



**Submission in response to the Australian Universities Accord Discussion Paper**  
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Education makes Australian citizens healthier<sup>[1]</sup>, wealthier<sup>[2]</sup>, and more engaged with society<sup>[3]</sup>. Government funded research in higher education drives economic productivity<sup>[4]</sup> in ways that other government funding does not. Together, the future of Australian prosperity depends on the education and research undertaken within its tertiary education system.

While the Accord process is directed towards the Higher Education system, I explicitly include all forms of tertiary education in this submission, as these systems must interact with each other if we are to get the best outcomes for Australia.

I propose that at the highest level, Australia's Higher Education system's mission is to

- To ensure that every Australian has the education and skills matched to their ability and aspiration they need to have a productive and happy life.
- Create, curate, teach, and translate knowledge that underpins our culture, society, security, economy, and overall prosperity as a nation.

To achieve these two over-arching objectives, several other objectives must be attained.

**Equity, Access and Inclusion:** Students from all backgrounds need to be able to successfully access any part of the higher education system. There needs to be a higher education entry point for all Australians that ultimately provides access to the entire system, and support for students without means to study on equal terms to those who do.

**Internationalisation:** Maintaining a world-class higher educational program that empowers people of our region and beyond to have outstanding life outcomes, including through migration to Australia, is important for national security, and economic prosperity. We cannot hope to successfully create, curate, teach, and translate knowledge effectively without interacting with the world of knowledge. As a multicultural nation, higher education is a key contributor to social cohesion within our society.

**Resilience:** The higher education system is a foundational sovereign capability, and its core capabilities must be resilient to global shocks, and economically sustainable as a system. This includes ensuring it continues to retain and attract the necessary talent to achieve its mission, as well as sufficient resources to invest in capital and innovative projects aligned to achieving against the mission.

## Short-comings of the Current Australian Higher Education System

### Equity of Access for All

University admissions out of high school are highly correlated with the socio-economic status of students in Australia, as are graduation outcomes. There is substantial friction for students wishing to move between the Vocational Education and Training system (VET) and University, especially limiting the mobility of students to the University system who start in the VET system, and vice versa. While domestic study fees across the system are covered by HECS-HELP and FEE-HELP, there is not sufficient support for students to study full-time without working or receiving family support. This means that student's time for study (and outcomes) is dependent on family income, mobility is highly dependent on family income, and students in rural/regional areas without nearby institutions are at a severe disadvantage compared to other students. Student funding does not recognise the increased support required for socio-economically disadvantaged students.

### Skills and Life-long Learning

Australia consistently under-produces graduates in a number of key areas, with current market signals and government incentives insufficient to deliver requisite numbers of students. In addition, there is poor provision for life-long learning for re-skilling/training, which are necessary for happy and productive citizens. It is much more preferable for people to upskill while still in employment, yet there is little focus or incentive for this to occur via government policy directed towards employers or the individuals. The friction between VET and University systems creates barriers for appropriate courses suitable for people who need to up-skill later in life.

### Research for National Benefit

The research ecosystem system has become highly reliant on funding via cross subsidies from international student fees, with Australian Government expenditure in R&D (GBARD) expressed as a fraction of GDP, the lowest of the world's advanced economies, and continuing to decline<sup>[5]</sup>. Government funding of directed research for national benefit is short-term, *ad hoc*, not strategically planned across agencies, poorly aligned to university planning timescales, and is not fully integrated to the work-force and major equipment needs, leading to shortfalls in key areas of national research need. Synergies between business, government, and university research are under-developed.

### Support of a Range of University Missions

Our current system has emerged from a one-size-fits-all set of rules, that provides resources just sufficient to fund education in typical courses in large metropolitan campuses. Universities fund their distinctive missions with international student fees, the only funding stream that currently provides resources substantially in excess of the activity. This means that rural/regional universities have opened up capital-city campuses catering to international students, while metropolitan universities cater to large numbers of international students through a combination of enrolling them on-campus, digital-remote, and in foreign-based degrees. This system is highly dependent on the current economic rents that can be extracted from the market, is vulnerable to global shocks, and tends to focus all universities' missions to the mean. The emergent

international market driven outcomes do not necessarily align to Australia's broader strategic priorities and are poorly catered for in state and federal planning. Higher Education is becoming a highly competitive international system, and we can expect that the ability to extract economic rents will decline over time as other countries increase their international student intake.

### Three Big Ideas

**Each Australian to have access to a lifetime of education from a Single System:** Bring all tertiary education under Federal control to enable inter-operability between the VET and University systems. Use a single mechanism of subsidy+income contingent loan to fund fees for all accredited *non-profit* Tertiary providers. Harmonise accreditation across VET and University sectors under a single body, noting special care will need to be taken in regulating non-public entities such as for-profit providers. A wide range of hybrid institutions would emerge around many existing universities, providing greater mobility across the education types, and a greater range of sophistication and agility of offerings which combine skills and education. These could extend from current Cert II-level qualifications against a national standard to post-graduate offerings to meet the highest skill levels needs. Such a change would meet many of the objectives of the Business Council of Australia's "Future Proof" discussion paper for the tertiary sector, and would address the jobs and skills agenda, providing a path for all Australians to have access to education for a lifetime. It would also improve the agility of tertiary and higher education institutions to compete and interact in a world that will be increasingly disrupted by digital for-profit providers of skill-training at low-cost and large scale. These providers will deliver only a limited subset of activities, and use their cheaper costs structures to focus on those areas that are profitable, thereby reducing the financial viability of Australia's TAFEs and universities, which have much broader societal expectations.

**A fully funded core sovereign research capability:** Identify the core set of sovereign research capabilities necessary for the future security and prosperity of the Australian people, and fund these activities in full (including overheads), without the need of cross-subsidies from non-domestic sources via a whole-of-government approach. This core set of research should be expected to be uniformly excellent, include curiosity driven research as well as applied, and should go beyond technological areas to support the vibrancy of the Australian democracy and culture. A large fraction of the sovereign curiosity research money should be competitively allocated via the ARC/NHMRC grant system. Applied research funding needs to be allocated by a highly outcomes-focused means, such as through government mission-based funding (top-down), and a separate agile bottom-up ideas-based funding stream. If all universities are expected to undertake excellent research, a base amount of research funding should be made available either through student-based allocations or another mechanism. Alternatively, the requirement that a University undertakes research could be dropped.

**Rethinking the funding of the translation of research for the public good:** A long-term (5-20 years) government mission-based approach of funding translation outcomes in areas of national need should be developed, replacing current schemes for the translation of top-down government priorities. Independent expert-based boards would be given a budget to achieve specific goals within a time horizon, and invest across

industry, government, and the research sector to achieve these goals. In addition, a new suite of agile bottom-up support of individuals' translation ideas should replace current translational grant systems. The funding scheme needs to pay particular attention to the areas of market failure in our translation ecosystem, with progress monitored on short-time scales to defund when progress is deemed insufficient. Panels with expertise could also work with the private sector to rapidly increase investment of such programs when commercially justified. Such a system should not crowd out existing private technology transfer (noting market failure requirement), but better join industry, government and academia together in the research ecosystem.

## **Smaller Ideas to Support the Big Ideas**

**Simplified sustainable student funding:** Demand-elasticity is demonstrably near zero for Australian income contingent student loans. Therefore, for CGS-supported places, move to a single rate for all student fees (as an income contingent loan), varying the CGS support for the place to meet the total cost of the degree. CGS-support could be simplified to a small number of levels, e.g., 3 levels, low-cost, high-cost, and very-high-cost. A few additional bands on both the loan and government contribution would be required if VET is integrated into the single system. This is different than setting HECS to match the graduate's life-time benefit as recommended by the Productivity Commission. The life-time benefit of a degree is very difficult to predict 50 years into the future, is highly correlated with other factors, is at least partially addressed by progressive tax rates, and it is unclear the added complexity provides significant benefits.

Programs seeking to influence university behaviour that have high administrative overheads (within Universities or Government) should be abandoned. Instead, these high-level expectations and KPIs should be included in base expectations of each activities' funding - with adequate provision for the activity within the funding, or within university mission funding (see below). Student funding rates need to make adequate allowances for expected rates of students who need extra support, and need to include reasonable allocations for long-term infrastructure costs. If universities are expected to undertake research at an international standard, student support costs need to include provision for this expense, unless it is covered through another mechanism, like base research funding through university mission funding (see below).

Government should be extremely wary of setting caps or barriers to degrees which it does not like – assuming it knows best over the prospective student's best interests. Government should instead focus on ensuring prospective students have good information about outcomes of different study paths, and a clear way of expressing market signals for student consumption. If the Government wishes to incentivise particular degrees or programs, it should do so with cash-in-hand stipends/scholarships to students (cash-in-hand has high demand-elasticity), but where students retain agency in deciding their future. Not only would such a program deliver students in areas of need, it would improve outcomes and opportunities for students from less advantaged backgrounds.

**University Mission Funding:** Each university has a distinct mission, but one-size fits all funding arrangements do not always support these missions. For example, Universities whose mission is to serve rural and regional areas have more expensive cost structures

than large metropolitan universities. Students from disadvantaged backgrounds require extra support for success, and these students are not evenly distributed across universities, and their support could be funded via this mechanism, where accountability for outcomes could be incorporated. Universities specialise in specific areas of study/research of national interest which do not fit the global cost structures. If universities are expected to undertake research, and this is not funded through students or another mechanism, it could be included as part of Universities' missions' funding to help create the sovereign research capability.

Funding and accountability against university missions should be funded as part of the Accord process to each institution as direct grants, with clear KPIs to be met to assure funding continuation, and through a tendering process where contestability provides better outcomes compared to the stability of long-term funding. It would be reasonable for the Government to ask universities to continue to support their missions by augmenting their activities from alternative revenue streams. These include international fees, philanthropy, and commercial activities with a reasonable set of expectations decided each year as part of setting each university's mission-based funding, and aligned with Australia's over-arching strategic imperatives such as immigration, and the external environment. In practice, universities will remain highly incentivised to continue to pursue external funding when it is readily available to bolster their autonomy, but the system will better make sure nation-wide needs are met, rather than hoping they spontaneously emerge from the system as is presently the case.

**Creating a Sustainable Academic Work force:** The Academic work-force requires some of society's most capable people to fulfil its mission to create, curate, teach, and translate knowledge at the leading edge, yet we find that the attractiveness of the profession has eroded considerably over the last two decades, with an emerging class of academics on rolling short-term or casualised contracts.

It starts with the PhD, whose funding rates have neither kept up with CPI or WPI, and whose financial outcomes upon graduation, particularly in Australia, are not commensurate to the other opportunities these people have in society.<sup>[6]</sup> Improving the stipends and conditions to outstanding PhD scholars that are in a program that operates at a high-global standard will enable the recruitment of outstanding talent. But, given their cost, the number of Commonwealth supported PhD places should reflect the needs both within Academia, and in broader society. Given the low fraction staying in academia, the training afforded to PhDs must include a skillset to prepare them for a wide-variety of activities beyond the university. Increasing the absorptive capacity of Australian business for PhD-level skills should be a focus if we wish to use research to boost productivity. Government translational funding should strongly incentivise non-academic institutions to involve PhD research to increase productivity through a higher quality and higher quantum of Business Expenditure in R&D, which has been dropping rapidly.

A sustainable Higher Education system needs to have a work-force in equilibrium, where most workers in the academy (post education) have prospects of long-term sustained employment. Universities themselves will need to answer to their staff for employing a significant number of staff on casualised, or very short-term contracts. Some of this can be attributed to inappropriate funding for teaching and research,

causing institutions to look for cost savings, but some of it must be attributed to institutions putting other objectives ahead of the reasonable treatment of staff. At present, Higher Education is able to behave in a way that other sectors cannot, because so many of our PhD graduates wish to stay in academia, and are prepared to do what it takes to maximise their chances. The market is already correcting with diminishing demand for students to undertake PhDs, and casualisation a focus of this round of enterprise bargaining. If we focus on appropriate government funding for high-quality PhDs at a level matching societal need, ensuring funding actually matches costs of activities under-taken within a university, then we should expect the EB-system to find an appropriate equilibrium over time.

**Foundational Research:** The Foundational research done in universities underpins the sovereign capability of the nation to increase productivity, improve health and well-being, remain secure, and to solve and adapt to challenges that face society. Government has a special role in funding this activity, as firms cannot typically capture the benefits of this work, but the productivity spill-overs into society, while hard to measure and which emerge with a considerable lag, are very large. This work is principally funded by Government via grants through the ARC for most disciplines, and the NHMRC for health. But universities now outspend government through margin from international student fees. We can expect the margin from international student fees to drop over the coming decades, and as part of a sovereign research capacity, Australia should set a minimum level for government sponsored foundational research as a fraction of GDP, in line with other nations with advanced economies.

**Making the Most of Government Spending:** While Australia achieves large productivity spill-overs from its university research investments, this same analysis shows it has not achieved productivity spill-overs from other government spending such as defence<sup>1</sup>. With unprecedented expenditure in defense forecast over the next two decades, Australia can ill-afford the status quo, and considerable design and effort must be put in to getting productivity gains for the economy from government expenditure, rather than just the procured product. The United States and Israel are examples of what is possible, but most advanced economies do this better than Australia. Government mission-based funding is one avenue to drive society-wide involvement, but regular government spending (e.g. defence) will require its own design, whereby Australian business and universities play a much larger role in delivering capability than in the past.

<sup>[1]</sup> <https://www.education.gov.au/integrated-data-research/benefits-educational-attainment/healthy-behaviour>

<sup>[2]</sup> <https://grattan.edu.au/report/mapping-australian-higher-education-2018>

<sup>[3]</sup> <https://www.education.gov.au/integrated-data-research/benefits-educational-attainment/civic-engagement-tolerance-and-trust>

<sup>[4]</sup> Elnasri, A. and K.J. Fox (2017), "The Contribution of Research and Innovation to Productivity," Journal of Productivity Analysis 47, 291–308

<sup>[5]</sup> <https://www.oecd.org/sti/scoreboard.htm>

<sup>[6]</sup> Go8 London Economics 2019 [https://www.go8.edu.au/Go8\\_London-Economics-Report.pdf](https://www.go8.edu.au/Go8_London-Economics-Report.pdf)