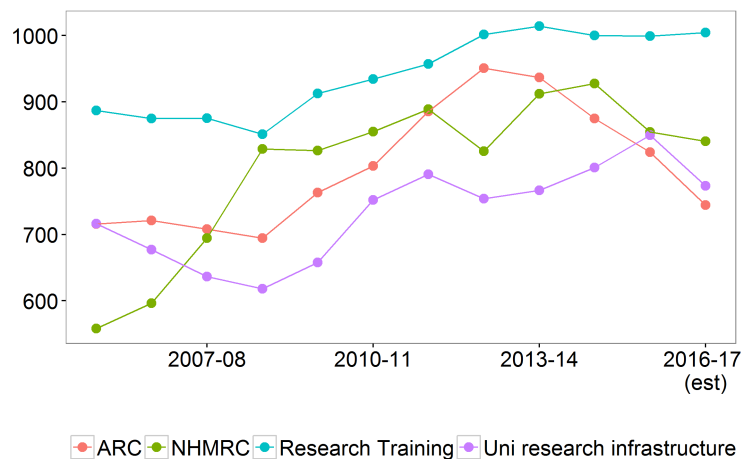


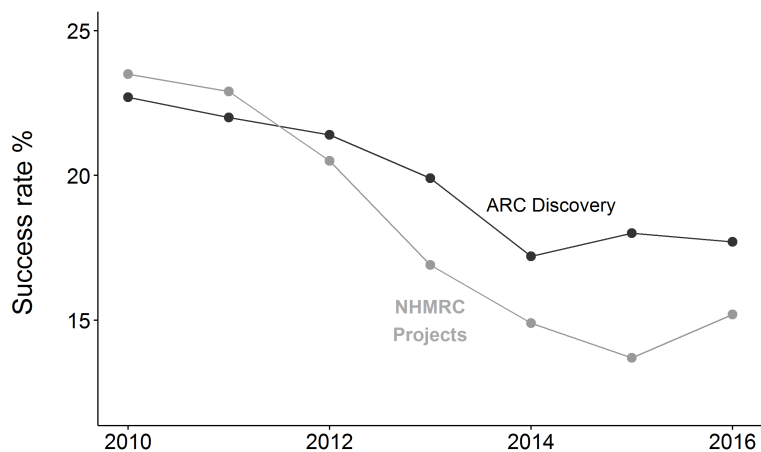
Figure 4 shows that while support for research training has been maintained, grant funding for universities has not been spared and, while research infrastructure support has had some increases in recent years, it still lags by some considerable distance that which is needed to fully cover the overhead costs of grants that are secured. The NHMRC data below includes medical research institutes; universities receive around 75 per cent of total NHMRC funding.

Figure 4: Core university real research funding
\$million 2016 prices



An inevitable consequence of this has been a decline in the success rates of grant applications, shown in Figure 5. This represents a considerable amount of wasted effort by applicants and reviewers, and illustrates the capacity of the university system to produce more high quality work if funds were available. It also shows that universities must take steps which they have hitherto been reluctant to take in order to respond, such as prioritizing grant applications and subjecting them to tighter scrutiny and vetting.

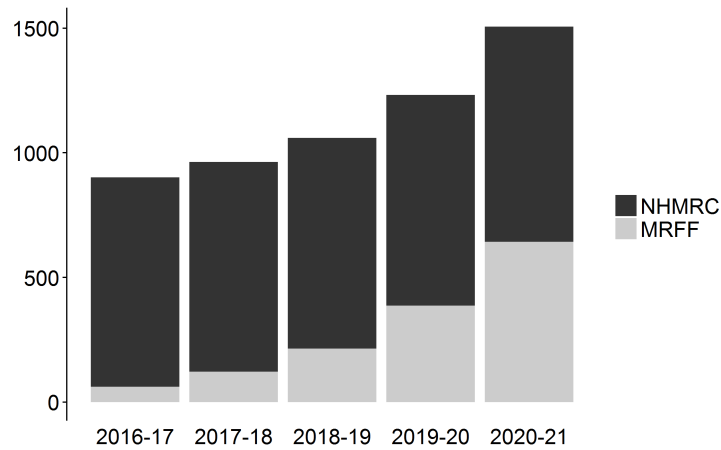
Figure 5: Grant success rates



There is one area where government seems willing to countenance an increase in public support, indeed it is the area which already receives the lion's share of private and philanthropic support, namely medical research. Over the next five

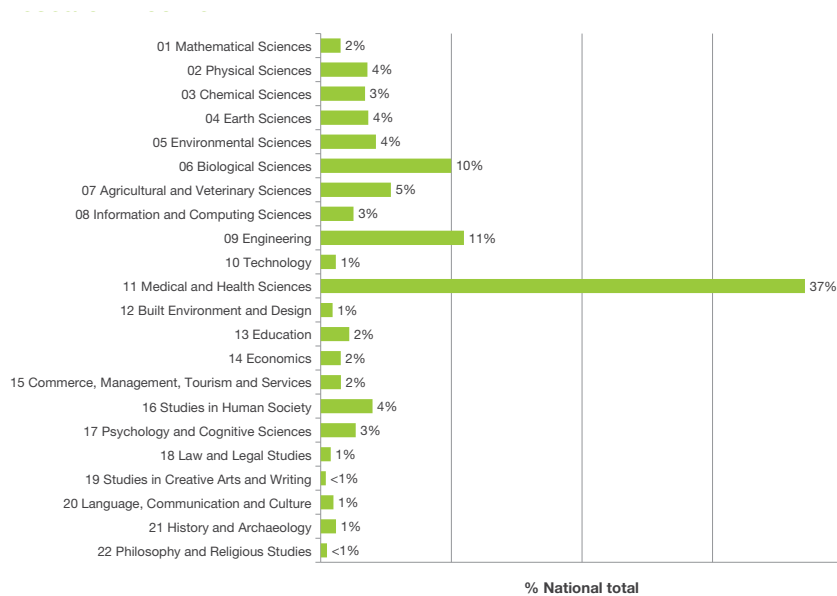
years an additional \$1.4 billion has been set aside through the Medical Research Future Fund.

Figure 6: Projected medical and health research funding
\$ million



While this is very welcome, it reinforces an existing position of extreme dominance, as shown by the 2015 ERA data.

Figure 7: ERA 2015 research income



Source: ERA 2015 National Report Vol. 1

Medical research is popular with politicians and the wider public because we all worry about health issues, especially those associated with ageing and obesity. Nor is Australia alone in having a high proportion of its university research funding dedicated to this field, though we already have a higher share than countries such as Germany and the UK. But the push for greater concentration of activity into medical research raises two issues, one being the over-reliance on one area for our future innovation, an area where we will always be small albeit important players, and the other being the increasing investment in treatment and the pursuit of cures while we spend relatively little on public health and prevention.

Conclusion: Post peak public funding

The metaphor of a “crossroads” has been used several times in higher education, here and in other countries. But there is no doubt that in 2017 we are at a critical juncture with the relationship between government and universities. Society has never needed universities to be more effective and pervasive, but government is clearly equivocal in its support. The former US Ambassador to Australia Jeff Bleich has referred to this as an era of “runaway technology and walk-away government”, when unprecedented challenges are confronted by the rise of populism, government dysfunction and widespread disillusionment, not only with the capacity of government and democratic institutions to make a positive difference, but also manifest in the form of distrust of expertise. This distrust can be seen in the promulgation of claims about “fake news” and the increasingly partisan polarization of views about climate change. In the face of wicked problems and global challenges, it is too easy to exploit the inherent uncertainties in scientific knowledge and claim that our efforts in this country alone will not solve the problem.

There is no simple path out of this impasse, but it is clear that business as usual is not going to suffice. Vice-chancellors have put the case for better funding for university teaching and research to governments over the years with varying degrees of logic, self-interest and bluster, and have evidently failed to cut through.

While universities might feel that their problems are the most important and worthy of government attention, they are - particularly from the perspective of a federal minister - much less significant than those facing the VET sector, which has undergone repeated major upheavals. Long dominated by public TAFE providers and funded by a mix of State and Commonwealth contributions, VET has been subject to cost-cutting and cost-shifting, and attempts to introduce a training market with encouragement of private providers. And since 2012 it has suffered at the hand of the demand-driven system which has enabled universities to enrol as many students as they wish. The decision to extend loans in the form of VET-FEE-HELP saw fees rise, compounded by a reduction in State investment, and a massive blow-out in Commonwealth debt costs, much of it fuelled by new players who were not sufficiently constrained by adequate regulation.

Universities have been quick to champion predictions that many jobs of the future will require degrees, but many other jobs will not, and in the face of



VICE-CHANCELLORS PRESSING THEIR CASE

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Raising the Stakes, UQP 2016

ongoing workforce disruption we need a robust and flexible training sector to enable an ongoing supply of relevant skills and adjustments to changing circumstances. However, enrolments and participation rates in VET tertiary courses have fallen steadily since 2012, aside from a slight national rise in enrolments solely attributable to growth in short courses in NSW in 2016. Over the same period university enrolments have increased rapidly, albeit with a slowing rate of growth in recent years as universities soak up available demand. The 2017 Budget proposal to extend the demand-driven system to university sub-bachelor enrolments is likely to increase the gap between the sectors, as VET fees in sub-bachelor courses have increased with the reduction of State subsidies; in many cases students would face higher costs in VET than in universities for similar level courses. The proposed extension, albeit limited in scope, has been vigorously promoted by some universities, though not by QUT, but at a time when both VET and public finances are under such pressure it is hard to see the rationale for such a lopsided approach to tertiary financing. University policy should not be seen as independent of wider tertiary policy, all the more so as it crosses into sub-bachelor territory. There are many factors that have worked against achieving an integrated approach to tertiary education in Australia, but we can only solve this problem with attentive government coordination and shared vision about the role of tertiary education in a transforming economy. We cannot continue to drive these two vitally important sectors in incompatible directions. While there might not be a simple recipe, there are steps that universities can take to adjust to the new reality and to engender a sense of confidence in those who support them that they are focused on what matters. These include:

- not simply relying on more overseas students to fill funding gaps. Some universities have drunk deeply the Kool-Aid of international income, and in some places between 50 per cent and 65 per cent of undergraduates in Business and Commerce programs are from overseas, predominantly from China. This involves real risks of budget over-reliance, compromise of course quality and campus experience, and wider threats to institutional and national risk profile;
- getting serious about understanding costs. The Federal government is seeking to impose discipline on universities in a standardised manner, which might be useful, but could also divert effort into compliance with an endeavour to find the lowest cost for funding purposes;
- being more selective in research, both in internal investments and external applications;
- taking a hard-headed approach to investing in learning and teaching, not swayed by fads but not allowing tendencies towards local diversity and inherent conservatism to dominate;
- continuing reform in handling of academic work from promotions to role specialisation; and

- demonstrating that universities are taking seriously the challenge of change in future workforce - and by seriously this means institutional-level at-scale approaches to work skills development and ability to adapt to and use technology.

For its part, government needs to steer a path between deregulation and heavy handed interventions such as metric-based performance incentives that are supposed to entice universities in directions preferred by the government of the day. In *Raising the Stakes* we described in some detail why such approaches were of limited value, and also why market-based solutions were likely to fail, one such reason being that income-contingent loans rendered competition on price unworkable. The reason vice-chancellors supported deregulation in 2014-2015 was that it offered a workable alternative to the status quo of formulaic approaches, characterised by constant shifting of goal posts, endless reviews, and pursuit of the lowest possible public cost. Alternatives were floated during the deregulation debate, such as discounted public contributions depending on fee levels. But these were not further developed. In the meantime, if we are not simply going to revert to the settings of fifteen years ago we should at least encourage a measure of policy stability with a maintenance of reasonable indexation as a first step in developing a clearer non-rhetoric based view of what the public should expect from its universities and how this should be supported. If government is going to fund less, it should intervene less. For research, we need to avoid both the tendency towards becoming a “one trick pony” with a sole priority on medical research, but also avoid steering too much funding into earmarked programs aligned to government priorities. These have their merits, but they distort university priorities and have proven to be short-term measures that are vulnerable to the tendency for incoming governments to seek to undo the legacy of their predecessors. We have a respected and effective mainstream funding system in the ARC, and it should be strengthened.

There are alternatives to government funding for both education and research. Philanthropy has been on the rise, and it can provide a valuable source of support for infrastructure and in areas such as support of students in financial need. However, it is a complement, not a replacement for more regular funding sources. In Australia we have been slower than our counterparts in places such as Germany and the US to bridge the gaps between universities and the private sector. Universities must make better efforts to show they can be relevant to business and industry, in education and research, not because it might fill a funding gap but because it is a fundamental part of the mission, particularly for universities such as QUT. Universities often complain of the lack of engagement by industry in university R&D, and there is a good basis for this complaint. But universities themselves need to make the case - through the sheer quality and impact of their R&D endeavour - and thus not only meet, but anticipate, the industry research market.

Higher fruit is easy to see, but hard to reach, and navigating the next decade in Australian higher education will be a daunting challenge. However we should not forget that our universities are strong, and despite long-standing predictions of collapse they have shown considerable resilience and adaptability. In a volatile

and increasingly globalised world, universities will become ever more important for the future of individuals and the nation, but they cannot rely on this being self-evident or automatically deserving of support. They must work with government and the rest of the community to ensure that while universities are demonstrably relevant, efficient and accountable they are also enabled to continue to adapt and, indeed, to lead in addressing the many opportunities and challenges we will face.