Higher Education Base Funding Review
University of Melbourne Submission March 2011
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EXECUTIVE SUMMARY

The Problems:

Funding and standards
- funding levels are currently set independently of standards
- increasing risk of courses not meeting domestic standards and falling behind international benchmarks
- risks will be increased by the Tertiary Education Quality and Standards Agency (TEQSA)
- research an additional standard for universities

Declining real funding for Commonwealth-supported students
- real purchasing power of Commonwealth-supported place (CSP) funding has declined
- consequences include an increase in student:staff ratios, up from 13 to 1 to 20 to 1 over the last 20 years, and increasing casualisation of the academic workforce
- international comparisons show Australian students are less satisfied with student:staff interaction

Postgraduate coursework Commonwealth-supported places
- there are legitimate reasons why postgraduate coursework is more expensive than undergraduate coursework
- acknowledged in deregulated postgraduate sector and previous public funding systems
- but postgraduate coursework CSPs are now funded at undergraduate rates, threatening the viability of high-quality postgraduate courses

Reliance on international students
- profits on international students necessary to maintain existing standards
- average international fee more than $5,000 above average income per place for all students
- subsidy from international students estimated at an average $1,200 per domestic student across the sector
- but international student numbers are now in decline, threatening economic viability of current system

Problems are structural
- further ad hoc funding increases are not a long-term solution
- needs to be an institutional change that will keep standards and funding in alignment
- base funding review provides opportunity for principles-based strategic settings that drive longer-term viability

Principles:
- Quality: Benchmarked against local and international standards
- Responsiveness and diversity: Capacity and incentives to meet shifts in demand by discipline, institutional type and delivery methods
- Fairness: All who can benefit from higher education will have the opportunity to do so, with the assistance of income support when necessary, tuition subsidies, and income-contingent loans
- Reasonable cost to taxpayers: Students receive private benefits from higher education and should contribute to its cost
- Stability: Higher education institutions need to be able to plan for the long term, without over-reliance on international students.

The Solutions:

An independent base funding price regulator
- An independent base funding price regulator needed to ensure standards and funding are in alignment
- Models in ACCC and other professional price regulators
- Would provide binding advice to government on base funding levels
- government would still decide mix of public and private funding

Elements of base funding
- all elements of funding incorporated into a per student base funding rate
- rates to differ by level of qualification
- rates to differ by discipline or groups of disciplines
- course standards set by TEQSA
- national and international accreditation standards determine quality and required resources
- teaching technologies a major variable
- component built in to cover infrastructure costs
- research component for universities

Partial deregulation of student fees
- necessary to let students invest more in their education
- necessary to make some universities more competitive and all universities more responsive in a demand-driven system
- necessary to simplify the price regulator's task
- 30% on base for undergraduates and postgraduates

Participation effects of tuition fees
- local and international evidence shows that overall higher education participation and attainment are not reduced when tuition fees are charged

the reason is that private benefits of higher education significantly exceed costs
- low SES students consider costs and benefits in the same way as other students
- the costs and risks of going to university are lower than the costs and risks of not doing so

Public funding rationales
- pays for public benefits of higher education
- these include producing graduates to meet workforce needs, research, community engagement, reduced social insurance costs, and greater social capital
- helps graduates smooth expenditure over time
- reflects public concern over tuition fees

Public funding levels
- a minimum floor public contribution recognising research, community engagement, and other public benefits
- discipline-related additional public contributions, reflecting course costs and relative private benefits to graduate

Diagram of Proposed Funding Framework:

- TEQSA provider and course standards
- Professional admission requirements
- International accreditation requirements

Independent base funding price regulator
(ensures funding sufficient to meet standards)

Base funding rates set by discipline and qualification level

Government sets public subsidy in base rate, residual paid by student

Student charges

HELP loan scheme for student charges

Universities able to charge fees up to 30% above the base rate
Recommendations

Recommendation: That a new system of setting base funding rates be developed.

Recommendation: That a research component be included in the Commonwealth-supported place base rate for fields of study meeting the research requirements of the Higher Education Standards Framework. This should vary with different levels of research activity.

Recommendation: That the requirements of meeting Tertiary Education Quality and Standards Agency (TEQSA) discipline standards are included in base funding rates.

Recommendation: That base funding rates take into account reasonable requirements of qualifications recognition.

Recommendation: That infrastructure costs are incorporated into the Commonwealth-supported place base rates.

Recommendation: That postgraduate coursework Commonwealth-supported places have a higher base funding rate than undergraduate Commonwealth-supported places.

Recommendation: That existing performance-based low SES funding is sufficient, and no additional low SES loading is needed in base funding.

Recommendation: That a base funding price regulator set the minimum rates higher education providers are entitled to receive for Commonwealth-supported places.

Recommendation: That the base funding price regulator should be independent of TEQSA, and consideration be given to placing it in an existing price regulator.

Recommendation: That the base funding review’s cost study be used to identify the most serious immediate funding issues, with necessary urgent funding changes to be made including with respect to individual clusters or disciplines before the base funding price regulator’s decisions.

Recommendation: That higher education providers be permitted to set maximum student fees of up to 30% more than the base funding rates.

Recommendation: That the public contribution to the base funding rates take into account course costs and private benefits to graduates.

Recommendation: That the research component of the base funding rates should be paid by the government as a public contribution.

Recommendation: That the community engagement activities of universities be acknowledged in the public contribution to the base funding rates.

Recommendation: That the public contribution to the base funding rates take into account the future tax contribution of graduates and spread higher education expenses over time.

Recommendation: That the public contribution to the base funding rates recognise public expectations of financial support for higher education.

Recommendation: That the public contribution to the CSP base funding rate include a floor subsidy paid for all students, with discipline-related additional contributions based on course costs and private returns to graduates.
1. WHY WE NEED TO CHANGE

The government has set ambitious goals for Australia’s higher education system. It plans to increase the proportion of 25-34 year olds with university qualifications from 34% now to 40% by 2025. To achieve that goal in the current age cohort would require nearly 180,000 additional completions. Still more student places will be needed to accommodate the larger age cohorts who will start moving into the universities between now and 2025. And the government wants these students educated at an internationally-benchmarked quality standard.

The current funding system is not designed to achieve these goals. Funding rates are set without reference to the standards that universities are required to meet. New and higher standards are emerging through professional admissions requirements, international accreditation, partner programs with overseas universities and soon the Tertiary Education Quality and Standards Agency (TEQSA). Universities will have more formal research expectations. Yet as these standards expectations have increased, the purchasing power of funding for Commonwealth-supported places (CSPs) has decreased.

Universities have sustained themselves with a series of patch-ups. To save money, they have employed a large casual teaching workforce to teach at lower cost, and increased student:staff ratios. Yet this makes improving the student experience more difficult, and has made it hard to offer the full-time permanent academic jobs needed to renew the academic workforce. To increase revenue, universities have enrolled hundreds of thousands of fee-paying international students. Surpluses earned on their fees sustain CSP students and help maintain research output. These surpluses are threatened by declining international student numbers.

Within the current funding policy framework, options are limited. Some universities could spread their international student revenue over fewer domestic students, and maintain or increase quality levels. But most universities are not in a market position to do this, and it would jeopardise achievement of the government’s 40% attainment target. The emerging higher education policy framework will put still more pressure on an already overstretched funding system. The coming surge in enrolments will require a significant infrastructure expansion that has no obvious source of finance. TEQSA may impose new standards with as yet unfunded cost implications for universities.

The funding system is increasingly breaking down, relying on unsustainable short-term fixes now and unable to support planned policy changes. A fundamentally flawed funding system requires fundamental reform, which will be outlined in sections 3 to 5 of this submission.

1.1 Problems in the current system

1.1.1 Standards-driven education

A key element of the quality agenda is meeting standards—and a key problem with the current base funding CSP system is that there is no connection between funding and standards. Quality standards can be framed in many different ways, including defining appropriate course content and learning outcomes, appropriate teaching methods, infrastructure requirements, and the broader student experience. Though TEQSA will introduce standards for disciplines that have historically lacked externally-set minimum requirements, meeting local and international standards is not a new experience for universities.

In some cases, universities have for decades been meeting the standards required by Australian professional admission organisations. Increasingly, Australian universities must also meet international
standards. In some cases, these standards come from programs created with international partners. More commonly, international standards are indirectly imposed through Australian professional bodies benchmarking themselves against their equivalents in other countries, or directly set when Australian universities are accredited by academic or professional associations overseas.

For example, business schools or faculties are accredited by the Association to Advance Collegiate Schools of Business (AACSB International) and/or European Quality Improvement System (EQUIS). Standards set through the International Union of Architects and the International Council for Building facilitate the movement of architecture and construction graduates internationally. The UK Chartered Institute of Building has recently accredited its first Australian property course. Engineering programs are accredited by Engineers Australia, which benchmarks into International Engineering Alliance accords designed to ensure mutual recognition of engineering qualifications. Some veterinary schools are accredited by the Royal College of Veterinary Surgeons (UK) and the American Veterinary Medical Association.

Meeting international standards is often essential and always valuable for Australian universities and their graduates. International students need qualifications recognised in their home countries or other places where they may seek employment, and Australian students need qualifications that allow them to work overseas. The value of an Australian qualification is radically reduced if it cannot meet these standards.

Veterinary science is a good example of how the current funding system makes meeting international accreditation standards difficult. Australian, American and UK accrediting bodies have recently synchronised a large number of accreditation standards. These include a student:academic staff ratio of 7 to 1, a student: support staff ratio of 1 to 1, at least 20 livestock animals per student, 50 companion animals per student, access to farms and diagnostic laboratories, and cleaning practices which must now be at human health standard. Recent changes have increased the need for extramural clinical and farming work.

None of these recent accreditation requirements are reflected in the CSP base funding rate for veterinary science. Unsurprisingly, at the University of Melbourne veterinary science has a larger gap than any other discipline between CSP rates and actual average costs per student. A submission to the base funding review from the deans of the established veterinary science schools shows that all four are operating at significant deficits.

There is an implicit but powerful link between funding rates and the standards a university can offer. Governments and other external bodies expect high standards, but in practice standards are the best that can be afforded on the money available. Graduates and professions must make do with whatever universities produce. This policy has its origins in an era when policymakers could assume a captive domestic Australian student and labour market. But with externally set standards and internationally mobile student and labour markets, the drivers need to be reversed. Instead of funding driving standards, standards must drive funding.

1.1.2 Income and cost trends
Instead of standards driving university funding levels, they have been driven by the Commonwealth’s fiscal policy and its political judgments on student contribution levels. From the mid-1990s, tight federal budgets provided the rationale for an indexation system that cut total per student funding in CPI-adjusted terms and shifted some costs to students. Between 1994 and 2002, spending per CSP dropped by an average of $2,000. The drop in public spending was even larger, at nearly $4,000. In the mid-2000s universities benefited from a return to strong surplus budgets and increased student contributions (now directed to universities rather than the Commonwealth), before budget constraints again took over and per student funding levels
flattened out. Though there has been some recovery in average public funding levels, they remain well below the mid-1990s and low compared to other OECD countries.

Recent funding increases are welcome, but figure 1 overstates the renewed purchasing power of average CSP income. The consumer price index understates the actual cost increases universities experience. In common with other labour-intensive professional service industries, higher education has consistently experienced above-CPI cost inflation. This reflects market competition for highly-skilled staff and constraints on productivity growth when personal interaction is required. For example, school cost increases, as measured the Australian Government School Recurrent Costs index (AGSRC), typically run well ahead of the CPI. As figure 2 shows, except for the year the GST was introduced, the annual increase in the consumer price index is always lower than labour price index (LPI) for professional, scientific and technical services, which is now used for indexing university grants (with a 10% discount). This part of the labour price index records salary increases in competitor industries such as scientific research, architecture, engineering, computer systems, design, law, accountancy, veterinary science, and management and other consultancy.

**FIGURE 1: AVERAGE FUNDING FOR COMMONWEALTH-SUPPORTED PLACES**

![Commonwealth-supported place funding graph](https://example.com/figure1.png)

*Source: DEEWR, Consumer Price Index adjusted. The funding for a Commonwealth-supported place is the total of the Commonwealth contribution and the student contribution. Funding rates differ between disciplines, with figure 1 showing the average total amount.*
Source: Australian Bureau of Statistics. The labour price index measures salary costs in equivalent jobs, and is therefore not influenced by changes in the job mix in an industry.

Though the differences are 2% or less in most years, cumulatively this can have a large effect. Figure 3 starts with the 1997 salary for a University of Melbourne level C academic (a senior lecturer), showing what the total salary outcomes would have been using the two indexation methods. By 2010, the LPI arrives at a salary that is nearly $11,000 a year higher than if the CPI had been used for indexation. In practice, universities have had to match salaries in competitor industries, with the inevitable implications for total expenditure.

For non-salary expenditure, university grants and student contributions have long been indexed using the CPI. This is to continue under the new indexation system. Clearly, however, the bundle of goods and services consumed by universities differs from the goods and services used to construct the CPI. Unlike for labour costs, there are few indices that permit easy comparison of these costs over time. However library journal costs are one area in which we can see broad cost trends. Unfortunately, monopolies in the electronic journals market are able to increase costs way beyond inflation in Australia or the source countries. Table 1 shows cost increases between 2006 and 2010, with journals in most fields of study increasing their costs between 31% and 40%. The Australian CPI over the same period is less than half this rate of increase, at 15%.

A further complication is that universities must now provide facilities and services that did not exist when the current funding system was designed. For example, learning management systems that provide websites for each subject and campus wi-fi are now expected by all students. These technologies improve service to students, but provide few if any cost savings for universities. Disciplines need to keep up with technological changes in the professions, forcing rapid depreciation of IT investment. The pace of innovation in the IT industry means that IT costs are going to continue increasing.

Universities have been squeezed between deregulated costs and tightly regulated income.

**TABLE 1: INCREASES IN JOURNAL COSTS**

<table>
<thead>
<tr>
<th>Cost increase band 2006-10</th>
<th>Number of fields of study</th>
<th>% of all fields of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>21-25%</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>26-30%</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>31-35%</td>
<td>9</td>
<td>29%</td>
</tr>
<tr>
<td>36-40%</td>
<td>11</td>
<td>35%</td>
</tr>
<tr>
<td>41-45%</td>
<td>6</td>
<td>19%</td>
</tr>
<tr>
<td>46%+</td>
<td>2</td>
<td>6%</td>
</tr>
</tbody>
</table>

1.1.3 Implications for students
The funding squeeze has significant implications for the student experience. By forcing universities to increase student:staff ratios, it reduces opportunities for interaction between students and staff and makes it less likely that students will reach their full academic potential. This runs counter to the government’s quality agenda, and puts into doubt the capacity of universities to meet fully local and international standards. With a large expansion in student enrolment already underway as the system moves towards the 40% attainment target, an over-stretched academic workforce is poorly-placed to deal with new students who are less-well prepared for higher education than most current students.

Figure 4 shows student:staff ratio trends from 1990 to 2008. From around 13 to 1 in 1990, the most recent Universities Australia figures put them at nearly 20 to 1 sector-wide in 2008, as seen in figure 4.

Sources: University of Melbourne and Universities Australia. Based on all staff with a teaching function, onshore students only from 2001. The ratio dropped 0.8 between 2000 and 2001. For some universities, the data understates staff numbers due to outsourcing of teaching.
Universities Australia no longer publishes the ratios at a discipline level, but earlier figures indicate large differences between fields of study, with particularly high ratios in management and commerce. At the University of Melbourne, the overall ratios are somewhat lower.

Student:staff ratios are a proxy for the staff resources available for teaching. Leading international universities have student:staff ratios that are lower than the Australian norm. At highly-ranked American public universities such as the University of California at Berkeley and the University of Michigan at Ann Arbor the ratios are in the mid-teens to 1. At Oxford and Cambridge, student:staff ratios are around 11 to 1, and at leading American private universities less than 10 to 1.

High student:staff ratios in Australia are one reason Australian students are less satisfied with their student experience than their American peers. Table 2 compares the American National Survey of Student Engagement and the Australasian Survey of Student Engagement (AUSSE). It shows that American students typically see teaching staff as more responsive than Australian students. American students are much more likely to perceive that they receive prompt feedback on their work. A majority of Australian students believe that they never or only sometimes receive prompt feedback on their work. Australian students are also much less likely than their American counterparts to discuss academic work with their teachers. Consistent with these results, senior Australian students are only half as likely as American students to rate their educational experience as ‘excellent’.

In addition to perceptions surveys, international research on university class sizes finds that larger classes have negative effects on academic outcomes.\(^1\) However results vary between studies in some respects. Separate studies at a British university and an American university found that the relationships between class sizes and academic results are non-linear. At the smaller class sizes, adding more students has a detrimental effect on grades. However, in already large classes adding more students has little further negative effect. A study at an Italian university, by contrast, did not find this non-linear effect.\(^2\) The American study found that class size effects were greater at the higher levels of academic achievement. Large classes substantially reduced the probability that a student would achieve an A-grade, but had a much smaller impact on a student’s chances of achieving at least a C-grade. The Italian study included after-graduation salary data, and found graduates from smaller classes had higher incomes.

All the studies acknowledge the complexity of examining class size effects. There are many potential confounding variables, which they control for within the limits of the available data. Studies that look at many disciplines (such as the American study cited above) find that class size effects vary between disciplines. There are a wide range of possible causal mechanisms. Larger classes tend to have students of more mixed ability, can be more difficult to manage, are easier for students to miss without being noticed, give students little opportunity to ask questions, and teaching staff may have less time to deal personally with students, among other possibilities. The total effects on grades are typically modest compared to other factors, such as a student’s ability and motivation. Nevertheless, overall it is clear that all other things being equal larger classes are worse for academic outcomes. A further response to tight funding in Australian universities has been increased use of casual staff. They are paid only during semester, with no financial support given for scholarship or research.

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### TABLE 2: AUSTRALASIAN AND AMERICAN STUDENT AND STAFF INTERACTION, FIRST YEAR STUDENTS

<table>
<thead>
<tr>
<th>Discussed your grades or assignments with teaching staff (%)</th>
<th>American research universities (high)</th>
<th>Baccalaureate college (arts &amp; sciences)</th>
<th>Australasian universities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Never</strong></td>
<td>9</td>
<td>5</td>
<td>38</td>
</tr>
<tr>
<td><strong>Sometimes</strong></td>
<td>39</td>
<td>36</td>
<td>42</td>
</tr>
<tr>
<td><strong>Often</strong></td>
<td>39</td>
<td>41</td>
<td>16</td>
</tr>
<tr>
<td><strong>Very often</strong></td>
<td>15</td>
<td>18</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Received prompt written or oral feedback from teachers/tutors on your academic performance (%)</th>
<th>American research universities (high)</th>
<th>Baccalaureate college (arts &amp; sciences)</th>
<th>Australian Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Never</strong></td>
<td>8</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td><strong>Sometimes</strong></td>
<td>36</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td><strong>Often</strong></td>
<td>39</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td><strong>Very often</strong></td>
<td>16</td>
<td>21</td>
<td>7</td>
</tr>
</tbody>
</table>

*Sources: American National Survey of Student Engagement and the Australasian Survey of Student Engagement.*

The LH Martin Institute report *The Real Academic Revolution* (2010) shows that the proportion of staff employed on a casual basis increased significantly in the 1990s, before stabilising in the 2000s at around 20% (p.14). This full-time equivalent (FTE) measure greatly understates the number of people employed by casuals at universities, since one FTE could be numerous individuals all working a few hours a week. This raises numerous management complexities and risks for the student experience as courses rely on a large group of part-time staff. As *The Real Academic Revolution* notes, casual staff are a diverse group. Temporary employment lets universities bring in expertise that might not otherwise be available. However, heavy reliance on casual teaching staff is not ideal. Casuals are often less available to students and not always as well-qualified as permanent staff. The inability of universities to offer PhD graduates full-time permanent employment has also contributed to significant problems with the ageing of the academic workforce.

### 1.1.4 Reliance on international student fee revenue

International student fees have filled the gap between costs and CSP revenues. Table 3 provides EFSTL (effective full-time student load) estimates of the financial contribution that international students make to CSP students. The model assumes that total teaching revenues (domestic plus international) approximate total teaching costs, defining these broadly. As universities are organised as teaching and research institutions (see appendix 1), international student fees also sustain the research and scholarship of academic staff. In this model, the weighted average fee is assumed to be equivalent to average costs per EFTSL. As the average CSP EFTSL brings in less revenue than the average weighted fee these students are subsidised by around $1,200 per EFTSL, funded by charging international students $5,300 above the weighted average fee.
TABLE 3: ESTIMATED DOMESTIC STUDENT AVERAGE INTERNATIONAL FEE SUBSIDY, 2009

<table>
<thead>
<tr>
<th>Average domestic EFTSL income</th>
<th>Average international fee</th>
<th>Weighted average fee</th>
<th>International premium on average fee</th>
<th>Subsidy per domestic EFTSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>$14,947</td>
<td>$21,382</td>
<td>$16,125</td>
<td>$5,257</td>
<td>$1,178</td>
</tr>
</tbody>
</table>

*Source: University of Melbourne. Calculations based on fees sourced from university websites, DEEWR enrolment data, and CSP funding rates. DEEWR international student fee data is not used as it under-reports income for some institutions.*

On this basis, across the entire sector, revenue per CSP EFSTL would need to be 8% higher to reach the current weighted average fee. This can be taken as a rough indicator of the CSP funding increase that would be needed to maintain current output and standards without international students. However, at some universities (including Melbourne) revenue per CSP would need to be about 20% higher to maintain current average per student spending without international students. The lower student:staff ratios at the University of Melbourne seen in figure 4 reflect in part the higher fee premiums paid by our international students.

Clearly, Australian higher education relies on international student fee income to maintain existing standards and output. It is particularly reliant on international students in business faculties, who make up nearly half of all international enrolments in Australian universities. We cannot assume that cross-subsidies from international students will continue at recent levels over the short or medium terms. The high Australian dollar is making Australian education more expensive compared to our international competitors, who can now offer smaller classes and better facilities at comparable prices. International students are rightly beginning to ask why they should support Australian students to such an extent. More restrictive immigration policies are also having an effect. The cumulative consequences of these trends can be seen in statistics on visas applied for and granted for higher education students. These declined 11% between 2008-09 and 2009-10 (figure 5). The final six months of 2010 (the latest published data) compared to the last six months of 2009 indicate a more serious downward trend of nearly 18%.

FIGURE 5: INTERNATIONAL STUDENT VISA APPLICATIONS AND GRANTS

*Source: Department of Immigration and Citizenship, Student Visa Program Report.*
Given the implicit subsidy from international to Australian students, loss of international income for the university sector will have significant consequences for the quality of higher education that can be offered to domestic students.

Indeed, the downturn in international student numbers may have more serious effects than the raw numbers suggest. The International Student Barometer surveys show that among current international students, cost is an Australian competitive advantage (table 4). Compared to international students in our competitor countries, students who choose Australian universities are more likely to give financial factors as one of the top five reasons for their choice. These results suggest that universities will need to restrain prices to increase competitiveness. The contribution of international students to supporting domestic students comes from both aggregate numbers and price; both are likely to decline.

Clearly there are worrying times for Australian universities ahead, as international numbers fall. Yet whatever the immediate causes of a downturn, it has always been inevitable over the long run that international student numbers would stabilise and eventually fall. The dominant source countries for international students are developing their own education systems. New competitors are entering the market, and Australia’s early mover advantage will be eroded by wider choice across the international market.

So heavy reliance on international student fees to cross-subsidise other university activities can never be a permanent solution to domestic funding issues. It has always had uncomfortable elements for universities, in skewing enrolments to faculties that attract international students, and charging students from developing countries far more than Australian students taking the same degree. But over the medium term international student fee income has been vital. A decline in international student numbers that is much sooner and larger than anticipated will have major consequences for the financial capacity of Australian universities.

1.1.5 The weaknesses are structural
CSP funding rates fall well short of average per student income in 2011, but this is not the key conclusion to draw from this section. This is just a symptom of the funding system’s central problem: it has no way of connecting funding with standards. It follows that any ad hoc increases to per student funding rates would address the symptom but not the underlying problem. The symptom would quickly re-emerge as standards altered, costs increased, visa rules changed or federal budgets tightened. The obstacles to the government’s quality and attainment agenda would remain. Australian higher education has a structural problem, and it requires a structural solution.

| TABLE 4: TOP FIVE REASONS FOR CHOOSING AUSTRALIA COMPARED WITH INTERNATIONAL ISB GROUP |
|---------------------------------|-----------------|---------------|
|                                | Australian ISB | International ISB | Variation |
| Reputation of education system  | 37%            | 45%            | -8%        |
| Opportunity to live in the country | 37%          | 28%            | 9%         |
| Cost of study                   | 30%            | 23%            | 7%         |
| Reputation of institution       | 27%            | 47%            | -20%       |
| Cost of living                  | 25%            | 12%            | 13%        |

*Source: Mary Varghese & Kevin Brett, International Student Barometer Project 2010: National Report*
1.2 Changed policy framework

The current system's structural flaws will be further exposed by major policy changes proposed by the government. A compulsory standards-based approach to quality will be applied to all of higher education, widening the gap between what must be delivered and the available funding. A demand-driven funding system will put new pressures on the higher education funding system, especially where significant enrolment increases require new infrastructure.

1.2.1 Higher Education Standards Framework

Draft legislation for the Tertiary Education Quality and Standards Agency (TEQSA) sets out a range of new standards for universities: the Provider Registration Standards, the Provider Category Standards, Teaching and Learning Standards, Information Standards, and Research Standards. The legislation gives scope for further standards to be created. Some of these standards replace existing standards, which have been monitored by the Australian Universities Quality Agency. Others are likely to codify existing practice. However, overall there is likely to be substantial increases in regulation and associated compliance costs.

The specific implications of the Provider Registration Standards, the Provider Category Standards, and the Teaching and Learning Standards are discussed in sections 3.1.1 and 3.1.2 below. Specific, externally-set standards reduce the scope for the trade-offs universities have made to ensure that they stay within their funding limits. Policy consistency suggests that if a government agency sets minimum standards that higher education providers must meet, the government must also ensure that higher education providers have the resources needed to meet those targets.

1.2.2 Demand-driven funding and the 40% target

From 2012 public universities will move to a ‘demand-driven’ funding system. This has an unexpected consequence – a temptation for universities to avoid teaching disciplines that are much in demand but cannot be funded adequately under the present CSP funding rate.

Under current policies, universities sign funding agreements with the Commonwealth. These agreements stipulate the total number of Commonwealth-supported places to be provided and detail the allocation of CSP places across particular funding clusters, each of which contains one or more field of study. The government is now indicating it will move from this command-based system of allocating places. Instead, it will create a quasi-market in which universities respond increasingly to demand, as expressed through student applications. This has significant implications for the role of per-student prices in the higher education funding system.

Under current funding agreement arrangements, discipline-level prices need not reflect costs with any precision. The discipline prices (Commonwealth plus student contributions) are used primarily to calculate a total funding amount. Universities can distribute the money they receive between disciplines according to their own criteria. This side-steps some complexities of setting prices without markets. Universities can incorporate local cost data into their internal formulas for allocating funding. Financially, what matters is that across the institution the average funding rate is sufficient to meet average costs (now achieved with international student fees).

Under a demand-driven funding system, per-student prices matter a lot more. Without government prescribing use of CSPs, there is a financial incentive to re-organise student load to improve the university’s financial position. Universities can scale back courses, disciplines or faculties that are uneconomic on the available income. They can avoid expanding or moving into fields that are loss-making or high financial risk, even if demand alone would suggest that they should. Given the reputational consequences of an adverse TEQSA report, phasing out of teaching activities that cannot support themselves may
be prudent. The funding system needs price-setting mechanisms that avoid these outcomes.

Though the initial enrolment response of universities to the prospect of a demand-driven system has been very positive, this is likely to be because they have scope to price at marginal cost. Higher education has a mix of fixed and variable costs. Fixed costs do not vary with the level of output, while variable costs move with output levels. The costs of infrastructure, course development, and regulatory compliance all tend to be fixed. In the medium term, some staff costs are also fixed, with salaries to be paid regardless of how many students are enrolled. Variable costs change with the level of output. In higher education, casual staff time for teaching, assessing, advising and administering students increases with enrolments. The average cost per student is the total fixed and variable costs, divided by the number of students.

The marginal cost of an additional student can be higher or lower than the average cost. Up to the point where existing fixed capacity is fully used, marginal cost will only be the variable cost and therefore below the average cost. For instance, adding another student to an existing lecture theatre is not expensive. Some universities are adding an additional teaching period to stretch their infrastructure further. But once enrolment reaches existing fixed capacity, significant new costs are incurred as infrastructure is expanded. At this point, the marginal cost of an extra student can greatly exceed the average cost, due to the new infrastructure expenses. The government’s goal of a large and sustained increase in Australian higher education attainment, so that 40% of 25-34 year olds have a bachelor degree or above by 2025, will require large increases in infrastructure capacity.

For the demand-driven funding system to work as planned, sufficient average funding at the discipline level is needed. Otherwise, the danger is that the supply of student places will be distorted by the financial incentives. Given the role of infrastructure in average cost, low funding rates will bias the system towards courses with relatively low infrastructure costs. If funding levels are adequate, universities will be able to supply places based on rational criteria—such as to meet demand or specialise in areas of strength—rather than have their choices dictated by funding model that favours some disciplines over others. Sections three and four explore in more detail what is required to ensure this outcome.

**Recommendation:** That a new system of setting base funding rates be developed.
2. PRINCIPLES FOR A NEW FUNDING SYSTEM

The funding system needs to be rebuilt from first principles. A framework based on clear principles can meet the needs of students, universities and government in a rational way. Principles can help avoid ad hoc development of policies that are poorly coordinated or offer only short-term solutions to problems. The following five principles are a guide to first principles, consistent with the government’s attainment and quality agendas.

Quality: We should benchmark against and aspire to international quality levels. Higher education providers must have sufficient resources to meet the standards set by TEQSA, international accreditation agencies and professional bodies. Funding rates will vary between disciplines, reflecting their different costs.

Responsiveness and diversity: A good funding system will provide the capacity and incentives to respond to shifts in demand by discipline, institutional type, and delivery methods. It will let students make their own higher education investment decisions.

Fairness: A good funding system will ensure that all who can benefit from higher education have the opportunity to do so. It provides enough places, institutions which can accommodate the diversity of student needs and preferences, affordable prices, student loans to eliminate up-front fees, and student income support where necessary. Public funding acknowledges the public benefits of higher education.

Reasonable cost to taxpayers: Universities produce public benefits, but there are finite public funds for higher education, as for other government responsibilities. From the private benefits they receive, students need to make a contribution to the cost of their education.

Stability: Stable but adaptable institutions give higher education providers capacity to plan for the long-term, confident that their assumptions will not be overturned by major policy shifts. The domestic student pricing system should not cause over-reliance on international students, or risk significant under-supply of domestic places.
3. ESTABLISHING BASE FUNDING

The follow four sections of the submission cover the base funding review’s key policy issues.

Section 3 deals with the issue of what costs should be included in the CSP base funding amount.

Section 4 sets out an institution, an independent base funding price regulator, that would have responsibility for calculating and setting the level of base funding.

Section 5 proposes that students and universities be given the opportunity to go beyond the base funding level, to a higher investment in education.

Section 6 discusses the public contribution to the CSP base funding amount.

3.1 What is included in average funding?

The average cost to meet quality standards is the base data needed to determine average funding. But this still leaves major questions, many of which are noted in the review’s background and consultation papers, on what costs should be included in the base. The following sections discuss these issues.

3.1.1 Provider Registration Standards, including research

Under the TEQSA legislation, Provider Registration Standards will set out requirements that all higher education providers must meet in order to be registered and able to offer courses. These standards will be decided by the federal minister based on the advice of a Higher Education Standards Panel. In the draft Provider Registration Standards, standards 3 to 6 require all higher education providers to have specified governance and management capacities. Provider standard 7 sets out physical and electronic infrastructure requirements. These standards involve minimum fixed costs which all higher education providers incur, before they enrol any students in the case of new providers. The costs of meeting these standards need to be incorporated into an average cost pricing model.

The provider standards distinguish between different types of higher education institution. Research is the key activity that differentiates universities from other types of higher education provider. Under the provider standards, all universities will need to create new knowledge or engage in original creative endeavour in at least three broad fields of study. In these fields, universities will need to offer research masters degree and/or PhDs. In addition, universities need to demonstrate ‘the commitment of teachers, researchers, course designers, and assessors to the systematic advancement of knowledge’ (emphasis added). A culture of sustained scholarship is needed in all fields of study in which higher education courses are offered.

These requirements of a university raise one of the most difficult issues faced by the base funding review—whether a research component should be included in per student base funding. The review’s consultation paper notes the Panel’s view that ‘scholarship’ is included in base funding, and acknowledges that in practice higher education institutions use base funding for research (see appendix 1 for more detail). However confirming that scholarship—defined as continuing engagement with the relevant subject and discipline knowledge and research—is included in base funding does not settle the issue. In setting out the requirements for universities and their staff, the Provider Category Standards clearly intend that university teaching staff go beyond keeping up-to-date with research. A commitment to systematically advancing knowledge strongly implies that most if not all university teaching staff need to be research active.

University research is supported in part by a range of research funding programs. But the
different components of the regulatory and funding systems need to be connected. Despite some welcome promised increases in research block grants, the resources in existing research funding programs are insufficient to fund research by all existing teaching and research staff employed by universities. Some grants specifically exclude funding for salaries. This shortfall will increase under the demand-driven funding system. Teaching staff numbers will grow with student enrolments, but there are no plans for matching increases in research funding. Further, research funding programs allocate money according to funding formulae that relate to research performance. These formulae take no account of undergraduate student numbers. Increased overall research funding through existing programs would not necessarily support research activity by new teaching and research staff.

The most practical way to integrate the Provider Category Standards and the funding system is to include a research component in the CSP base rate. Its main purpose would be to cover the salaries of researchers in the non-teaching part of the year. It would support academics without specific research grants, as well as academics whose salaries are not supported by their grant. For example, the chief investigator’s salary for project leaders is not funded as part of Australian Research Council grants. The costs of specialised research infrastructure would still be covered by other research funding programs.

All fields of study in a university that met the relevant Higher Education Standards Framework requirements would be eligible for a research component in their CSP funding. Under current draft Provider Category Standards, this would at minimum require that they offer research qualifications and engage in knowledge creation. The Research Standards may impose more detailed or higher standards that must be met. A research funding component in the CSP base rate would ensure that universities could maintain a teaching-research nexus. However, some activity-level criteria will be needed to ensure that research resources are used effectively. For example, the same field of study may have different needs at a university with multiple chief investigators than one which employs many full-time teaching-only staff.

This proposal for a CSP research component also addresses concerns about the large increases in public expenditure being triggered by demand-driven funding. The research component would not necessarily be paid for all students enrolled in institutions with university status. It would only be paid in fields of study (or whatever other organisational principle is determined) that meet the Higher Education Standards Framework requirements of university status. Where research requirements are not met, institutions may need to move to a year-round teaching model to pay full-time academic salaries. Where franchise arrangements exist, and actual teaching is carried out by a private provider or TAFE, the research component would not be payable. A lower teaching-only rate would allow more non-university providers to be admitted to the funding system in their own right, without taxpayers funding output that is not delivered.

**Recommendation:** That a research component be included in the Commonwealth-supported place base rate for fields of study meeting the research requirements of the Higher Education Standards Framework. This should vary with different levels of research activity.

### 3.1.2 Discipline standards set by TEQSA

Through Teaching and Learning Standards the government intends that TEQSA will regulate academic standards at a discipline level. The Australian Learning and Teaching Council started work on developing these standards, on the assumption that they will take the form of baseline learning outcomes, rather than prescribing the detail of curriculum or teaching methods. However, the government is yet to say whether it will take this relatively light touch approach, or be more prescriptive about the inputs required to achieve these outcomes. The draft course accreditation standards for non-self-accrediting higher education providers
suggest that there may be detailed input requirements.

The discipline standards set by TEQSA will be a key input into base funding. How these standards will be costed, including the role of different teaching technologies, is discussed in section 4.3.

**Recommendation:** That the requirements of meeting Tertiary Education Quality and Standards Agency discipline standards are included in base funding rates.

### 3.1.3 Standards set by national and international accreditation agencies

For students, the most important standards are those affecting the recognition of their qualifications, especially in the labour market. Many Australian professions already have admission standards which inform university curriculum. As noted in section 1.1.1, some universities are now seeking international accreditation that will increase the recognition of their qualifications overseas. This increases the value of the qualifications to students, as they can work in a larger number of countries.

The interaction between TEQSA standards and existing or future national or international accreditation systems is as yet unclear. However, given the importance of qualifications recognition, reasonable standards imposed by professional bodies and other accreditation agencies need to be taken account of in determining base funding.

**Recommendation:** That base funding rates take into account reasonable requirements of qualifications recognition.

### 3.1.4 Costing of capital investment and multi-use infrastructure

Buildings and other infrastructure are an integral part of meeting the standards for quality education, and therefore need to be explicitly costed and incorporated into the funding model. The key issue is whether buildings and other infrastructure are funded on a project basis, such as through the Education Investment Fund or the now-abolished Capital Development Pool, or incorporated into per student funding rates. Considering the new policy framework as a whole, demand-driven funding requires infrastructure to be included in per student funding rates.

Under demand-driven funding, significant increases in student numbers have infrastructure implications: new or improved lecture theatres, IT services, libraries and study centres, and other facilities. If these capital works are funded centrally on a project basis, in practice the ‘demand-driven’ system will resemble the current one. Universities would have limited capacity to borrow money for infrastructure, as their future income streams would be too uncertain. So significant changes in their enrolment profile would still need government approval, through securing specific project funding. This would make the process of responding to shifts in student demand slow and uncertain.

Centrally-funded infrastructure could also result in less efficient use of capital resources. In practice, with central funds, top priority projects for institutions are often not funded. Universities put forward the proposals with the best chance of receiving funding, rather than the most valuable proposals for the institution and its students. For teaching infrastructure, there is little reason to believe that central agencies will have a better understanding than universities themselves of how infrastructure should be provided, given the courses, teaching methodologies and expected student numbers of each institution.

Selective federal funding of major infrastructure projects is also problematic in a competitive environment, such as that already being produced by the prospect of demand-driven funding. Project-based infrastructure that is funded centrally will become highly political. An institution that received major project infrastructure funding from Canberra could offer students better facilities and/or lower fees, potentially undermining the viability of its competitors’ courses. A demand-driven funding system with infrastructure funding incorporated into prices would avoid
this politicised process, and create a system of 'competitive neutrality' between the different universities.

Incorporating infrastructure into per student base funding would not preclude the Commonwealth monitoring university infrastructure planning through the Institutional Performance Portfolio Information Collection.

Section 4.3 contains more on the role of infrastructure in calculating a CSP base funding amount.

**Recommendation:** That infrastructure costs are incorporated into the Commonwealth-supported place base funding rates.

### 3.1.5 Postgraduate/undergraduate differences

Postgraduate coursework in Australia is diverse. It includes initial professional entry courses and specialised or advanced courses for graduates who already possess high levels of discipline knowledge. These differences are recognised in the new Australian Qualifications Framework (AQF). The diversity of postgraduate courses makes generalisation about costs difficult.

Nevertheless, there are aspects of postgraduate coursework that, on average, lead to higher per student costs. As the review's background paper suggests, postgraduate courses tend to have smaller classes. They are more likely to rely on a seminar mode of delivery, which is more teacher-intensive. As subject matter becomes more specialised, opportunities for economies of scale in teaching diminish. Lower enrolments mean that fixed costs such as curriculum development are spread over fewer students than undergraduate courses, pushing up the average EFTSL cost.

Despite this, postgraduate CSP courses are currently funded at the same rate as undergraduates. In the original relative funding model used to adjust public higher education funding in the early 1990s, postgraduate premiums were up to 40% on undergraduate courses in the same discipline. This premium was abandoned when other elements of the relative funding model were reintroduced in 2005. Most current postgraduate students (see figure 6) are in full-fee places with market-set prices. This price flexibility has permitted courses that would not have been feasible within the CSP system. For example, averaged across the whole institution, at the University of Melbourne average costs for postgraduate professional courses in 2010 were around 30% higher than average costs for undergraduate students.

Though most postgraduate coursework students are in full-fee places, as figure 6 shows there is an upward trend in CSP postgraduate places. The University of Melbourne graduate schools are part of this trend, but growth in postgraduate CSPs is widespread. The funding agreements show new postgraduate CSPs in more than 60 courses spread across about two-thirds of public universities. Most new CSPs are in education, nursing, mental health and other health-related fields, in which graduate education is emerging as the norm for professional preparation. Postgraduate CSPs are important in broadening access to postgraduate education, and in health and education helping to meet community needs for appropriately-qualified professionals.

Melbourne’s Master of Teaching program is a case study in the benefits of such programs (see box on page 22). Long-term underfunding of postgraduate CSPs may lead to these courses ceasing or converting to a full-fee basis.
The review panel expressed concerns that differential funding rates for postgraduate CSPs could have undesired as well as desired outcomes. For example, universities might shift student load from undergraduate to postgraduate not for any educational reason, but simply to take advantage of higher funding. However, successful reform of undergraduate pricing would make this outcome substantially less likely. When undergraduate funding rates are too low to deliver courses properly that creates a regulatory incentive to shift to postgraduate, whether CSP with higher rates or full-fee courses. Higher undergraduate funding rates would reduce or remove the financial incentive to reclassify courses.

In practice, many other constraints on category shifting exist or will be introduced. Under the new AQF, masters-level initial professional entry courses cannot be rebadged undergraduate degrees. Students will be expected to develop and demonstrate higher-level cognitive, technical and creative skills. Masters students are expected to plan and execute a substantial research-based project, capstone experience, or professionally focused project. These require close supervision of individual students. In this context, converting a course to postgraduate would increase costs as well as revenues, diminishing or removing any financial advantage. In student market terms, all postgraduate courses add study time, increasing both direct and opportunity costs for students. This puts universities offering postgraduate courses at a competitive disadvantage on price, as many students will choose shorter and cheaper undergraduate options.

The government currently caps postgraduate CSP numbers. This is expected to continue in the demand-driven funding system, providing a further constraint on category shifting. These CSPs should normally be restricted to initial professional entry qualifications, or professional development courses in disciplines that are socially important but have low or modest financial returns. This would codify the existing pattern of postgraduate CSP funding.

**Recommendation:** That postgraduate coursework Commonwealth-supported places have higher base funding rates than undergraduate Commonwealth-supported places.
The University of Melbourne Master of Teaching

Teaching quality is the most important variable in student outcomes that public policy can influence. Yet there is widespread recognition that traditional teacher training programs do not always prepare graduates for the realities of the classroom. An Australian Education Union survey in 2008 found that only 41% of beginning teachers considered their pre-service teacher education had prepared them ‘well’ or ‘very well’ for the realities of teaching.

In 2008 the University of Melbourne launched a new two-year degree designed to address concerns over the effectiveness of teacher education. The graduate entry Master of Teaching (MTeach) degree has three streams of Early Childhood, Primary and Secondary teacher preparation. It features a substantially revised curriculum designed to more effectively link theory and practice. Its clinical teaching approach aims to produce teachers with high level analytical and diagnostic skills, able to identify and address individual learning needs in a manner similar to practitioners in the health professions.

The MTeach was developed and introduced in partnership with the Victorian Department of Education and Early Childhood Development, the Commonwealth Department of Education, Employment and Workplace Relations, the Victorian Catholic Education Office and selected independent schools. Collaboration is a key feature of the MTeach, with carefully selected Base Schools, Partnership Schools and clusters replacing the ad hoc dispersal of teacher trainees which is problematic in other programs.

Candidate teachers are placed in a school or early childhood setting early in their course for two days per week. Supervising teachers and teaching fellows attached to the school support the candidates, as well as teaching in a half-time capacity. Clinical specialists from Melbourne Graduate School of Education staff facilitate the clinical model by working with candidates, supervising teachers and teaching fellows to link candidates’ academic learning with their practical work in classrooms. Clinical specialists also deliver fortnightly practicum seminars in base schools.

This model represents a radical departure from traditional approaches to teacher education in this country. The University of Melbourne has drawn upon world’s best practice in devising the MTeach and acceptance within the profession is already very positive. The high level of support for candidates, the emphasis on linking theory with practice, the closer alignment of the University and schools and early childhood centres and the overall quality and preparedness of the candidates are seen as strengths by principals. A recent report of the Blue Ribbon Panel on Clinical Preparation and Partnerships for Improved Student Learning in the US affirms that the MTeach aligns with US thinking about best practice in preparing effective teachers.

In 2010 the Australian Council for Educational Research undertook an review of primary and secondary evaluations of the MTeach, including both quantitative and qualitative data. The extended school experience is credited with producing graduates who are well-prepared to begin teaching and who have a good understanding of schools, students and teaching. Graduates also rated the emphasis on building theory-practice links as a core strength of the program and a major contributor to their development as professionals. When the first MTeach graduates, who began teaching in 2010, were surveyed in the second half of last year, 90% rated themselves as being ‘well prepared’ or ‘very well prepared’ when they started teaching, a stark contrast to the 41% national average recorded in 2008.

The MTeach at the University of Melbourne is an expensive and complex model of teacher preparation. The approximately $5,000 gap between per EFTSL costs and CSP rates has been filled with ad hoc funding sources. Its future is not assured, as external funding must regularly be renegotiated. A postgraduate CSP rate that made it viable would guarantee its future and encourage other universities to upgrade their teacher education programs. More widespread use of the MTeach method should have significant advantages in improved learning, greater school retention, and eventually higher workforce participation and productivity.
3.1.6 Low SES premium in base funding

Increasing the proportion of students from low SES backgrounds is a major policy goal of the government. Existing funding programs encourage universities to recruit low SES students and finance on-campus support programs. The question for the review is whether low SES should also be included in base funding.

A survey of current evidence suggests that additional funding is probably unnecessary. The 2009 AUSSE publication Doing More for Learning reports that there is little difference between students of different socioeconomic backgrounds in the level of the interaction with staff. However, it did find that Indigenous students and students with a disability interacted with staff more often than other students (p. 24). The finding on socioeconomic status is consistent with the educational research finding that low SES is itself not a significant academic disadvantage once students are at university (there are major SES effects at school level). This passage from the Australian Council for Educational Research’s report on the 2008 Graduate Pathways survey is typical of the literature (p. 94):

While these students may have arrived at university from disadvantaged backgrounds, there was no difference in their self-reported educational performance. Their learning and development outcomes as well as their average overall grades were on par with those of other students. Similarly, they were equally satisfied with their study, including with careers advice, overall educational experience, and value for time and money. Their bachelor degrees were seen to be of equal relevance to further study and work in the first, third and fifth years after graduation.

Outcomes in terms of participation in further study for these graduates were the same as for others. They were just as likely to be involved in education or training in the first, third or fifth years after graduation, and to be involved in specific form of further training after five years. After five years, they were very slightly less likely to have obtained postgraduate coursework (22 compared with 25 per cent) and to have an undergraduate degree as their highest level of attainment (72 compared with 68 per cent).

As the higher education system expands it will take more under-prepared students from across the SES categories. But SES does not in itself appear to be a strong proxy for students with high academic needs. Indigenous students do on average appear to be make greater demands on institutions, though as with low SES students there is likely to considerable variation, depending on their particular circumstances. The issue of under-prepared students may be better handled through indices of prior academic preparation, using school results and other admission criteria. Unfortunately we do not have the evidence base on student support costs to make clear recommendations on appropriate funding levels.

For students with disabilities, predictable additional needs depending on their particular disability may justify inclusion in base funding. For example, academic support workers are employed to assist with tasks such as note-taking and conversion of study materials into Braille or audio formats. These costs can be easily identified and incorporated into a base funding loading.

Recommendation: That existing performance-based low SES funding is sufficient, and no additional low SES loading is needed in base funding.
4. PRICE-SETTING INSTITUTION

4.1 Permanent solution required

The review panel has been asked to advise on base funding levels, taking into account TEQSA and international benchmarks of teaching quality and student engagement. This is an important task, but it essential that the review's legacy is more than an ad hoc adjustment to CSP funding rates. The standards and benchmarks the review panel identifies in 2011 will certainly evolve over time, and potentially very quickly as TEQSA starts its work. Institutionalised methods of setting base funding—the prices universities receive for CSPs—are the missing components of the emerging policy framework.

One option is to have more regular base funding reviews, at much greater frequency than once every 20 years. A second option is to establish a base funding price regulator with an on-going responsibility to ensure base funding rates are up-to-date. A third option is to deregulate student fees, with tuition subsidies used to limit the cost to students. There is a role for elements of the third option, particularly for students who want an education that cannot be provided within base funding. This is discussed in section 5.

However, relying solely on market competition to regulate tuition fees is unlikely to be politically acceptable.

More regular base funding reviews would improve on the status quo. However, a permanent base funding price regulator would be able to build and maintain expert understanding of higher education standards, costs and operations. The limited financial information available to this review is a problem that an institutionalised regulator would remedy. While universities are providing data to the review, Australia lacks independent experts on higher education costs that can provide informed and critical scrutiny of this data. With ad hoc base funding reviews, expertise built up in the process is lost as those involved move on to other things. For example, the costing exercise for this review has been outsourced to an economic consultancy.

There are models for a higher education price regulator. The Victorian Essential Services Commission, the New South Wales Independent Pricing and Regulatory Tribunal and the Australian Competition and Consumer Commission (ACCC) review and determine prices in many price-regulated industries. These regulators use techniques and theories derived from economics to set prices which protect consumers from cost-padding, while ensuring that the regulated industries are financially viable and attractive to investors. These bodies set the standard that an Australian higher education price regulator should follow.

Though price regulators need to avoid ‘industry capture’—in this case, the regulator needs to balance sector, student, and government interests—the higher education sector needs to have confidence in base funding price regulation. Confidence encourages institutions to plan and invest over long periods of time, including for the expansion required by government enrolment targets, without fearing that their economic viability will be undermined by political decisions or indecision.

For this confidence to exist, it is critical that the price regulator is established by statute and independent of government in its decision-making. For higher education providers, independence limits concerns about base funding decisions being taken on fiscal or political rather than educational grounds. In the long run, it is also better for the government. Price regulators reduce the government’s political responsibility for decisions that may be unpopular. It provides an ‘independent umpire’ rationale for not intervening. For example, the government sets the considerations that Fair Work Australia needs to take into account when setting the
minimum wage, but leaves to Fair Work Australia the task of determining the actual amount.

The price regulator’s task would be to cost against standards to produce a base funding amount per student, at the level of detail it deems necessary (some suggestions as to how it would do this are at section 4.3). It would identify separate teaching and research components, creating a different base for universities. These would be the minimum prices universities and other higher education providers were entitled to receive for their CSPs.

The base funding price regulator would not have the power to determine government spending levels. The government would still decide what share of the base funding amount it provides, and therefore what share becomes a student contribution. The student contribution amount is therefore the base funding amount less the public subsidy. However, the government may ask for the regulator’s advice on this issue (for example, on price sensitivity among students). If the government agreed to price flexibility above the base funding amount, it would need to determine the scope for increases. This issue is discussed in section 5 below.

**Recommendation**: That a base funding price regulator set the minimum rates higher education providers are entitled to receive for Commonwealth-supported places.

**4.2 Where should the base funding price regulator sit?**

The higher education base funding price regulator will need to work with TEQSA in performing its duties, as TEQSA’s standards will be a major input into the costing process. Locating the price regulator within TEQSA would help ensure sharing of information and expertise. However, on balance standards setting and the costing process would be better carried out by separate organisations.

Standards setting and cost analysis require different skills sets unlikely to be found in the same individuals. Selection of TEQSA commissioners should be based on their expertise in academic standard setting and quality assurance, and selection of the leaders of the base funding price regulator based on their accounting or economic expertise.

Higher education costing and pricing is a new regulatory function, so attracting suitable staff is important to its success. Locating the higher education price regulator within an existing agency with other price-setting responsibilities would provide access to staff with price regulation experience in other industries. The ACCC is one option.

Another major reason for separating standards and pricing is concern about concentrating power in TEQSA. TEQSA already has very wide-ranging powers. There would be more confidence in the base funding price regulator if it was a separate agency.

**Recommendation**: That the base funding price regulator should be independent of TEQSA, and consideration be given to placing it in an existing price regulator.

**4.3 Determining costs**

Drawing on the relevant standards, the base funding price regulator’s task is likely to start with the teaching technologies, or mix of teaching technologies, appropriate to each discipline and each qualification level. These will include a mix of infrastructure, overhead and staff inputs. The major technologies are likely to include:

- lecture
- tutorial
- seminar
- laboratory (including different types of laboratory)
- studio
- clinical education
- work-integrated learning
- field work, field trips and field sites
- online (complement to campus-based course)
- online (distance education)
Using the ASCED field of study classifications, broad fields of study may be an adequate level of price setting when teaching technologies are similar. However, where costs vary significantly between narrow or detailed fields of study rates may need to be set at those levels. Rates could vary for recognised and verifiable differences in teaching methods, such as clinical training or work-integrated learning, where higher costs are demonstrated. Student support services are less likely to vary significantly between disciplines, and could be calculated on an average basis or according to other characteristics of the student population (section 3.1.6).

In setting prices, the regulator would use cost evidence collected from a range of institutions and other appropriate sources. It would need to exercise professional judgments about whether costs are reasonable in the circumstances. For example, it could make assumptions about the minimum enrolment levels needed to deliver economies of scale, and the mix of staff required to teach a course effectively. These could vary depending on whether the course is undergraduate or postgraduate. The regulator could make assumptions about the efficient use of infrastructure.

The price regulator’s task would not be easy. Local and international experience in the UK and USA is that even within institutions costing exercises are complex and contentious. A key issue is how fixed costs are distributed across activities, with costs potentially varying considerably depending on the assumptions made. Use of space allocation as a cost driver is prone to disputes with faculty managers and auditors. Staff time surveys are used to apportion the single largest expense of salaries, but these surveys use supervisor or self-reports likely to involve approximation.

These difficulties are amplified when comparisons are made between institutions. Even with uniform costing methodologies, institutions will vary in their cost estimates due to local differences. Campus location can affect costs; regional institutions say that distance adds to costs, but rents and other real estate infrastructure costs can be higher in metropolitan areas. Universities seeking to recruit staff for both research and teaching may face higher salary costs, due to the more limited labour market for the most able researchers.

These problems facing a base funding price regulator (and this review) suggest strongly that some fee-setting at the institution level is needed to deal with variations in costs. If this option was available, the regulator could significantly simplify its task. It could then use broad base funding categories containing disciplines with similar cost structures, a modified version of the current cluster system. For example, England uses four subject price groups to which disciplines are allocated. The use of fee flexibility to deal with cost variability is discussed in section 5.1.

### 4.4 Timing and interim measures

There are significant timing issues for a new funding system. Major developments such as TEQSA, the demand-driven funding system and the downturn in the international student market are all running ahead of funding reform. The problems outlined in section 1 could therefore strike the system or individual institutions before any policy remedy is in place.

The base funding price regulator needs to be put in place as soon as possible, and no later than 2013. In the interim, the findings of the Access Economics cost study conducted for the review can be used to identify the disciplines at most risk of adverse outcomes. Ad hoc changes to funding could be made prior to the price regulator’s decisions. It would be for the government to decide the mix of public and private contributions.

**Recommendation:** That the base funding review’s cost study be used to identify the most serious immediate funding issues, with necessary urgent funding changes to be made including with respect to individual clusters or disciplines before the base funding price regulator’s decisions.
5. BEYOND BASE FUNDING

The funding model outlined in sections 3 and 4 is designed to secure the minimum CSP funding levels and incentives needed for the new policy architecture to function. However, there is merit in partial fee deregulation above the amounts decided by the base funding price regulator. The main reasons for this flexibility, outlined below, are to minimise the difficulties the regulator faces in setting prices appropriate for all institutions, to allow students to invest more in their own education, and to promote price competition in the CSP market, without which some institutions will be at risk of significant loss of their current market share.

Partial fee deregulation needs to be large enough to achieve these policy objectives, while low enough to be politically feasible and avoid any unintended social consequences. In the University of Melbourne submission to the Bradley review in 2008, we recommended a maximum student fee of 30% on top of the base funding amounts set by the base funding price regulator. This margin would be enough to produce noticeable differences in class sizes and other aspects of the student experience. This fee would be above the student contribution effectively set by the government, through its decisions on public funding (discussed further in section 6). The income-contingent HELP loan scheme would continue to lend students the money needed to invest in their education.

This fee would be above the student contribution effectively set by the government, through its decisions on public funding (discussed further in section 6). The income-contingent HELP loan scheme would continue to lend students the money needed to invest in their education.

5.1 To help the price regulator function

The higher education price regulator, as noted in section 4, will face difficulties with the inherent variability in higher education provider costs. Without flexibility in student fees, the regulator would need to set a price in the upper part of its range of costs. Otherwise, the regulated prices may force more providers out of the field of study than is desirable for students or the industries dependent on graduates. However, if there is flexibility on student fees it can set the regulated price closer to the mid-point of its range of costs and use simplified pricing structures.

With flexibility above the base price, the higher-cost providers can stay in the market for that field of study. However, setting a price above the benchmark would create public and market pressures to justify charges above that level. In other industries where benchmark prices exist there is often public commentary on pricing levels. For example, petrol retailers are criticised when their prices are out-of-line with the known wholesale prices for petrol on international markets. In a related industry, there is much commentary on the level of fees charged by private schools, given their receipt of state and federal funding. The proposed My University website could aid transparency on fees and costs, as My School has done. Public and market pressures would encourage institutions to examine and reduce their costs. Alternatively, high-cost universities would need to persuade students that higher prices represent value for money.

5.2 To allow students to invest more in their education

The demand-driven system puts student decisions at the heart of the funding system. It will trust students to choose courses and institutions, decisions likely to have large implications for their future lives and careers. But current policy settings do not let students make an additional important decision: how much to invest each year in their course. All Commonwealth-supported students have a maximum annual private investment in their course set by legislation. Maximum student contribution amounts reflect judgments on the political acceptability of fee increases. The result is a one-size-fits-all rate that in practice permits no differences between students. There is no scope for students to spend more for courses that better match their learning
needs or preferences. They cannot pay for smaller classes or better facilities; or for any other difference that would cause costs to rise above the CSP income universities receive. Australian universities cannot offer world class education, and Australian students cannot buy it at home.

A truly demand-driven system would recognise that demand varies on more dimensions than just field of study, course or university. Seeing students as having an active role in choosing all aspects of their higher education changes the way we think about student fees. The idea of a ‘student contribution’ to a total amount fixed centrally becomes less relevant. It is replaced with the idea of a student investment that could vary significantly between individual students, depending on the courses and institutions that they choose.

The earnings profiles of typical graduate occupations suggest that higher levels of investment are affordable, even assuming no income benefits from added educational investment. Current student contribution amounts are quite low compared to the earning potential of graduates. Figure 7 shows the income by decile in 2010 of professional employees, the major broad occupational outcome for graduates. It shows considerable variation in earnings, reflecting differences in occupation, industry, hours worked, experience and other personal attributes. Students who believe that they will be high income earners could prudently spend much larger sums on their education than currently permitted.

For example, the cost of a three-year course at the highest current annual student contribution amount (for example, commerce) is equivalent to around 18 weeks gross salary and 23 weeks net salary for male employees on median male professional employee earnings. For female employees on a median professional income, a three-year course at the highest annual student contribution amount is equivalent to around 23 weeks gross earnings and 29 weeks net salary. So at the median income, a commerce course cost is equivalent to six to eight months salary after tax. But at the ninth decile, the cost of the three-year commerce degree is equivalent to only four months after tax earnings for men, and five months for women.

**FIGURE 7: PROFESSIONAL EMPLOYEE INCOME 2010**

![Professional employee income 2010](image)

Source: ABS, Employee Earnings and Hours, Cat. 6306.0, May 2010.
More flexibility on student fees is likely to promote institutional diversity in Australian higher education. Compared to Australia, the United States has a very diverse higher education system. There are many different types of specialisation including by discipline, by level of education, and by religion. The Carnegie system of classifying American higher education institutions needs six broad categories and over 30 sub-categories to describe its diversity. By contrast in Australia more than 90% of students are enrolled in institutions that would be categorised into just one of the broad Carnegie categories, the doctorate granting university. The Americans can offer such a range in part because they are closer to a higher education market than Australia. If there is demand for a style or type of higher education, there are few supply constraints on it being met. Underlying this is substantial discretion in charging fees sufficient to cover costs.

One notable feature of the distribution of American advertised fees in figure 8 is that most students (and a large majority at public institutions) pay fees that are similar to or slightly above current Australian student contribution amounts, at current exchange rates. Allowing more flexibility in student fees does not mean that all students pay significantly more. But it does permit more diverse options for students who see higher fees as value for money.

5.3 To promote price competition in the CSP sector

When students contribution amounts were partially deregulated in 2005, price competition did not last long. Within a few years, all universities were charging the maximum permitted amount for their courses. This was in part because the permitted increases, of between $1,000 and $1,700 per year depending on course, were too small to finance major improvements. However, in a demand-driven funding system with higher limits on student charges it is unlikely that we would see the same lack of price competition.

In 2005 the market for CSPs was uncompetitive. The system was designed so that the total number of CSPs was less than demand. Further, universities were allocated CSPs through funding agreements in ways that restrained competition. Universities were penalised for exceeding by more than a specified amount CSP numbers determined in the funding agreements. This meant that there was no financial benefit from significantly increasing market share. To the contrary, concern about over-enrolment penalties caused the total number of CSPs to decline between 2002 and 2005. Consequently, universities did not need to offer lower prices than their competitors to fill all available CSPs.

A demand-driven funding system will create a far more competitive system. Though it is not due to start until 2012, many universities are already aggressively pursuing market share. In effect, some are already discounting to fill places. Though students cannot observe this, the universities that have reached the maximum 10% extra Commonwealth over-enrolment funding are taking students on the student contribution amount only. This represents a discount of between 17% and 81% on the full CSP rate, depending on course.

As we enter the demand-driven system in 2012, for a variety of reasons some universities are in a better competitive position than others. On prices that are the same wherever CSP students go, some institutions have a much more demand than they can meet, given their funding agreements and capacity to take additional students, while others have less demand and rely partly on students enrolling on the basis of second or lower preferences. These institutions are at greatest risk of losing students as funding agreement controls are lifted from 2012. More popular universities can expand at the expense of less popular universities.

As well as benefiting students by keeping costs down, price competition would give universities with current demand deficits a selling point that they currently lack in the CSP market. It would help reduce the risks of
in institutional instability in a demand-driven system, particularly as its introduction coincides with a downturn in international student enrolments. For many Australian universities, price competition is a proven strategy in full-fee markets. By offering relatively cheap courses to international students, some universities have a much larger share of international than domestic enrolments.

5.4 Participation effects of higher tuition costs

The government has a goal of 40% of 20-25 year olds achieving a university qualification by 2025. The review’s terms of reference require that fees do not become a barrier to participation in higher education. Historically, fees supported by income-contingent loans have not reduced participation in higher education or attainment of higher education qualifications. Figure 9 shows a steady increase in the proportion of Australians aged 15-64 with higher education qualifications, despite tuition charges being lifted in 1989, 1997, and 2005. In a paper prepared for the Henry tax review, the economist (now Labor MP) Andrew Leigh found from his comparative analysis of OECD countries a negative relationship between higher per student public subsidies for tertiary education and higher attainment of tertiary education qualifications. 3

In other words, tertiary education attainment is higher in countries that require students to contribute to the cost of their education.

These findings do not make education a special case where prices cannot affect demand. They are consistent with the idea that students compare the private benefits of higher education with the private costs and risks. Despite increases in tuition costs since 1989, private financial benefits remain high compared to costs. Figure 10 shows using census data that post-tax financial returns for bachelor degree holders remained attractive or improved in the HECS/student contribution era. In each case, the income of graduates is compared to the incomes of people who finished school at year 12. While there are costs and risks from attending university, the costs and risks of not doing so are much greater.

These findings do not contradict the claim that price competition can work if caps on student

investment are partially lifted. The issue of whether to attend university or not is distinct from the issue of which university to attend. Someone with the ability to succeed in higher education would forgo significant lifetime earnings by not attending any university, but could make savings by finding cheaper ways of attaining their higher education.

Though tuition cost increases of the kind proposed in this submission are unlikely to cause participation or attainment to decline, trends in demand for and supply of places in total and by discipline need to be monitored. This will require much more timely release of data than has been achieved by DEEWR in recent times.

**FIGURE 9: HIGHER EDUCATION ATTAINMENT 1976-2010**

![Higher education attainment, 1976-2010](chart1.png)


**FIGURE 10: POST-TAX RETURNS TO BACHELOR DEGREE, EMPLOYEES**

![Post-tax returns to bachelor degree, employees](chart2.png)

*Source: Hui Wei, Measuring Economic Returns to Post-School Education in Australia, ABS.*
5.5 Socioeconomic effects of higher tuition costs

With every increase in tuition charges, possible disproportionate effects on low SES students have been a major concern. However, the evidence suggests that, at least on the fees charged to date, low SES students have not been more sensitive to cost than other SES groups. Despite cost increases over time, low SES students have not decreased their share of total enrolments, and the probability that a young person from a low SES background will attend university has increased. Low SES commencing student numbers increased in 1997 and 2005, despite substantial cost increases in those years.

These findings suggest potential students from low SES backgrounds approach the decision to attend university in much the same way as other prospective students. Research by Buly Cardak of La Trobe University and Chris Ryan of the Australian National University, drawing on data that included both socioeconomic background and school results, found that school results were the only significant factor that correlated with university attendance. For a given Year 12 result, rates of going on to university were the same for low and high SES students. The effects of SES occur prior to the school to university transition point, by affecting school completion rates and school results.

As reported in section 3.1.6, low SES students report very similar student experiences to other students. Their employment outcomes are not quite as good as other students, but the differences are not major. The Graduate Pathways Survey 2008 found that five years after completion 59% of low SES graduates were in professional or managerial jobs, compared to 64% of other graduates (low SES based on primary school postcode, neither parent with a university qualification, and neither parent in a professional occupation). The Beyond Graduation 2009 survey, a survey of graduates three years out, found that after controlling for major field of education, sex, language background, broad occupation type, whether the graduate was employed full-time in their final year of study, and weekly working hours, a graduate who had been the first in their family to attend university earned 2.9% less than other graduates. Unsurprisingly, occupation and field of study had the largest effects on income.

Overall social science finds that people from low SES backgrounds are not greatly different from other SES groups in their higher education choices, experiences or outcomes. Like other students, they can make good judgments about the costs and risks of attending university compared to the costs and risks of not attending university. Contrary to theories suggesting irrational debt aversion, they are willing to use the HELP scheme to invest in their education. Low SES students are as disadvantaged as high SES students by regulation that prevents them from spending more on their university education.

Recommendation: That higher education providers be permitted to set maximum student fees of up to 30% more than the base funding rates.

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5 Buly Cardak and Chris Ryan, ‘Why are high ability individuals from poor backgrounds under-represented at university?’ Discussion paper A06.04, La Trobe University School of Business.
6. PUBLIC FUNDING

In the proposed funding model students can at their own expense invest more than the base amount set by the price regulator. But within the base amount, public funding has three broad rationales.

First, it recognises that the costs of public good aspects of higher education should be supported through taxation rather than paid by students through fees.

Second, public funding helps graduates smooth the cost of their study over a longer period of time than HELP loans, by shifting some of their contribution to university costs to a time when they are significant net taxpayers.

Third, in Australia as in other countries methods of financing education reflect the broader political culture. Though Australia is a country in which private finance of education is common, there are also strong expectations of public support.

6.1 Helping ensure a mix of graduates that meets labour market needs

Though on average graduates earn good returns on their higher education investment, earnings differ significantly between occupations. Though financial rewards are only one factor driving student preferences, high costs relative to monetary benefits may weaken demand for some courses. This in turn could lead to the higher education system producing too few graduates to meet workforce demand. This in turn could lead to important services being in short supply, and reduced overall economic activity due to skills shortages.

As Australia has always had a subsidised higher education system, we do not have empirical evidence on domestic-student sensitivity to full-fee course prices across a wide range of disciplines. But we can see approximately what difference the current tuition subsidy system makes to the average graduate in various occupations. Table 5 compares how long it would take to repay CSP course costs without a tuition subsidy, compared to how long it would take to pay the student contribution amount alone. In each case, all of net average weekly earnings from the target occupation are assumed to be used to repay debt (of course graduates are likely to earn less than average earnings for their occupation early in their career). It measures effort to repay rather than just dollar amounts, reflecting the fact that while courses leading to some occupations cost a lot to study, their graduates also earn high salaries.

Table 5 shows that the tuition subsidy system brings some courses that would be very expensive (in both dollar and work effort terms) down towards the average cost. Despite outlier occupations that are cheap in work effort relative to the average (science, nursing) or expensive (accounting, architecture, medicine), overall the tuition subsidy system substantially reduces variation in costs to students compared to system in which students pay all the costs of a CSP place. The standard deviation of the average number of weeks to repay drops from 17 to 5. The tuition subsidy system, with its flow-through to student contributions, evens out the financial rewards associated with different fields of study.

The strong demand generally observed for CSP places across the disciplines suggests that this policy has broadly been successful. Shortages of graduates are chronic only in health-related disciplines, but due to restrictions on supply rather than insufficient demand (see section 1.2.2 on the dangers to supply of inadequate pricing mechanisms). In a demand-driven system, demand for places relative to forecast workforce requirements will need to be monitored carefully.
### TABLE 5: RELATIVE WORK EFFORT TO REPAY COURSE COSTS, BASED ON AVERAGE MALE NET WEEKLY EARNINGS

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Weeks to repay</th>
<th>Weeks to repay</th>
<th>Saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSP total course cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td>CSP total course cost</td>
<td>course student contribution</td>
<td>Saving</td>
</tr>
<tr>
<td>Arts professionals</td>
<td>59</td>
<td>20</td>
<td>39</td>
</tr>
<tr>
<td>Media professionals</td>
<td>39</td>
<td>13</td>
<td>26</td>
</tr>
<tr>
<td>Accountants, auditors</td>
<td>29</td>
<td>24</td>
<td>5</td>
</tr>
<tr>
<td>Financial brokers, investment advisers</td>
<td>20</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Architects, planners and surveyors</td>
<td>64</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Engineering professionals</td>
<td>66</td>
<td>22</td>
<td>44</td>
</tr>
<tr>
<td>Science professionals</td>
<td>55</td>
<td>10</td>
<td>44</td>
</tr>
<tr>
<td>School teachers</td>
<td>51</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td>Health therapy professionals</td>
<td>53</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>Medical practitioners</td>
<td>79</td>
<td>25</td>
<td>54</td>
</tr>
<tr>
<td>Midwifery and nursing professionals</td>
<td>43</td>
<td>13</td>
<td>30</td>
</tr>
<tr>
<td>ICT network and support professionals</td>
<td>38</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Legal professionals</td>
<td>21</td>
<td>18</td>
<td>4</td>
</tr>
<tr>
<td>Social and welfare professionals</td>
<td>49</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td>Average</td>
<td>47</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>17</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Source: ABS, Employee Earnings and Hours, Cat. 6306.0, May 2010. Net earnings calculated with ATO tax calculator. Apparent errors in weeks saved are due to rounding.

Skills Australia is already monitoring workforce needs. Changes to Commonwealth contributions to reduce prices paid by students are one policy mechanism that can be used to boost demand where it is too low relative to workforce projections.

**Recommendation:** That the public contribution to the base funding rates take into account course costs and private benefits to graduates.

### 6.2 Research

Under the draft Provider Category Standards, universities are required to do research. In section 3.1.1 this submission argues that research should be included in base funding, as a separately identified component paid only when the relevant requirements of the Higher Education Standards Framework are met. Without including research in the base funding amount, there is no clear funding source that would enable universities to meet this standard. Research competitive and block grants do not support all teaching and research academic staff, and are strongly skewed to the research-intensive universities.

Though students can benefit from attending a research university, the research itself has strong public good properties. When published or otherwise disseminated, research benefits anyone who is able to make use of it, regardless of their association with the university. Because research has broad public benefits it tends to be under-supplied by the private sector, and is heavily supported by governments around the world.

While it is reasonable for students to contribute to private benefits that they receive from higher education, the government should finance public benefit elements of the base funding amount. A funding system that made students pay for research would impose on them a disproportionate share of the cost of producing public benefits. The research component of the base funding amount, as calculated by the base funding price regulator, is one clearly identifiable and quantifiable
contribution that should be made by the government.

**Recommendation:** That the research component of the base funding rates should be paid by the government as a public contribution.

### 6.3 Community engagement

The draft Provider Category Standards state that universities are expected to engage with their local and regional communities. Engagement typically goes well beyond this, with university staff engaging at a national and international level. The *Changing Academic Profession* 2007 survey indicates that on average Australian academics spend four hours a week, or about 9% of their time, on 'community service'.

In the past, the government has opposed direct community engagement funding. Given that quantifying the cost of engagement activities is difficult, this approach has merit. Community engagement is typically intertwined with academics’ teaching and research activities, with knowledge re-used in multiple contexts.

However, given the legal expectation of community engagement, some allowance should be made for it in public funding. It is one of the main mechanisms by which the general community benefits directly from the activities of academic staff, rather than indirectly through graduates or research findings utilised by other organisations. As with research, it is reasonable that the public through taxes rather than students through fees cover the cost of university public benefit activities.

**Recommendation:** That the community engagement activities of universities be acknowledged in the public contribution to the base funding rates.

### 6.4 Reduced social insurance costs

One of government’s expensive roles is as a provider of social insurance. For example, people unable to work or find work, or in poor health, rely heavily on government financial support. Where education enables individuals to avoid negative personal outcomes, this is of significant benefit to them and also to the government in lower social welfare outlays. Combined with the income tax revenues received from graduates (section 6.6), this means that increasing education levels are a net positive for government finances.

Because of the skills that higher education provides and signals, people with higher levels of education typically face lower risks of adverse employment outcomes. As table 6 shows, all forms of post-secondary education from the higher vocational education qualifications upwards are associated with much higher levels of workforce participation than no post-school education and the lower-level vocational education qualifications.

People with more education also typically report better health. Though the figures in table 7 are not adjusted for age and therefore over-state the differences between education levels, university-educated people report much better health. The links between education and health are thought to come from greater ability to understand how to live healthily, including higher comprehension of instructions given by doctors and pharmacists.

### 6.5 Social capital and tolerance

Higher education is also associated with greater willingness to contribute to the community and higher levels of tolerance, as shown in table 8 on volunteering and table 9 on attitudes to Muslims. As with social insurance, these findings support making higher education opportunities widely available rather than any specific level of public funding per student.
### TABLE 6: EMPLOYMENT RISKS BY EDUCATION LEVEL, 2010

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Unemployed</th>
<th>Not in labour force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree (all levels)</td>
<td>2%</td>
<td>13%</td>
</tr>
<tr>
<td>Diploma/Advanced diploma</td>
<td>3%</td>
<td>17%</td>
</tr>
<tr>
<td>Cert III/IV</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>Cert I/II</td>
<td>6%</td>
<td>24%</td>
</tr>
<tr>
<td>No post-school qual.</td>
<td>5%</td>
<td>32%</td>
</tr>
</tbody>
</table>


### TABLE 7: SELF-REPORTED HEALTH, 2010

<table>
<thead>
<tr>
<th>Education level</th>
<th>Very good or excellent</th>
<th>Good</th>
<th>Fair or poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Year 10</td>
<td>48%</td>
<td>32%</td>
<td>19%</td>
</tr>
<tr>
<td>Year 11 or 12</td>
<td>55%</td>
<td>30%</td>
<td>15%</td>
</tr>
<tr>
<td>Trade</td>
<td>49%</td>
<td>30%</td>
<td>21%</td>
</tr>
<tr>
<td>University</td>
<td>65%</td>
<td>24%</td>
<td>11%</td>
</tr>
</tbody>
</table>

Source: Menzies-Nous Australian Health Survey 2010.

### TABLE 8: VOLUNTEERING BY EDUCATION LEVEL, 2006

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Volunteer rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree (all levels)</td>
<td>45%</td>
</tr>
<tr>
<td>Diploma/Advanced diploma</td>
<td>45%</td>
</tr>
<tr>
<td>Cert III/IV</td>
<td>35%</td>
</tr>
<tr>
<td>Cert I/II</td>
<td>38%</td>
</tr>
</tbody>
</table>


### TABLE 9: ATTITUDES TO MUSLIMS, 2007

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Have as visitor only OR Keep out of Australia altogether</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate degree or postgraduate diploma</td>
<td>12%</td>
</tr>
<tr>
<td>Bachelor degree (including Honours)</td>
<td>17%</td>
</tr>
<tr>
<td>Certificate or diploma (TAFE or business college)</td>
<td>32%</td>
</tr>
<tr>
<td>Trade qualification or apprenticeship</td>
<td>33%</td>
</tr>
<tr>
<td>None</td>
<td>46%</td>
</tr>
</tbody>
</table>

6.6 Smoothing income flows over time

Subsidies to higher education have sometimes been criticised as socially regressive. University students typically come from more affluent families, and those that do not will typically earn higher-than-average incomes after completing their degrees. On this argument, income is unfairly being redistributed up the socioeconomic hierarchy.

However, this argument needs substantial modification. The Australian tax and welfare system is designed so that lower-income earners who are not students do not in any meaningful way contribute directly to the costs of supporting higher education. The lowest 50% of Australians by income already receive more in government benefits and social services than they pay in taxes. So on average the taxes they pay are returned to them in other ways, with no redistribution to university students taking place.

Graduates are significantly over-represented among the taxpayers who contribute more to government revenues than they receive in government benefits. Table 10 reports taxpayers whose incomes put them in the top 10% of taxpayers in 2006-07, with earnings in the $81,947-$85,024 bracket or above. Overall, just over a half of people whose income as reported in the last census put them in the top 10% of taxpayer hold a university qualification, with majorities in the 30-59 year age groups. As the percentage of the population with university qualifications grows, it is likely that high-income groups will increasingly be dominated by graduates.

When graduates are strongly represented among net taxpayers, public contributions to higher education costs are only in part a redistribution of resources between people. Instead, these public contributions are a redistribution of resources around an individual’s life cycle. The English economist Nicholas Barr emphasises this distinction between ‘Robin Hood’ activities of government, which redistribute between individuals, and ‘piggy bank’ activities that redistribute over time. Piggy bank programs move income or expenses to more convenient times of life, without significantly altering the lifetime distribution of income.

<table>
<thead>
<tr>
<th>Age</th>
<th>% of all people with degree</th>
<th>% of top earners with degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>30-39</td>
<td>26</td>
<td>57</td>
</tr>
<tr>
<td>40-49</td>
<td>21</td>
<td>52</td>
</tr>
<tr>
<td>50-59</td>
<td>18</td>
<td>62</td>
</tr>
<tr>
<td>All 20 or more</td>
<td>17</td>
<td>51</td>
</tr>
</tbody>
</table>

Sources: ABS, Census 2006. ATO, Taxation Statistics 2006-07. Persons reporting gross weekly income of $1,600 or more.

The HELP loan scheme redistributes expenses over time, but over a relatively short period: from before and during higher education to just after higher education. One disadvantage of HELP’s repayment schedule is that with an average repayment time of around 8 years it coincides with the high-expense years of purchasing a home and starting a family. By letting the progressive tax system finance part of higher education through grants, it helps smooth the costs to graduates over a longer period. The high marginal tax rates graduates pay as their incomes peak later in life covers the cost of public higher education contributions.

The more universal an expense becomes, the easier it is to justify a ‘piggy bank’ approach to funding. Every young person in a Western country is required to attend school, and every Western country moves the pressure of funding school education away from parents while their children are young. Post-school education is not universal, but in Australia

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nearly 70% of people currently aged 25-34 currently have at least one post-school qualification. With government targets for 40% of that age group to hold a university qualification, and more to hold vocational qualifications, most people will benefit from public funding of vocational and higher education.

**Recommendation:** That the public contribution to the base funding rates take into account the future tax contribution of graduates and spread higher education expenses over time.

### 6.7 International norms

Compared to other OECD countries, Australia’s total spending on tertiary education per student is above average, though well below Canada, Sweden, Switzerland and the United States. Its total spending on tertiary education as a proportion of GDP is on the OECD average, though less than Canada, Chile, Korea, Portugal, Sweden and the United States. OECD averages should not be taken as a guide to what is sufficient, since higher education funding levels are seen as inadequate in many countries.

However, OECD comparisons do reveal what some of our competitor countries are spending. Section 1 provides evidence that American students are significantly more satisfied with their experience than Australian students, and that international students are less likely to choose Australian universities based on their reputation.

Australian tertiary education is distinctive in the OECD not in total spending but in its high reliance on private tuition charges. Only three countries—Japan, Korea and the United States—have higher average public university tuition charges (though after recently announced changes, fees in England will exceed those in Australia). Those high-fee countries plus Canada and Chile have private funding of higher education that is more of their GDP than Australia. Australian private higher education spending is 0.9% of GDP, compared to the OECD average of 0.5%.

Correspondingly, Australian public investment in higher education is relatively low compared to other OECD countries. At an average of US$7,324 in 2007, Australia’s public spending per tertiary education student is only about 70% of the OECD average. Our public expenditure of 0.7% of GDP is below the OECD average of 1% of GDP.

The OECD experience does not set any clear international standard for the right mix of public and private funding. There are successful systems with different mixes of public and private funding. Practices vary according to the prevailing political culture. The Nordic countries with high public spending and no tuition charges also have very high taxation by Australian standards. The high-fee countries typically have lower taxation levels as more services are privately funded. There is a trade-off: free education and high taxes, or education charges and lower taxes.

Overall Australia is a low-tax country by OECD standards, but our heavy reliance on income taxation produces relatively high income tax rates. Australia’s marginal income tax rates on people making more than average earnings—the higher incomes that graduates disproportionately earn (table 10 above)—are above those of other high student fee countries (table 11). This means that Australian graduates, compared to graduates in other high-fee countries, contribute relatively large amounts through both direct student charges and income taxes. Though the Australian combination of student fees and income taxes still leaves attractive private benefits from university education, it suggests that Australian graduates have one of the least favourable financial deals in the OECD.

**TABLE 11: MARGINAL INCOME TAX RATES AT 167% AVERAGE EARNINGS, 2007**

<table>
<thead>
<tr>
<th>Country</th>
<th>Tax rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>41.5</td>
</tr>
<tr>
<td>Canada</td>
<td>33</td>
</tr>
<tr>
<td>Japan</td>
<td>30</td>
</tr>
<tr>
<td>Korea</td>
<td>20</td>
</tr>
<tr>
<td>USA</td>
<td>39</td>
</tr>
</tbody>
</table>

*Source: OECD. Stat*
6.8 **Australian norms**

Though the principle of student contributions to higher education costs is well established in Australia, polling shows complex public attitudes on the topic. Most respondents to a 2008 ANU Poll agreed that university education is worthwhile despite its expense, and that students appreciate the value of a university education more if they help pay for it themselves. At the same time nearly three-quarters of respondents agreed that students have to borrow too much money to pay for their fees, with nearly half agreeing strongly with that proposition.

As with most public opinion research, these results need to be treated with caution. These answers are intuitive responses to questions that poll respondents were not expecting to answer; attitudes sway as different considerations are put to respondents. At the same time these surveys are a guide to the political landscape. The idea of public support of higher education to keep fees down is deeply entrenched in Australian political culture.

For reasons outlined in this submission, a financially stable and well-functioning higher education system is unlikely without more flexibility on student charges. But these surveys support the view that increased public funding should accompany increased private financing. This would signal that the government recognised widespread public concerns about the cost of higher education. Instead of asking students to incur all the costs of an improved higher education policy framework, the government would be calling for a shared increase in spending.

**Recommendation:** That the public contribution to the base funding rates recognise public expectations of financial support for higher education.

<table>
<thead>
<tr>
<th>TABLE 12: PUBLIC ATTITUDES ON UNIVERSITY CHARGES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students have to borrow too much money through the Higher Education Contribution Scheme to pay for university fees</strong></td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Don’t know/not sure</td>
</tr>
<tr>
<td><strong>University students are getting their money’s worth</strong></td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Don’t know/not sure</td>
</tr>
<tr>
<td><strong>Even though it is expensive, university today is worth it</strong></td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Don’t know/not sure</td>
</tr>
<tr>
<td><strong>Students appreciate the value of a university education only when they have some personal responsibility for paying the costs</strong></td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Neither agree nor disagree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Don’t know/not sure</td>
</tr>
</tbody>
</table>

*Source: ANU Poll July 2008.*
6.9 Fairness between students

Another political acceptability issue is the perception of some categories of students that the public subsidy system treats them unfairly. For example, law and business students complain that not only is their tuition subsidy very low, at less than 10% of the subsidy paid for some other disciplines, but that they pay a very high percentage of the total rate CSP for their place. They pay 84% of the total CSP rate for their place, when most students pay less than half, and science students pay less than 20%.

6.10 Conflicting policy conclusions from different public investment rationales

Different rationales for public funding of higher education lead to conflicting conclusions. This means that the review panel will need to make choices between them, or arrive at an acknowledged compromise. Because the current pattern of Commonwealth contributions lacks a clear and publicly-stated justification, it is not surprising that both Australians generally (section 6.8) and students (section 6.9) express reservations about it.

If the goal is to steer students towards particular disciplines or to minimise financial influences on discipline choice then a highly differentiated system of public subsidy is required. For example, consider the high cost courses of medicine, dentistry, veterinary science, engineering and agriculture students (table 13). If their graduates had to pay the full course cost, or a fixed percentage of the full cost, they would pay fees that were high relative to courses with lower total costs. This would translate into long repayment times on student debt. Table 5 in section 6.1 compares repayment times for graduates if all of average weekly net income for the occupation was spent reducing student debt. Law and business graduates, who take low-cost courses, would repay in 20-30 weeks if they incurred the full cost. But for the high-cost courses, repayment periods for full cost would range from 55 to 79 weeks.

From this rationale, relatively low public subsidies for law and business are justifiable. A low-cost course / high paying profession combination does not need a large subsidy to make it financially attractive to prospective students. However, on other public subsidy rationales this relatively low public contribution is not justifiable. Current subsidy levels in law and business courses barely recognise public benefit contributions, including the research and community engagement activities required by law from universities (sections 6.2 and 6.3). These subsidy levels do not acknowledge the large amounts of tax graduates in law and business pay to the government (sections 6.6 and 6.7). The tuition charges that students in these courses pay feed perceptions that the cost of attending university is too high (6.8). The students themselves see the high cost of their education relative to other students as unfair (section 6.9).

One possible compromise solution is shown in table 14. It includes a floor subsidy, a minimum amount paid to universities for all Commonwealth-supported students. The floor subsidy would include the research component, acknowledge community engagement and other public benefits, and move some tuition costs to a later period in the student's life. It would lift the very low subsidies currently received for business and law students. However, in other respects the system would for each discipline take into account costs of delivery and financial returns to graduates. As shown in table 5, this would have the effect of making more even the work effort required to pay for courses in the different disciplines. As this is loosely how the current system works, it would also limit the need for radical changes.

Recommendation: That the public contribution to the CSP base funding rate include a floor subsidy paid for all students, with discipline-related additional contributions based on course costs and private returns to graduates.
### TABLE 13: PRIVATE AND PUBLIC CONTRIBUTION TO CSP RATE, BY DISCIPLINE, 2011

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Commonwealth contribution ($)</th>
<th>Student contribution ($)</th>
<th>Total ($)</th>
<th>% paid by student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law, accounting, economics, commerce</td>
<td>1,793</td>
<td>9,080</td>
<td>10,873</td>
<td>84%</td>
</tr>
<tr>
<td>Dentistry, medicine, veterinary science</td>
<td>19,542</td>
<td>9,080</td>
<td>28,622</td>
<td>32%</td>
</tr>
<tr>
<td>Computing, built environment, other health</td>
<td>8,808</td>
<td>7,756</td>
<td>16,564</td>
<td>47%</td>
</tr>
<tr>
<td>Allied health</td>
<td>10,832</td>
<td>7,756</td>
<td>18,588</td>
<td>42%</td>
</tr>
<tr>
<td>Engineering, surveying</td>
<td>15,398</td>
<td>7,756</td>
<td>23,154</td>
<td>33%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>19,542</td>
<td>7,756</td>
<td>27,298</td>
<td>28%</td>
</tr>
<tr>
<td>Humanities</td>
<td>4,979</td>
<td>5,442</td>
<td>10,421</td>
<td>52%</td>
</tr>
<tr>
<td>Behavioural science, social studies</td>
<td>8,808</td>
<td>5,442</td>
<td>14,250</td>
<td>38%</td>
</tr>
<tr>
<td>Clinical psychology, foreign languages</td>
<td>10,832</td>
<td>5,442</td>
<td>16,274</td>
<td>33%</td>
</tr>
<tr>
<td>Visual and performing arts</td>
<td>10,832</td>
<td>5,442</td>
<td>16,274</td>
<td>33%</td>
</tr>
<tr>
<td>Education</td>
<td>9,164</td>
<td>5,442</td>
<td>14,606</td>
<td>37%</td>
</tr>
<tr>
<td>Mathematics, statistics</td>
<td>12,179</td>
<td>4,355</td>
<td>16,534</td>
<td>26%</td>
</tr>
<tr>
<td>Nursing</td>
<td>12,093</td>
<td>5,442</td>
<td>17,535</td>
<td>31%</td>
</tr>
<tr>
<td>Science</td>
<td>18,769</td>
<td>4,355</td>
<td>23,124</td>
<td>19%</td>
</tr>
</tbody>
</table>

### TABLE 14: PUBLIC SUBSIDY MATRIX

<table>
<thead>
<tr>
<th></th>
<th>High income</th>
<th>Middle income</th>
<th>Low income</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cost</td>
<td>Mid-range subsidy</td>
<td>High subsidy</td>
<td>High subsidy</td>
</tr>
<tr>
<td>Medium cost</td>
<td>Floor subsidy</td>
<td>Mid-range subsidy</td>
<td>High subsidy</td>
</tr>
<tr>
<td>Low cost</td>
<td>Floor subsidy</td>
<td>Floor subsidy</td>
<td>Mid-range subsidy</td>
</tr>
</tbody>
</table>

**Definitions:**
- **Income:** Typical earnings of graduate with qualification
- **Cost:** Total expenditure to complete qualification
- **Floor Subsidy:** Payment by government to cover research component, acknowledge community engagement and other public benefits, and move some tuition costs to a later period in the student’s life
APPENDIX 1: BASE FUNDING FOR TEACHING AND RESEARCH

Australian universities have two main functions, teaching and research. In itself, this states the obvious—it is the definition of a university formalised in the protocols for recognising higher education institutions, and carried through to the Provider Category Standards. But the idea of universities as integrated teaching and research institutions has increasingly been challenged by funding policy.

The integration occurs by co-producing teaching and research using heavily overlapping staff and facilities. Most academic staff are employed on a teaching and research basis. For example, the University of Melbourne’s collective agreement states that academic staff will normally conduct research in at least one of the three teaching periods of the year (semesters one and two, and the summer term). Other universities have similar guides as to how teaching and research staff should spend their work time. Academic staff time surveys going back to the 1970s consistently show that academics spend about a quarter of their time on research during the teaching semesters. Even those staff classified as ‘research only’ in fact are permitted, indeed encouraged, to engage in teaching, and the converse for ‘teaching only’ or ‘teaching focused’ staff. Except for casuals, however, across the public higher education sector few academic staff are teaching only (<5%). A little under a third of academic staff are research only.

Though universities are organised around academic staff who are both teachers and researchers, funding policy has increasingly financed the two activities separately.

‘Block grants’ that can be applied to either or both functions, and which provide the base funding on which other university activities are built, have declined. The trend is clearest in research, with government funding principally directed via project funding and performance-linked grants (the relatively rapid growth in research-only staff partly reflects this trend). In itself, unbundling research funding from the base favours universities with stronger histories of research activity. However because project grants have usually not been fully funded, grant success has added other financial pressures to research-intensive universities (recent government research policy changes will partly alleviate these pressures).

Up until 2005, the Higher Education Funding Act 1988 (HEFA) preserved a block grant system, with an ‘operating grant’ specifically funding both teaching and research. The Science and Innovation Budget Tables published each year claimed significant operating grant funding for research, typically around $600 million in HEFA’s last years. This represented 9-12% of total operating grant funding (it varied from year to year). Though the measured ‘output’ requirement on the operating grant was teaching-related—universities had to provide a minimum number of student places each year—the funding system recognised that teaching was carried out by academics who were also researchers.

The operating grant was replaced in 2005 by the Commonwealth Grant Scheme (CGS) under the Higher Education Support Act 2003. CGS funding is driven by student numbers and discipline-based funding clusters, but the legislation does not specify how money from it is to be used. Though there has been some inconsistency, government officials generally appear to believe that the CGS is for teaching. It does not appear in the Science and Innovation Budget Tables as making a contribution to research.

Over this same time period, the real purchasing power of funding under the operating grant and then the CGS declined
This added to the strains on universities as integrated teaching-research institutions, as the funding per CSP EFTSL provided less capacity to support academic staff as teachers and researchers. Casual teaching staff who are not paid outside the teaching period, or for scholarship or research, were a partial reaction to this problem. Fee-paying students, particularly international students, were another crucial response. Figure 11 shows how base funding is currently operating.

It highlights the important role of the integrated base in the system, as providing a threshold from which higher order activities can occur, from which careers can be developed, and from which each of the two main streams of activity can be informed by and contribute to the other.

Figure 12 shows how the base funding system now operates at the University of Melbourne. The research component in the middle teaching and learning cost column is research activity not funded by government grants or industry, averaged out on an EFTSL basis (adjusted for the estimated future impact of the Sustainable Research Excellence program). For undergraduate teaching costs alone, CSP average funding is at around the break-even point. But CSP average funding cannot finance the smaller classes at postgraduate levels or the base research activity of teaching and research academic staff. Smaller classes are financed by the premium prices paid by full-fee students. Access to full-fee markets has counter-acted the pressures to separate teaching and research.

Indeed, it is perhaps ironic that it is international student markets that appear willing to pay a premium in explicit recognition of the research standing of Australian universities according to their latest international ranking for the contribution this is expected to make to their overall learning experience and outcome, when such a nexus is no longer willingly admitted nor funded by the Australian Government itself.

**FIGURE 11: UNIVERSITY BASE FUNDING SYSTEM IN AUSTRALIA**

![University Base Funding System in Australia Diagram](image-url)
The University of Melbourne’s analysis of international student fees supports the hypothesis that teaching-driven income is used to sustain universities as teaching and research institutions. Figure 13 shows that there is a strong relationship between international student fee premiums over CSP revenues and weighted research publications, suggesting that the margin on international students finances research as well as CSP students (section 1).

The danger facing Australia’s universities over the next few years is a rapid disintegration of the teaching and research organisational model. The downturn in international student numbers is the most immediate force for this occurring. Changes in research funding policy are likely to concentrate research income in areas of existing research strength, reducing funding for teaching and research staff in other areas. A decision to base the new student funding system on a teaching-only basis (especially an undergraduate-only basis) would be the final, and possibly fatal, blow to the integrated teaching and research model of university organisation and finances.

Such a decision would have very significant implications. It would create strong pressure for the teaching and research academic staff profile to be replaced with a teaching or research academic staff profile, reflecting the different funding sources. While there is a role for academic staff specialising in teaching or research, the base funding system that covers both activities should be preserved. This is especially important for students who aspire to become researchers or complete research degrees. But teaching by research-active staff can benefit all students through bringing the latest research into the classroom.

Far from giving room to hide through mingling, this submission proposes an effective way of ensuring that funding for the research-side of the base equation can be made fully accountable.
FIGURE 13: CORRELATION BETWEEN ESTIMATED PRICE PREMIUMS FROM INTERNATIONAL STUDENTS AND WEIGHTED RESEARCH PUBLICATION OUTPUTS, 2009-10

Q1.1 Government investment in higher education has been justified in terms of delivering benefits to the economy, benefits to society and equity of access for students from all socioeconomic backgrounds. Should these principles continue to be applied, and if so how should they be used to determine the appropriate level of government subsidy for the cost of universities’ learning and teaching activities?

Public funding is discussed in section 6 of the submission. It proposes a floor public subsidy reflecting including public benefits of research and community engagement, the large future tax contribution of graduates, and public concern about tuition charges. On top of the floor public subsidy, differing amounts of public contribution affect degree costs relative to future earnings. This is likely to increase demand for those courses, compared to charging the full cost. Without the public contribution, there may be workforce shortages due to too few graduates.

Q1.2 What principles should determine the appropriate balance of resources contributed by:

- Government;
- students; and
- other sources

towards the cost of undergraduate and postgraduate education?

See the answer to question 1.

Where private benefits are high, since 1997 the Commonwealth has expected students to pay more of the costs of their tuition (this is not a consistent ‘balance’, as the share reflects the total cost of the place as well as the private benefit). In section 6, the submission suggests reasons why this approach continues to have merit.

It is important that there is scope for students to invest more in their education above the base funding rate (see section 5).

The main other contribution in the other system is international students (section 1.1.4). This revenue source is in decline, and so the government and domestic students will have to incur more of the total costs of base funding.

Q1.3 What other principles, if any, should influence the level and distribution of government subsidies for tuition costs in higher education?

No further principles other than those mentioned in the answers to Q1.1 and Q1.2.

Q2.1 What are the best international measures of course quality that would provide appropriate benchmarks to inform judgments about the appropriate level of base funding for Australian universities?

There are existing international standards reflected in local and international accreditation required or sought by universities (see section 1.1.1). Funding must be at least sufficient to meet these standards.

Q2.2 What are the best international measures of student engagement that would provide appropriate benchmarks to inform judgements about the appropriate level of base funding for Australian universities?

Matching questions in the American National Survey of Student Engagement and the Australian Survey of Student Engagement allow us to benchmark against the United States. These indicate that engagement is lower in Australian universities (section 1.1.3). Student:staff ratio differences between the
United States and Australia are one explanation for the differences (section 1.1.2).

**Q2.3 Is there a system of higher education funding in another country that would be a useful benchmark model to inform Australia’s review of base funding?**

No. We can learn from other countries in aspects of their higher education system, but their overall funding systems reflect their particular histories and political cultures. Many different types of funding systems can lead to good outcomes (section 6.7).

**Q2.4 What is the connection between the level of base funding and quality outcomes?**

Base funding is not the only factor affecting quality, but adequate staff levels and infrastructure are necessary for high quality outcomes (section 1).

**Q3.1 Do the current funding relativities reflect the relative cost of delivering undergraduate courses in particular disciplines? What, if any, relative weightings should be afforded to various discipline groups and why?**

At the University of Melbourne, expenditure relativities do not match funding relativities. However adjusting funding clusters based on recent expenditure levels is not the right long-term solution. In a standards based system, funding needs to reflect the costs of meeting standards rather than historic spending levels that may not reflect these standards. We recommend that an independent base funding price regulator carry out this work (sections 3 and 4). However, the base funding review’s current costs study could be used to meet urgent funding needs before the new system is put in place (section 4.4).

**Q3.2 What are the costs to universities of improving the quality of teaching and the quality of the student learning experience at the undergraduate level and to what extent should they be reflected in the base funding model?**

There are many different ways of improving quality and the student experience. The standards will set some benchmarks. However, competition in the demand-driven system and the scope for students to invest more in their education are two further mechanisms that will encourage universities to explore ways to improve teaching and learning (sections 3 to 5).

**Q3.3 What are the costs of engaging low SES students in undergraduate education? Should such costs be a factor in determining base funding? How might support for low SES students be maintained in the future?**

The government has separate programs aimed at attracting low SES students to undergraduate education, which should be retained. However evidence to date does not show that low SES is a strong proxy for students with high needs (section 3.1.6). While there may be issues with less-prepared students as the system expands, indices based on prior academic preparation may be a stronger guide than SES to resource requirements.

**Q3.4 What additional costs are involved in the provision of work integrated learning and should these be considered in setting the level of base funding?**

Work-integrated learning costs will need to be factored into base funding rate setting. To distinguish between different delivery methods, there may need to be different rates for the same field of study or course (section 4.3).

**Q3.5 What proportion of a higher education teacher’s time should be spent on scholarly activity and how could the costs of scholarship be included in the base funding model?**

Scholarship as distinct from research has not been previously been separately identified in studies of academic work. However, studies of how academic staff spend their time indicate
that at least a quarter is spent on research (appendix 1).

**Q3.6 Should any research activity continue to be supported by base funding?**

Funding for research activity is a crucial element of base funding. It is how universities have historically been organised in Australia (appendix 1), and universities must continue to be teaching and research institutions under the new standards framework (section 3.1.1). Not funding research as part of base funding jeopardises the teaching and research employment framework of Australian universities.

**Q3.7 Should infrastructure investment continue to be supported by base funding?**

Yes. Without incorporating infrastructure into the base the demand-driven system will be undermined by major enrolment changes still requiring associated infrastructure funding to be approved centrally. Project-based central infrastructure funding can lead to inefficiency through universities submitting the projects most likely to be funded, rather than those that are the most important (section 3.1.4).

**Q3.8 What other factors, if any, should be taken into account in determining base funding for teaching and learning in higher education?**

In a standards-based approach to setting funding, other factors can be identified through the standards (see sections 3 and 4).

**Q4.1 Is there a higher relative cost for postgraduate coursework degrees? If so why is there a difference and what is the extent of the difference compared to an undergraduate degree in the same discipline?**

Across the whole institution, at the University of Melbourne average postgraduate professional coursework costs are around 30% higher than average undergraduate costs. The main driver for these higher costs is small class sizes. The deregulated fee model of postgraduate coursework made possible class sizes that would not have been possible under the CSP funding model (section 3.1.5).

**Q4.2 Are there other factors that contribute to the costs of postgraduate coursework degrees that should be acknowledged in the base funding?**

At the University of Melbourne aspects of the graduate school approach have had additional cost drivers beyond on-campus class sizes. For example, the ‘clinical’ model of teacher education in the Master of Teaching requires much greater and more expensive interaction with schools (section 3.1.5). However, these teaching methods could also be used in undergraduate courses.

**Q5.1 Are there general principles that should determine the maximum contribution a student should make towards the cost of their education in a publicly funded higher education system?**

Reflecting the role of student choices in demand-driven funding, the funding system should provide greater recognition of students as decision-makers in the level of their investment in higher education. Students should have more scope to choose a different type or quality of education than base funding permits (section 5.2).

**Q5.2 In what circumstances should the level of students’ contribution towards the cost of their courses be based on factors other than the cost of their tuition?**

In the system this submission proposes, the student contribution element is the difference between the base funding amount and the public contribution. The likely future earnings of graduates should be reflected in the public contribution and therefore also the student contribution (sections 6.1 and 6.10).

**Q5.3 Should the basis for determining the level of contribution by the student
towards the cost of their tuition be different at the postgraduate level?

Yes. There are public policy reasons for maintaining public subsidy neutrality between undergraduate and postgraduate. With a higher base funding rate for postgraduates, this means that the student contribution rate will be higher (section 3.1.5).

Q6.1 To what extent does the base funding model provide incentives for institutions to invest in and deliver high quality teaching?

The main function of base funding is to provide the capacity (rather than incentives) to invest in and deliver high quality teaching (section 3). The other drivers for quality are TEQSA, other accreditation agencies, and competition in student markets.

Q6.2 Does the base funding model provide incentives for institutions to maintain strong academic standards?

As for question 6.1, the main function of the base funding model is to provide capacity for strong academic standards. The external standards institutions provide strong incentives to meet standards. Especially in a demand-driven funding system, negative reports on standards are likely to cause serious financial consequences from reduced student demand.

Q6.3 What features could be incorporated in the design of a new base funding model to make it more simple, transparent and responsive to higher education providers?

Transparency would be greatly improved by two measures. First, the base funding price regulator recommended in section 4 would have a clear basis for setting the overall funding rates received by higher education providers. A separate research component would identify money to support joint teaching and research staff. Second, the basis for differing public subsidy levels should be explained (section 6.10).

The funding system could be more responsive to higher education providers and students if there was scope for student fees above the base amount. This would allow students to purchase types of education that are not now available in Australia (section 5).

Base funding is relatively simple now. For example, there are many fewer price points than in full-fee markets. The complexity in the system has come from the unbundling of the base funding system into many different separate sources of program and project funding, with frequent changes to criteria. The incorporation of infrastructure costs into base funding would remove one source of this complexity (section 3.1.4).