



27 November 2019

Mr Peter Achterstraat AM
NSW Productivity Commissioner
GPO Box 5469
Sydney NSW 2001

Dear Mr Achterstraat,

Re: Kickstarting the productivity conversation

Thank you for the opportunity to comment on the Productivity Commission's discussion paper, *Kickstarting the productivity conversation*.

Higher education is of critical importance to the NSW and Australian economy, educating the workforce of tomorrow, driving prosperity through research and innovation, and underpinning the nation's third largest export industry.

The University of New South Wales (UNSW) has identified a number of opportunities to further capitalise on the value of our sector to the economy.

The value of higher education

University graduates are critical to NSW's productivity, undertaking the work that will propel our economy into the future. With a growing trend towards automation of manual labour, the strength of tomorrow's workforce will increasingly depend on university graduates. Indeed, Commonwealth Minister for Education, Dan Tehan, has acknowledged that the majority of new jobs created in Australia in the coming years will require a university degree¹.

A recent study found that undergraduates aged between 20 and 29 earn wages 52% higher than their peers without a university qualification², while UNSW postgraduates have a median income of more than \$120,000 three years after graduating³. UNSW graduates also benefit from increased employability, with 77.5% of graduates employed full-time within four months of graduating⁴.

However, the benefits of higher education extend beyond the wage premium experienced by individual graduates. There is a growing body of evidence demonstrating that the benefits of a university education, and indeed university research, flow through to the economy overall.

Universities Australia estimates the total value of Australian university research to Australia's economy to be \$160 billion, with the skills of graduates estimated to be worth a further \$140

¹ Minister Tehan address to National Press Club, 28 August 2019. <https://ministers.education.gov.au/tehan/national-press-club>

² Ernst & Young, *The productivity uplift from better outcomes for our university students* (September 2019) at p11

³ 2019 QILT Graduate Outcomes Survey

⁴ 2018-19 Good Universities Guide

billion in 2014⁵. These benefits extend well beyond graduates. For example, for every 1000 new graduates entering the workforce, 120 new jobs are created for people without a degree, while the wages of those without a degree are boosted by \$655 a year when more graduates enter the workforce⁶. Indeed, research has shown that 55% of the benefit to the economy from each graduate – US\$167,700 per male graduate and US\$126,500 per female graduate – was a public benefit, compared to a 45% private benefit⁷.

Similarly, last year, the Group of Eight (Go8) universities released a report⁸ written by London Economics, highlighting the economic value of higher education. That report found that:

- For every person employed at a Go8 university, 2.4 jobs were created in the broader community;
- For every \$1 invested in university research, around \$10 came back in benefits; and
- For every three international university students studying in Australia, there was a \$1 million benefit to the economy.

In addition to economic value, universities also produce world leading research which in turn has led to inventions that improve lives, addressed critical challenges faced by society, and provided input to the formulation of important public policy. At UNSW, cutting-edge research is regularly undertaken across a wide range of areas, including water technology, waste management and cancer research, while solar photovoltaic cells were developed from UNSW research, and continue to play a critical role in the global transition to renewable energy.

Recommendation 1: That the Productivity Commission recognise the value of higher education to the state's economy, and acknowledge that skills shortages in the state's workforce should be addressed by university education as well as VET.

Maximising the dividend of higher education

There are a number of opportunities to further maximise the value of higher education to the NSW economy.

Research and Development (R&D)

The 2019 NSW Innovation and Productivity Scorecard highlighted that NSW lags behind Victoria, Queensland and the national benchmark for higher education research and development investment⁹. Furthermore, the Scorecard highlighted that collaboration between industry and universities on research in NSW is at a low level, with 31.8% of higher education research funded by industry¹⁰. This is compounded by Commonwealth investment in research and development having fallen by \$4 billion, and now well below the OECD average of 2.37% of GDP¹¹. Indeed, the Commonwealth Productivity Commission recently identified decreased investment in research and development as a prime cause for “mediocre” productivity growth¹².

⁵ https://www.universitiesaustralia.edu.au/wp-content/uploads/2019/05/190116-UA-Pre-Budget-Submission-2019-2020_FINAL.pdf

⁶ Ibid

⁷ Ibid

⁸ London Economics, *The economic impact of Group of Eight universities* (2018), available online at https://www.go8.edu.au/Go8_London-Economics-Report.pdf

⁹ *NSW Productivity Scorecard* (2019), available online at <https://www.industry.nsw.gov.au/business-and-industry-in-nsw/innovation-and-research/research-series/scorecard>

¹⁰ Ibid.

¹¹ <https://www.theaustralian.com.au/higher-education/rd-spending-drops-below-oecd-average/news-story/86f921d3a51522e7efc19f5105732b53>

¹² <https://www.smh.com.au/politics/federal/productivity-growth-mediocre-as-businesses-cut-r-and-d-and-innovation-spending-20190603-p51tvd.html>

We note that the Premier has recently asked her Parliamentary Secretary to help accelerate R&D investment to make NSW a leader in this space, and the NSW Government is to be commended for recognising this as a priority. Previous reports have suggested boosting R&D activity through a collaboration premium to be included in the R&D tax incentive to pull industry towards collaboration with publicly funded research institutions¹³.

A further proposal that has been previously proposed by UNSW is the establishment of an Australian Research Translation Fund as a non-health parallel to the Medical Research Future Fund. This proposal was recommended in a 2018 Parliamentary Inquiry into *Funding arrangements for non-NHMRC Research*¹⁴, and would complement the research funded by the Australian Research Council to encourage the translation of research in priority areas.

While both of these proposals have been targeted at the Commonwealth Government, NSW should consider developing its own initiatives to give it a strategic advantage over other states to attract investment. NSW would be well placed to undertake advocacy to the Commonwealth on reforms to R&D tax incentives and could establish its own fund to promote industry translation of university research.

Recommendation 2: The NSW Government's inquiry into *Accelerating Research and Development* should be welcomed, and addressing its recommendations should be treated as a priority.

Recommendation 3: Additional funding for research and development in NSW should be treated as a priority budget measure.

Recommendation 4: Advocacy to the Commonwealth should be undertaken to seek reform to research and development tax incentives, to further incentivise research, innovation and collaboration.

Recommendation 5: The NSW Government should consider establishing a research translation fund to promote collaboration between universities and industry. Given the cost-benefit of university research, such a fund would be consistent with NSW fiscal policy.

Attracting international students

International education is Australia's largest service industry export, and third largest export industry overall. In NSW, international education contributed more than \$12 billion in export income to the state's economy in 2017-18¹⁵, with the economic benefit extending more broadly. However, with other countries launching additional incentives to study there, and other Australian states increasing their efforts to attract international students, it is critical that NSW takes action to retain our competitive advantage.

While studying in Sydney and NSW offers potential students a premium lifestyle and world class education, there are nevertheless 'cost of living' factors that we need to keep pace with. At present, travel concessions are available for international students in other Australian states, but not NSW. Former Premier Barry O'Farrell announced travel concessions for international students in 2012¹⁶, although this was later cancelled in 2016 with the withdrawal of non-Opal

¹³ Department of Industry, Innovation and Science, *Review of the R&D tax incentive* (2016); and Department of Industry, Innovation and Science, *Australia 2030: Prosperity Through Innovation* (2018).

¹⁴ https://www.aph.gov.au/Parliamentary_Business/Committees/House/Employment_Education_and_Training/FundingResearch/Report at Recommendation 11

¹⁵ Study NSW, *International Education Strategy 2019-2020* at p6

¹⁶ <https://www.smh.com.au/national/nsw/overseas-students-to-get-discounted-public-transport-20121029-28fkv.html>

ticketing. The re-introduction of these concessions would support efforts to ensure NSW retains, and indeed grows its share of international students coming to Australia.

Other proactive efforts to attract international students to NSW universities are also required. While NSW attracts the majority of international students to Australia, Victoria, Queensland and other states are working hard to increase their share. To this end, NSW must ensure that Study NSW is properly resourced and remains fit for purpose.

There is one other measure that NSW should consider for advocacy to the Commonwealth Government. International students often factor in post-study work rights when deciding where to undertake their study. The United Kingdom has just extended its post-study work rights, making them a more attractive option relative to Australia. To ensure that Australia does not lose our advantage over other countries, our post-study work rights should remain at least comparable to similar nations competing for international students. While this issue is the responsibility of the Commonwealth Government, the NSW Government should undertake advocacy to the Commonwealth for Australia to keep pace with our competitors, given the importance of international education to our economy.

Recommendation 6: The NSW Government should consider extending travel concessions to international students, to ensure NSW retains our competitive advantage in attracting students to study here.

Recommendation 7: Study NSW should be adequately resourced and remain fit for purpose in supporting universities and other education providers to attract international students.

Recommendation 8: Advocacy to the Commonwealth should be undertaken for post-study work rights that ensure NSW is able to remain competitive with other states and overseas competitors in attracting international students.

Equitable access

Equitable access to higher education is critical, given the links between education and prosperity. Wide and equitable access to higher education will ensure that NSW is able to draw from a larger and more productive workforce, while also better sharing the prosperity that results from education. Universities, including UNSW, have run a range of programs for some years to improve the access of students from disadvantaged backgrounds to a university education. At UNSW HEPPP funding and significant university resources are dedicated to this. But we are still far from achieving equity in access to Higher Education for disadvantaged students.

The involvement of state government is vitally important to the various efforts to promote equitable access to a university education.

The sole reliance on ATAR scores for university admission is an obstacle to supporting more equitable access to universities, with students from higher socio-economic backgrounds and more advantaged schools generally achieving higher ATAR scores. UNSW, along with other universities, has been developing alternative entry pathways to help mitigate this inequity. We believe the state government could assist us in this endeavour to ensure that high school students are not disadvantaged due to their socio-economic background.

Research indicates that a sense of 'belonging' is important to a student's educational aspirations, as is geography. Outreach activities by universities play an important role in school children considering a university education as an option, while effective transition courses between school and university can help prepare these students for Higher Education. Once students from

disadvantaged backgrounds are at university ensuring the availability of scholarships and other forms of financial support as well as appropriate mentoring and support are effective in assisting them to belong and succeed. UNSW and other universities already undertake these types of activities, and since launching our *Aspire* program in 2007¹⁷, enrolments in university from partner schools have increased by 155%. UNSW is partnering with other Sydney based universities to more effectively and efficiently deliver widening access programs to students in disadvantaged schools in NSW.

However, these equity programs such as *Aspire* are resource intensive for universities to run and HEPPP provides only a very small proportion of the resources needed. The involvement of Government in such programs through public funding and in-kind support will greatly enhance the outcomes they are driving, which in turn will further promote the economic benefits of higher education for NSW.

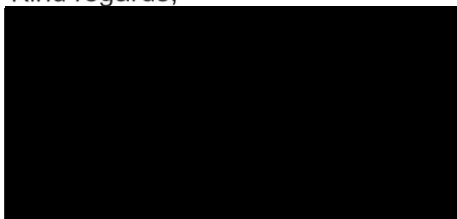
Recommendation 9: The NSW Government should consider how to better support university efforts to increase enrolments of students from disadvantaged backgrounds.

Conclusion

Thank you once again for the opportunity to comment on the Productivity Commission's discussion paper, *Kickstarting the productivity conversation*. A range of university activities support the goals of the NSW Government by driving the state's prosperity into the future and improving the lives of people who live here. However, there is always scope to further capitalise on our sector's value, and this submission outlines some opportunities to do so.

To further discuss any issue raised in this submission, please do not hesitate to contact me on [REDACTED]. We look forward to contributing to this important conversation.

Kind regards,



¹⁷ *Aspire* is UNSW's outreach program, working in communities where the number of school students who attend university is low. Its aim is to support students considering university as a post-secondary school option. Further details can be found at <http://www.aspire.unsw.edu.au/>