April 2011

The Group of Eight
Group of Eight House
Level 2, 101 Northbourne Avenue
Turner ACT 2612
www.go8.edu.au
Executive summary

The Group of Eight (Go8) is pleased to make a submission to the Review of Higher Education Base Funding. The Review gives Government an historic opportunity to set higher education funding on a sound footing for the future, and to commit the support needed to achieve its important quality and participation goals.

Base funding does not adequately cover the costs of the activities that are central to universities’ missions. There is a funding gap of up to 30 per cent, though the size of the gap varies by institution. As a result, universities have had to allow student-staff ratios to increase and have neglected essential investment in infrastructure and facilities. These and other savings threaten the quality of the student experience. There is already disturbing evidence that Australia has fallen below international benchmarks.

In an expanding, demand-driven system these problems are likely to worsen as the funding gap widens. Growth in demand for university places is likely to be very large (and larger than Government projections have allowed). Accommodating growth will absorb fiscal capacity.

In the recent past, revenue from international student fees has bridged the funding gap. But a combination of short-term factors (exchange rates, changes to migration policy and perceptions of negative attitudes to foreigners) and longer term developments (market maturity and growth in international competition) suggests that Australia can no longer rely on continued exponential growth in international enrolments. Revenue from this source will not be able to fund future growth in domestic participation.

Universities’ deferral of key investment in staff and facilities, and over-reliance on international fees, show that public funding is not sufficient. There is a strong case for more public investment in Australia’s universities in view of the significant public benefits of higher education (labour force participation, skills, knowledge and innovation). In a global knowledge economy, higher education funding is a key investment in the nation.

There are also compelling arguments for increasing private investment. Firstly, Government will be unable to support an expanded system while maintaining quality under current funding arrangements. Secondly, partially deregulating student contributions will encourage further diversification in the sector – essential to meeting the varied needs of a bigger and more diverse cohort of students. Thirdly, additional private funding will make increased resources available to universities to recruit and support students from low SES backgrounds and other traditionally under-represented groups.

Nations around the world face the issue of how to fund a quality mass higher education system. Australia led the world in introducing income-contingent loans for university fees to allow students to co-invest in their education, without imposing up-front barriers to participation by the less affluent. In the coming decades, Australia will need to build on this world-leading system to ensure that higher education funding is adequate and fair, and that it effectively supports growing participation and world-class quality.
Principles for higher education funding

**Australia’s higher education system should be of international quality**

- International benchmarking of the quality of the learning experience shows that the learning experience of Australian students is inferior to that of students in the US and the UK.

**A quality higher education system requires adequate funding which should be sustainable**

- Current funding rates do not support universities to achieve Government’s participation and quality goals.
- Universities cannot fund a quality student experience at current funding rates.
- Base funding must cover the cost of university activities that contribute to the student experience, including infrastructure, scholarship and research, and student services and amenities. It should not be considered to fund teaching alone.
- An enhanced student experience can increase student engagement and raise success rates.
- Due to inadequate funding, universities have had to allow teaching infrastructure to deteriorate and student-staff ratios to rise, and student support services have not been provided at a level sufficient to meet international benchmarks.
- Revenue from international student fees has plugged the funding gap. Relying so heavily on international revenue was always dubious policy: now it threatens to become unfeasible due to softening international demand.
- Demographic growth, increasing demand for high level skills and Government attainment and participation targets will drive strong growth in domestic enrolments in the foreseeable future. Go8 projections suggest that EFTSL in CSPs will increase by 55 per cent (or more than 200,000) to 2030.
- It will not be possible for Government alone to meet the cost of projected growth in the medium to long term, and if universities have no room to raise tuition fees then quality is likely to decline further.

**Costs must be shared between Government and students**

- Funding reform must build on Australia’s world-leading system of income-contingent loans.
- While Government should increase funding, its contribution will be limited by fiscal constraints. In order to make a sufficient level of base funding available, universities should therefore be allowed greater flexibility in setting fees.

**Students should have greater choice**

- Government has committed to a demand-driven system by removing caps on CSPs from 2012. To make the system genuinely demand-driven, the next step is to diversify supply by allowing institutional differentiation. A more diverse range of provision will be necessary to meet the differing needs of a larger and more diverse student body.
• Deregulating student contributions will allow price point competition. Students can make their own trade-offs between convenience, quality and price, as already happens in the international and postgraduate full-fee markets.

• Pricing flexibility allows universities to charge more for more expensive, higher quality services.

**Funding arrangements should support equity and access**

• Income-contingent loans lower up-front barriers to student participation.

• Fee deregulation means a closer alignment between what students pay and what they can afford.

• In return for pricing flexibility, universities must demonstrate their commitment to recruiting those students most able to succeed, regardless of their background, including those disadvantaged by their prior schooling.

• Improvements to funding of student living costs would be more effective than loadings for enrolment in improving participation of low SES students.

**Allocation of funding should be as simple as possible, recognising the complexity of contemporary higher education. Allocation of funding should be transparent**

• Funding should be allocated on the basis of a simple formula, based primarily on student numbers as an indicator of the volume of activity. Additional earmarked components and loadings should be kept to a minimum.

• Base funding should include a more realistic level of funding for capital works and maintenance. Infrastructure funding should be an integral part of base funding as adequate facilities are an essential input to the student experience.

• The basis for allocation of funding should be explicit and should be related to quality benchmarks.
The funding gap

Data on costs and expenditures from Go8 universities show that there is a significant gap between current levels of resourcing and the actual cost of delivering a quality student experience.

**Figure 1. The funding gap**

**Higher education funding overview**

Universities are underfunded on average relative to the activities they are expected to undertake to meet Australian and international quality standards.

![Diagram showing the funding gap]

Research* activity not funded via ACG or industry (adjusted for anticipated impact of SRE uplift 2010-13).

Note: the model ignores additional costs per funded EFTSL to pay for unfunded EFTSL in-built to system.

Source: The University of Melbourne

Of course, the size of the gap differs by course and institution, due to differing costs, and to differing relationships between costs and funding in a less than rational Cluster Funding system. Estimates from Go8 universities suggest that the gap between revenue from base funding and the cost of teaching and learning plus unfunded costs of scholarship and research is equivalent to nearly 30 per cent of the total cost of this package of activities at some universities. In dollar terms, the gap is up to $6000-$7000 per EFTSL.

That there is a gap between funding and costs is hardly news. A study carried out last year by Access Economics for Universities Australia (UA) found that ‘costs and funding do not match’, citing anecdotal evidence from key informants as well as ‘preliminary cost-gathering exercises undertaken by a few universities’. The study argued that base funding rates – both Commonwealth and student contributions – were not related to costs and lacked empirical foundation.1

Current funding does not support Government quality and participation goals

Current, inadequate funding for the higher education sector has led to a situation where quality standards are determined by available funds. In a more rational system, funding would be set at a level to achieve appropriate standards.

The tension between funding and standards will become more pressing once the Government has set up the new higher education regulator, namely the Tertiary Education Quality and Standards Authority (TEQSA). TEQSA will mandate a range of quite detailed quality standards (including, at least potentially, some standards on inputs, such as staffing profiles). Quality assurance to determine universities’ compliance with these standards will be stricter and more centralised than previously. The TEQSA legislation (currently being considered by a Senate committee) includes important principles guaranteeing that TEQSA’s approach to regulation will be informed by a risk management approach, and Government has made some concessions to the university sector in respect of institutional autonomy. Nevertheless, TEQSA’s powers will be considerable: TEQSA will carry a proverbial big stick, even if it speaks softly. The consequences – especially reputational consequences – for any university that fails to meet quality standards could be quite severe.

The new quality assurance regime has important implications for funding. It would be unreasonable for Government to mandate quality standards without allowing universities access to sufficient funds to meet those standards. As discussed in more detail below, universities have relied on international fee revenue to reduce the funding gap and avert serious declines in quality. However, likely future growth in domestic enrolments – driven partly by Government participation targets – combined with a softening in international demand will make this strategy risky and possibly unfeasible in the future.

Adequate funding must cover a bundle of university activities

Costs include not only the direct cost of teaching and learning, but also the cost of assuring and enhancing quality, developing and updating courses, translating research findings into teaching materials and activities, investing in and maintaining infrastructure and facilities for students, including lecture halls, classrooms, labs and accommodation, together with student support services and staff time on scholarship and research. All of these are essential to the student learning experience and to maintaining an international level of quality across the activities expected of a university. Hence it is our contention that base funding ought to be set at a level to cover all of these activities. Base funding should not be considered as funding for teaching and learning only. Even a more adequate level of base funding exclusively for a narrow definition of teaching and learning would be insufficient. This would fund only a part of the student experience. Past experience suggests that when implicit funding amounts for other activities are rolled out of base funding, the result is that overall funding for all university activities is allowed to fall. Under the new quality assurance regime, provider standards for universities will be unambiguous about the need for all universities to be active in research. It is therefore essential that universities have access to adequate funding to cover indirect costs and academic salaries which are not funded, or only partly funded, from competitive grants and research block grants. Of course, funding should reflect the range of activities that are actually undertaken at a given institution.

The funding gap described above shows that Australian universities are finding it increasingly difficult to finance to an internationally acceptable level of quality the bundle of activities which are core elements of their mission.
Funding, student-staff ratios and quality

The funding gap has left Australian universities with no choice but to allow staff-student ratios (SSRs) to blow out to levels which are much higher than in the recent past, and are generally agreed to be undesirable and a risk to quality. SSRs have grown from 14:1 in 1995 to more than 20:1 in 2008. Both the Bradley Review and the then Minister for Education, and now Prime Minister, the Hon Julia Gillard, explicitly recognised that SSRs were too high:

*Relative to the UK, Australian graduates from the class of 2006 rated their university experience lower on every measure bar one – which related to satisfaction with the feedback they received.

*Relative to the US and Canada, Australian graduates from the class of 2007 rated their university experience lower on every measure – with no exceptions.

Discrepancies in ratings between Australian graduates and their UK and north American counterparts appear to be greatest in those areas most impacted by large student – staff ratios, such as

- Student and staff interaction
- Enriching educational experiences
- Whether staff are good at explaining things
- Whether teaching staff make subject material interesting for students.

Figure 2 below shows the student engagement score scales for first year students in Australasia and the United States. Australasian students’ scores are lower than American students’ for all five indicators for which American data are available. Note that there is a particularly alarming gap between results on the indicator ‘Student staff interactions’ – presumably the indicator most closely linked to the availability, and thus the number, of academic teaching staff.

**Figure 2. First year student engagement scores, Australasia, New Zealand and USA**

Results for later year students show that the gap in student engagement scores widens somewhat as students progress through their degrees (Figure 3). For ‘student and staff interactions’ the gap widens from around 13 points to around 16.

2. The Hon Julia Gillard MP, Deputy Prime Minister, Transition, Retention and Progression Forum Opening Address, Monash University – Caulfield Campus, 9 December 2009, Melbourne
While there has been no particular study of the relationship between staffing resources and engagement scores in Australia, American research shows that there is a statistically significant relationship between ‘faculty resources’ and the five main indicators of student engagement (Figure 4).

Figure 4. Relationship between student engagement benchmarks and selected indicators of quality

<table>
<thead>
<tr>
<th>US News Indicators of Quality</th>
<th>NSSE Benchmarks of Effective Educational Practice</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Academic challenge</td>
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<tr>
<td>Academic reputation</td>
<td>*</td>
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<tr>
<td>Alumni giving rate</td>
<td></td>
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<tr>
<td>Graduation and retention rate</td>
<td>*</td>
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<tr>
<td>Barron’s selectivity</td>
<td></td>
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</tbody>
</table>

Notes: All statistically significant relationships are positive with effect sizes between .02 and .10.
Student-level controls include gender, minority status, athlete status, first-generation status, on-campus residence, Greek membership, full-time status, and major, institution-level variables not listed include educational expenditure per student and Carnegie classification.

Source: National Survey of Student Engagement, Annual Report, 2005
Higher education funding is still based on a modified form of the Relative Funding Model (RFM), developed and adopted more than 20 years ago. The RFM was intended to adjust for inequalities in funding between established universities and the new universities set up by the Dawkins reforms. It was not intended to be an enduring structure for higher education funding over the long term. The RFM was based on historical patterns of expenditure, that is, on historical rates of funding for tertiary institutions. It was not based on an empirical analysis or estimate of actual costs. It therefore perpetuated (and perpetuates) the cyclical dependence of funding on expenditure which is in turn dependent on historical rates of funding.

Whatever the merits or otherwise of the RFM when it was first introduced, it has outlived its usefulness. It is reasonable to believe that the cost of delivering higher education to an internationally acceptable standard of quality has changed in the last 20 years. Increased use of information and communications technology in teaching and learning, higher expectations of facilities and a faster rate of obsolescence and turnover in facilities and equipment have imposed additional costs. Growth in the number and diversity of courses offered – including cross-disciplinary and highly specialised courses – have added to the cost of teaching and learning. Significant growth in the number of students, and changes in the profile of students attendant on the move from an elite to a mass system have led to higher expectations of feedback and support for students.

Cluster funding rates and HECS-HELP bands derived from funding relativities from the RFM lack a solid empirical foundation or a consistent principle of cost-sharing. Current rates result from two decades of incremental changes, some driven by political considerations or fiscal expediency as much as by educational factors.

Funding rates should be reformed to better reflect costs. Rates should follow differences in costs between disciplines, but should be based explicitly on the costs of different methods of delivery (for example, classroom, laboratory, clinical etc.). This would be a simpler and more rational system. There is no rationale for the wide diversity in public/private shares of funding between fields. A simpler and more consistent approach would be fairer and more effective. However, a flat rate of student contributions across all fields would be as unfair and irrational as the current system.
The funding gap and associated problems will be exacerbated in a demand-driven system

All of the problems identified above as consequences of the funding gap will become more pressing when funding for CSPs becomes fully demand-driven in 2012. A demand-driven system without reform of base funding will exacerbate the basic problem of the higher education funding regime – namely that more money is only available through expanding enrolments while resulting revenue increases do not allow maintenance of infrastructure, staffing and student services at levels sufficient to protect quality. Higher education commentators have estimated that there will be a shortfall of $1 billion per year in infrastructure funding alone.\(^3\) According to the most recent Go8 infrastructure benchmarking survey, the total estimated backlog maintenance liabilities of its members exceeded $1.5 billion in 2009. This liability represented 10.3 per cent of the estimated Asset Replacement Value (ARV) and had grown 1.3 per cent since 2007.\(^4\)

While universities can and do expand enrolments at marginal costs, there must be a limit to how far this can go without a serious threat to quality. SSRs are already too high and maintenance has been neglected. It is hard to see how significant increases in enrolments over the medium to long term can be achieved if per student funding is not adequate to fund the corresponding expansion of infrastructure and facilities that will be necessary.

In short, the funding gap will widen – both relative to the increased number of students and in absolute terms. The amount that universities will have to find from other sources – will be much greater than today.

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4. Group of Eight, *Infrastructure Survey 2009*
Future growth in domestic enrolments will absorb fiscal capacity

Domestic demand will continue to grow in the short and longer term

Since 2005, domestic enrolments have grown fairly strongly, following several years of stagnation at the beginning of the century. Total domestic enrolments have grown 13 per cent since 2005, while postgraduate coursework enrolments have grown somewhat faster (18 per cent).

Indications are that growth will continue and speed up over the next few years. Applications and offers data show increasing demand for university. In 2009 (still the latest year of published data available from DEEWR), the number of applicants increased by over 5 per cent and offers increased by more than 1 per cent. This was the biggest increase in applications since 2002. 2010 applications and offers figures can be expected to show another year of strong growth in applications and particularly strong growth in offers, judging from the levels of over-enrolment in the sector. Preliminary indications for 2011 suggest slightly more modest growth in applications, which will be largely absorbed by further growth in offers. While part of recent growth is due to poor labour market prospects following the global financial crisis, there has been some increase in demand for higher education on top of this.

In 2010, over-enrolment in Commonwealth-supported places (CSPs) across the sector was estimated at 9.9 per cent, up from 5.7 per cent in 2009. Government has attributed the large increase in over-enrolments to its higher education policies and targets and to improvements in funding for the sector.5 Government estimates that 9.9 per cent over-enrolment equates to an extra 44,000 places6 in the system.

In the longer term, indications of future growth are strong. Underlying population growth – especially in youth cohorts from about 2015 onward – will combine with strong labour market demand for higher level skills and qualifications, Government’s higher education access and participation agenda, and a long-term trend to higher levels of education to drive strong, long-term growth in enrolments – in universities, other higher education providers and in the TAFE sector.

Government policy is a further strong driver: in 2009, Government announced a 40 per cent Bachelor degree attainment target for the 25-34 year old population by 2025 (attainment was 32 per cent in 2008; now up to 34 per cent). To meet a 40 per cent target, there will have to be an additional 217,000 completions by 2025, or well over 300,000 extra enrolments above baseline growth, according to DEEWR calculations.

It is important to note that DEEWR has only modelled the increase in participation that would be needed to hit the target: it has not modelled the likely size of future demand. Growth in demand is likely to exceed the numbers cited in DEEWR’s projections. The Go8 has done some projections of likely future demand based on movements in population and participation rates. These suggest decidedly bigger growth than the DEEWR estimates.

6. ibid
Previously published projections of growth in tertiary participation\(^7\) suggest that undergraduate enrolments will grow by 19 per cent to 2020 and 41 per cent to 2030. Postgraduate enrolments are projected to grow by 60 per cent to 2020 and 120 per cent to 2030. Overall growth is projected at 27 per cent to 2020 and 51 per cent to 2030.

**Figure 5. Projected levels of enrolment in tertiary education by level of study, 2009 to 2030**

![Figure 5. Projected levels of enrolment in tertiary education by level of study, 2009 to 2030](attachment:figure5.png)

Source: Group of Eight (2010), *Future Demand for Higher Education in Australia*, Backgrounder 10

Projected growth is quite large compared to recent trends in domestic enrolments. Domestic Bachelor enrolments (at public HEPs) grew by about 13 per cent between 2001 and 2008, or around 61,000 (about 48,000 in EFTSL terms). Projected growth in Bachelor CSP EFTSL to 2020 is nearly 85,000. In the following decade, further growth of 94,000 EFTSL is expected.

In the first ten years after the Dawkins reforms in 1989, domestic undergraduate enrolments grew by 24 per cent. In absolute terms, though, this was 92,463 – or about 73,000 in EFTSL terms. This was smaller than the growth projected for either of the ten year periods to 2030.

Of course, growth in the 1990s began from a much lower base and took place in the context of a major reform to higher education financing. Growth in domestic enrolments became possible because students’ HECS contributions made a new source of finance available to Government and the sector.

**Cost of projected growth**

Past forecasts have generally underestimated growth in demand for higher education. It appears that Government has under-estimated likely growth in demand, and associated costs, even in the short-term. The DEEWR Portfolio Budget Statement (PBS) for 2010 included a significant upwards revision of CGS funding, driven by stronger than expected growth in demand and enrolments following the announcement of the move to demand-driven funding in 2009. Estimated undergraduate EFTSL for 2009-10 was revised upwards by more than 21,500 (or 5 per cent) while CSP EFTSL in postgraduate coursework places was revised upwards by more than 4000 (or 20 per cent). Upwards revisions were in excess of 30,000 in the out years for undergraduate EFTSL (around 7 per cent). For postgraduate coursework, the revision was nearly 9000 by 2012-13 (38 per cent!). The associated revision in CGS funding was $92 million in 2009-10, rising to $430 million in 2012-13. The upwards revision in the latter year is equivalent to 8 per cent of the estimate in the 2009 PBS.

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Table 1. Changes to Budget forecast for Commonwealth Supported Places

<table>
<thead>
<tr>
<th></th>
<th>2009-10</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
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<tbody>
<tr>
<td><strong>Funding</strong></td>
<td></td>
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<td></td>
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<tr>
<td>2009 Budget Forecast funding ($’000)</td>
<td>4,471,435</td>
<td>4,688,787</td>
<td>4,958,254</td>
<td>5,171,880</td>
<td>5,171,880</td>
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<td>2010 Budget Forecast funding ($’000)</td>
<td>4,563,826</td>
<td>5,029,042</td>
<td>5,250,302</td>
<td>5,602,652</td>
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<td>Difference in funding 2009 to 2010 ($’000)</td>
<td>92,391</td>
<td>340,255</td>
<td>292,048</td>
<td>430,772</td>
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<tr>
<td><strong>Places</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>2009 Budget Forecast places (EFTSL)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>422,000</td>
<td>432,000</td>
<td>444,000</td>
<td>458,000</td>
<td></td>
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<tr>
<td>Postgraduate coursework</td>
<td>21,000</td>
<td>23,000</td>
<td>23,000</td>
<td>23,000</td>
<td></td>
</tr>
<tr>
<td>2010 Budget Forecast places (EFTSL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>443,540</td>
<td>466,022</td>
<td>474,986</td>
<td>488,016</td>
<td>494,210</td>
</tr>
<tr>
<td>Postgraduate coursework</td>
<td>25,297</td>
<td>30,194</td>
<td>31,660</td>
<td>31,790</td>
<td>31,870</td>
</tr>
<tr>
<td>Difference in undergraduate places</td>
<td>21,540</td>
<td>34,022</td>
<td>30,986</td>
<td>30,016</td>
<td></td>
</tr>
<tr>
<td>Difference in postgraduate coursework places</td>
<td>4,297</td>
<td>7,194</td>
<td>8,660</td>
<td>8,790</td>
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</tr>
</tbody>
</table>

Source: DEEWR Portfolio Budget Statements, 2009 and 2010

Over the longer term, funding requirements are likely to continue to outpace DEEWR estimates.

In 2008, total CSP EFTSL cost just over $8 billion, of which about $4.2 billion was Commonwealth contributions, nearly $3 billion was student contributions and $0.9 was Commonwealth HECS subsidies. Assuming no change to these funding arrangements requires an extra $3.6 billion in funding, of which the Commonwealth would be liable for $2.3 billion (additional Commonwealth contributions plus the cost to the Commonwealth of additional HECS-HELP loans). Under this scenario, SSRs would increase somewhat above their already very high 2008 levels.

In order to maintain the 2008 SSR, total funding would have to increase by $4.5 billion. This represents an increase of 8.2 per cent in funding per EFTSL. If current cost shares were to be maintained, the Commonwealth would be liable for $2.9 billion more per year than in 2008.

To lower SSRs to 16 to 1 would require an increase of $7.5 billion on total funding (public and private) as at 2008. This represents a 34 per cent increase in funding per EFTSL. At current public/private funding shares, this would see the Commonwealth contributing an extra $4.7 billion.

The table below gives some further detail on these estimates. Note that all figures are in constant dollars, and do not allow for indexation. Indexation would increase costs to the Commonwealth significantly over time.

Table 2. Costs of projected EFTSL growth at 2030

<table>
<thead>
<tr>
<th></th>
<th>Total aggregate cost 2030 ($bn)</th>
<th>Increase in total aggregate cost compared to 2008 ($bn)</th>
<th>Aggregate cost to C’wealth (at current funding shares) ($bn)</th>
<th>Increase in aggregate cost to C’wealth (at current funding shares) ($bn)</th>
<th>Increase in funding per EFTSL (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorb growth in demand</td>
<td>11.6</td>
<td>3.6</td>
<td>7.3</td>
<td>2.3</td>
<td>0</td>
</tr>
<tr>
<td>Maintain current SSRs</td>
<td>12.6</td>
<td>4.5</td>
<td>7.9</td>
<td>2.9</td>
<td>8</td>
</tr>
<tr>
<td>Reduce SSRs to 16:1</td>
<td>15.6</td>
<td>7.5</td>
<td>9.8</td>
<td>4.7</td>
<td>34</td>
</tr>
</tbody>
</table>

Source: Group of Eight (2010), Higher Education Financing, Backgrounder 14
Fee revenue from international students has plugged the funding gap. Rapid growth in international enrolments was driven partly by migration policy settings that made it easy for international graduates to gain permanent residency. From the mid 1990s, growth – especially in international undergraduate enrolments – was exponential. Growth in postgraduate coursework enrolments was also very strong. Enrolments in higher degrees by research (HDRs) also grew, but from a small base and remain a relatively small proportion of international enrolments.

In 1995, international student fee income was a large and useful additional source of revenue, but still much smaller than base funding from either Commonwealth or student contributions. Ten years later, international fees had outstripped domestic students’ contributions in absolute terms.

This development is clearer still from the trend in international student fee income relative to base funding revenue. In 1995, international student fees were equal to 11 per cent of base funding revenue and 15 per cent of aggregate Commonwealth contributions. By 2009, international student fees were equal to half of total base funding and 80 per cent of Commonwealth contributions. As seen in Figure 6 above, international fee income has been above 100 per cent of student contributions since 2004.
Figure 7. Total international student fee revenue relative to aggregate base funding and aggregate Commonwealth contributions, 1995 to 2009

For the sector as a whole, international student fee income represented 17 per cent of total revenue (from all sources) in 2009. The share differs substantially by university. Six universities derive 20 per cent or more of their income from international student fees, and two are over 30 per cent.
Australia cannot rely on continued exponential growth in international enrolments

For a combination of reasons, the era of exponential growth in numbers of international students coming to Australia to study in higher education and other sectors appears to be drawing to a close. Significant changes to migration policy – affecting both pathways from student visas to permanent residency as well as student visas themselves – have weakened the previously strong appeal of study in Australia as a route to migration. A strong Australian dollar has undercut Australia’s cost advantage – in both fees and cost of living – compared to rival destinations. Perceptions that Australia has become less welcoming to foreigners in general and international students in particular – resulting from a small number of widely publicised attacks on Indian students in Melbourne and from some fairly crude discussion of migration and population policy during the last federal election campaign – have further damaged Australia’s attractiveness as a study destination.

Time series data for international enrolments (stock data) across all sectors show that 2010 recorded the first fall in onshore enrolments since the Asian financial crisis of the late 1990s. Commencements data tell an even less positive story. Growth in higher education commencements has slowed almost to a standstill, while there are clear declines in ELICOS and VET – both of these sectors are, among other things, important pathways to higher education for international students. Schools commencements have been in decline since 2008. While the number of international enrolments in schools has always been fairly small, this sector is another pathway to higher education.

International student visa applications data recently reported by the Department of Immigration and Citizenship (DIAC) show sizable declines in demand, including in the higher education sector. Study in Australia needs to develop a new value proposition, that is based more firmly on quality higher education, and less on ‘lifestyle’ factors, cheapness and migration. In the longer term, competition in the international student market is likely to increase significantly.

While international education is likely to remain a strong export earner for Australia, and for Australian universities in particular, it is very unlikely that the exponential growth in onshore, full-time enrolments seen in the last two decades can be expected in the future. Australian universities will no longer be able to rely on international students to plug the funding gap, especially as domestic participation grows over the next two decades.
Increase in costs must be shared between Government and private sources

Higher education creates an array of both public and private benefits. For this reason, it is appropriate that costs be shared between Government and the direct recipients of private benefits (students and graduates).

**Figure 8. Benefits of higher education**

<table>
<thead>
<tr>
<th>Public</th>
<th>Private</th>
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<tbody>
<tr>
<td>Increased tax revenues</td>
<td>Higher salaries and benefits</td>
</tr>
<tr>
<td>Greater productivity</td>
<td>Employment</td>
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<tr>
<td>Increased consumption</td>
<td>Higher savings levels</td>
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<tr>
<td>Increased workforce flexibility</td>
<td>Improved working conditions</td>
</tr>
<tr>
<td>Decreased reliance on Government financial support</td>
<td>Personal/professional mobility</td>
</tr>
<tr>
<td>Reduced crime rates</td>
<td>Improved health/life expectancy</td>
</tr>
<tr>
<td>Increased charitable giving/ community service</td>
<td>Improved quality of life for offspring</td>
</tr>
<tr>
<td>Increased quality of civic life</td>
<td>Better consumer decision making</td>
</tr>
<tr>
<td>Social cohesion/appreciation of diversity</td>
<td>Increased personal status</td>
</tr>
<tr>
<td>Improved ability to adapt to and use technology</td>
<td>More hobbies, leisure activities</td>
</tr>
</tbody>
</table>


Higher education is clearly both a public and a private good. The corollary is that it should be funded from a combination of public and private sources. However, the range of public and private benefits does not offer guidance on the precise split between public and private funding.

Clearly, there should be a balance between public and private funding, but where this balance should be is not a question that has a conclusive, technical ‘right’ answer. In other words, this is a political decision for Government to make, based on goals for higher education’s role in society, basic principles about investment in higher education and consideration of the various trade-offs that are necessarily involved in fiscal decision-making.
The case for improved public investment

Governments around the world have an essential role in funding higher education, making large public subsidies available. This is true even in countries like the USA where private contributions are high (in absolute terms and as a share of total funding).

The rationale for public subsidy for higher education is:

- Higher education is a public good – there are positive externalities beyond the private benefit to participants; and
- Individuals may under-invest in higher education in the absence of a public subsidy.

Public good benefits of higher education include:

- Supply of skilled workers to the labour market;
- Increased tax revenue and reduced dependence on welfare;
- Increased productivity and flexibility in the workforce; and
- Better social cohesion and more community involvement.

A university degree has become the default qualification for most of the high-skill occupations in the economy. In particular, the fastest growing occupations in recent decades have disproportionately been jobs where most workers have a degree.

While the significant income premium enjoyed by graduates is a private benefit, the higher taxes paid by graduates make a disproportionate contribution to Government taxation revenue. Revenue from taxes paid by graduates can be regarded as a public return on Government investment in higher education. A study by Johnson and Wilkins (2002) examined historical data on Government outlays on higher education and a range of earnings and tax data for graduates. The study found that within ten years, Government investment in higher education in 1989-90 had produced a net benefit to Government of more than $8 billion (at year 2000 prices). The authors estimate that this net contribution accounted for nearly five per cent of Government revenues. They observe that the fiscal benefits of investing in higher education increase as participation rises.8

Graduates are much less likely to be unemployed than are people without degrees. This is, of course, a major private benefit to graduates, but it also leads to savings in social security expenditure by Government: an important public benefit. According to the latest ABS Survey of Education and Work, only 2.7 per cent of graduates were unemployed, compared to 5.3 per cent overall, and 8.0 per cent of people with no post-school qualifications.9

A study of returns to education in Australia found that while returns to Year 12 and VET qualifications included a large effect from increased labour market participation (around half of returns to Year 12 and two-thirds of the return to VET), returns to Bachelors degrees were mostly due to higher productivity.10

The significant size of the funding gap shows that Government has not been contributing its fair share to higher education funding. Rising SSRs and decaying infrastructure show that Government has allowed its effective contribution to decline in value over time, and has left it to the ingenuity of the sector to try to cover the gap. All of these factors, plus the Government’s commitment to participation and attainment goals that will contribute to a significant expansion of enrolments make the case for an increase in Government contributions to base funding for higher education. The Bradley Review’s

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9. ABS (2010), Education and Work 2010, Catalogue number 6227.0
10. Andrew Leigh (2007), Returns to Education in Australia, ANU Centre for Economic Policy Research, Discussion Paper no. 561
recommendation for an increase in base funding has not been taken up by Government, though Government has adopted many other significant recommendations – which the proposed increase in funding was designed to help pay for. Massaro (2010) estimates that Government funding for reforms adopted following the Bradley Review meet only 30 per cent of the costs.\textsuperscript{11}

Figure 9 below shows spending per student as a percentage of GDP, split into public and private components. In overall spending as a percentage of GDP, Australia is right on the OECD average at 1.5 per cent. Only three OECD member countries (the United States, South Korea and Canada) are significantly above Australia. However, it is notable that Canada’s public spend on tertiary education is equivalent to Australia’s total spend. Private spending in Canada is also higher than Australia, with the result that Canada’s total spend is over 2.5 per cent of GDP. It is also noteworthy that while private contributions in the US dwarf those in Australia, the US public investment, as a proportion of GDP (1 per cent) is higher than Australia. New Zealand’s total spending is at the same level as Australia’s but the public share is relatively higher. Of the main English-speaking countries, only the United Kingdom looks worse than Australia, with a lower total spend (1.3 per cent) though their public investment is about the same as ours. On the other hand, it should be noted that total investment as a proportion of GDP in Australia is at or above levels observed in countries where student fees are low or minimal.

\textbf{Figure 9. Public and private spending on tertiary education institutions as a percentage of GDP, OECD and partner countries, 2007}

![Figure 9. Public and private spending on tertiary education institutions as a percentage of GDP, OECD and partner countries, 2007](image)

Public spending on higher education is an essential investment in Australia’s future. Higher education equips Australians with the higher level skills needed to be competitive in a globalised economy where knowledge is an important factor of production and innovation. Universities have a vital role in fostering innovation and research. Australia has an opportunity to invest some of the profits from its long resources boom in skills and productivity for a more diversified future economy. Australia’s

The economy is in a strong position, relative to other countries. While the fiscal situation may currently be tight, there is a strong case in the medium term to invest in higher education, and thereby in skills and innovation as the Budget returns to surplus.

The Go8 – like the rest of the sector – welcomes the Government’s decision to introduce improved indexation of higher education funding on a basis which is more likely to deal more adequately with cost increases due to inflation. However welcome this funding boost is, it cannot entirely compensate for years of decline. Nor does it address the inadequacy of base funding rates in the first place.

The Bradley Review recommended that base funding be increased by 10 per cent. While the Government has adopted many significant recommendations of the Bradley Review, it has not to this point accepted the need to raise base funding.

**The case for greater private investment**

On the other hand, the private benefits of higher education are considerable:

- Graduates are much less likely to be unemployed;
- Graduates earn higher salaries: estimates of the return on investment in higher education are typically around 12 to 17 per cent; and
- Graduates report better health outcomes.

As noted above, graduates have a very low unemployment rate. Time series data show not only that graduate unemployment rates are well below total unemployment over time, but that graduates are somewhat protected from the labour market effects of recessions: graduate unemployment increases more slowly than overall rates.

There is a significant income premium from higher education. Analysis of data from the Household, Income and Labour Dynamics in Australia Survey (HILDA) finds that a Bachelor degree increases annual earnings by 45 per cent, relative to people with no post-school qualifications. A study of Census data found that private rates of return from Bachelor degrees for employees were 12-13 per cent in 2006, and had risen somewhat over time. Some other Australian studies have estimated private rates of return between 9 and 15 per cent. An earlier study found that an average Australian graduate realised an income premium of over $430,000 (in 2002 dollars). Subtracting direct costs and foregone earnings (estimated at just over $50,000) leaves a net lifetime monetary gain of $380,000, representing a private rate of return of 14.5 per cent.

As in previous periods of expansion, the higher education sector will need access to increased amounts of private funding to cover increasing costs. At the moment, the funding regime sets incentives for universities which are difficult to reconcile with policy aims in higher education. Universities have an incentive to admit full fee paying international undergraduate students and fee paying domestic postgraduates, in preference to domestic undergraduates. Further, universities have an incentive to take a bulk approach to undergraduate teaching, with large class sizes, casual teachers and less imaginative (and effective) teaching and assessment methods. The current cluster funding model means that all universities have to offer places in profit-making courses (to both international and domestic students) on a large scale, in order to subsidise other courses in other disciplines (high cost disciplines and disciplines with lower student contributions). This can distort universities’ offerings and prevents specialisation and differentiation.

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In addition to the fiscal argument, there are two other strong arguments for increased private funding of higher education: optimising students’ investment in human capital and driving provider diversity in the sector.

Under current funding arrangements, Government determines the maximum tuition fee on the basis of field of education but without regard to institution or to the characteristics of the course (e.g. mode of delivery, SSR etc.). The demand-driven system planned for 2012 does not alter these arrangements. The current system means that high and medium SES students pay less for university than they could afford. This puts limits on access for low SES students and on the services and support which universities can offer to those low SES students who do make it to university.

Secondly, with all universities receiving the same total funding per CSP (Commonwealth plus student contribution), there is little incentive for universities to differentiate their course offerings to play to their strengths in a competitive market. A more flexible, less regulated approach to student contributions would encourage universities to behave in a more market-driven way in the domestic undergraduate space, as they have been doing very successfully for some time in the international and postgraduate areas. For domestic undergraduates, a price cap should be retained, but it would be set at a level designed to encourage price point competition between universities. Differentiation in course offerings and prices would allow students to make their own trade-offs between quality, convenience and price in order to meet their varying needs and circumstances, just as in markets for other goods and services.

At the same time as introducing more flexible arrangements for student contributions to drive differentiation among universities, Government should encourage further diversity by making CSPs available to TAFEs at a reduced rate of funding, recognising that TAFEs do not have the research overhead costs borne by universities.

Market competition is likely to limit increases in student fees. Analysis of competitive, deregulated student markets – namely, international student market and the market for full-fee postgraduate places shows a genuine market with price point competition determined by competitive forces. There is no evidence that all institutions – or even the most prestigious institutions – will or can charge the top rate. On the contrary, the distribution of international students fees in Figure 10 follows an almost linear pattern of price points with few wide breaks between institutions. At the bottom end of the distribution, prices are constrained at levels around the amounts received in base funding per EFTSL, as institutions compete on price and seek volume. At the top end of the distribution, prices are also constrained by competition. While international students are obviously prepared to pay more to study at more prestigious universities, there is a limit to how high the price can go before demand falls. Furthermore, the increase is gradual. While institutions are grouped in fairly clear patterns along the x axis, there is no sign of a rigid segmentation into two or more institution types. Finally, price premia are strongly correlated with an important proxy indicator of quality and reputation, namely the proportion of ERA ratings at 3 or above by institution.
Price competition will be stronger, delivering benefits of choice to students and keeping fee increases down, if TAFEs (and private providers) are allowed by the funding and regulatory regime to take a bigger role in the delivery of publicly subsidised higher education. This will further increase the range and variety of competitively priced options for a more diverse and larger group of students.

A wide range of possible fees will allow price point competition to develop. Institutions will be able to compete on quality and price and make their own decisions about volume. This will make a wider range of options available to students.

Finally, liberalising student contributions is a logical step in a demand-driven system. From 2012, quantity will be deregulated but price will still be highly regulated. This is an unusual state of affairs and is unlikely to be conducive to maximally efficient operation of a truly demand driven system. Without flexibility on price, universities will remain subject to the same pressures to offer more places in profitable courses in order to subsidise less profitable courses. Indeed there may be more of a disincentive to offering unprofitable courses at all, as the incentives will be even more clearly based on volume than they are now. Current maximum student contributions are not necessarily related to courses’ delivery costs to universities or their value to students. An adequate and rational Commonwealth contribution, plus a student contribution set to reflect specific course costs and a
specific value proposition for students is more likely to encourage a pattern of provision that is better aligned with student and employer demand.

The Bradley Review report anticipates a possibility that fee deregulation may be considered at some time in the future, but is cautious about it. It interesting to note that the West Review in 1997 recommended incremental deregulation of both volume and price, but in the opposite order to Bradley: West recommended that fees be deregulated first while target volume was still agreed between Government and institutions. It was only after this that volume would be deregulated.

Some are likely to argue that a deregulated fees system will have negative implications for access and equity. On the equity implications, strong counter-arguments include:

- Australia operates a system of income-contingent loans to help students pay their university fees, removing up-front financial barriers to access and participation, and postponing debt repayments until graduates have realised a graduate wage premium later on;
- There is little convincing evidence that increases in student contributions have deterred participation in the past, either in general or for low SES students in particular;
- There is little convincing evidence that low SES students are more debt-averse than other groups of students;
- Holding tuition fees down has a regressive effect in that more affluent students invest less in their education than they could afford. While regressive in itself, this also has a more direct effect on low SES students by restricting the number of places available.

Government could use the compacts process to ensure that universities meet equity goals and other community expectations.

It is likely that living costs are a bigger barrier to higher education participation by the less affluent than are fees which can be deferred through an income-contingent loan system. A more generous, but more targeted system of student income support, designed effectively to benefit those in greatest need, would be the most effective and efficient way that Government could work to lower barriers to participation and achieve its social inclusion goals in higher education. The Go8 strongly supports the Government’s efforts to reform student income support along lines suggested by the Bradley Review. Effective reform in this area – while very difficult politically – is very important for future equity in access to Australia’s universities.
Foundations for a sustainable solution

The Go8 argues that the Review Panel should recommend to Government that higher education funding be reconfigured following the basic principles listed at the beginning of this submission (see pages 5-6). Translating the principles into effective policy changes will, of course, require further work by Government and stakeholders. The Go8 believes that, at this preliminary stage, the key changes and recommendations should fall under the following broad headings:

- Recognise that sustainable funding at adequate levels is essential to quality higher education by explicitly linking funding to quality assurance;
- Simplify the funding system by:
  - Moving away from the RFM, cluster funding and HECS band system to a simpler, more consistent approach;
  - Reducing the number of programs funded for specific purposes or outcomes to give universities responsibility and flexibility in use of funding to achieve their main objectives, subject to accountability to regulators;
- Fund universities for a package of activities which are essential to their mission, recognising the essential interdependence of these activities and their costs;
- Incorporate funding for infrastructure, scholarship and research and student services and amenities in base funding;
- Undertake a rigorous and comprehensive costing exercise to determine the costs of the activities to be funded to lessen dependence on historical funding rates in deriving future funding rates;
- Benchmark the quality of teaching and learning against international standards;
- Adopt a consistent principle for sharing of costs between public and private funding (moving away from the anomalies in the current system between different fields of education);
- Partially deregulate student contributions following further study to determine the best approach;
- Ensure that new caps on student contributions are high enough to allow price point competition;
- Deregulation could be introduced gradually, starting with fields of education where student contributions already make up a large share of base funding (for example, law and business);
- Investigate options for an independent pricing regulator to oversee higher education funding in the public interest, but at arm’s length from government.
Example: deregulating Cluster 1

A gradual deregulation of fees could begin in courses in Funding Cluster 1, such as Business and Law. These courses are in strong demand and the private returns are high. The Commonwealth contribution in these courses is less than 20 per cent of base funding, on the assumption that demand for these courses is less price elastic than in some other areas. Starting with partial deregulation of student contributions in Cluster 1 would be less likely to have temporary, distorting effects as a strong (though price controlled) market for these courses already exists. If partial deregulation could work in Cluster 1 without negative effects, and with appropriate safeguards for equity of access, consideration could then be given to deregulating student contributions in other fields.

Partial deregulation of student contributions in Business and Law would involve raising the cap from the current $9080 to an agreed ceiling. For example:

- The cap could be raised by 50 per cent to $13,620 (or $14,982, assuming a 10 per cent increase in base student contributions before any deregulation). Student contributions above the base amount (up to the increased cap) could be charged for premium courses only, that is, where a university demonstrates to a pricing regulator that the course costs more to deliver and offers a better value proposition for students.

- Alternatively, universities could be allowed to charge up to the increased cap, with price point competition in the market left to determine the level of student contributions at each institution. The pricing regulator’s role would be to ensure genuine competition that benefitted students.

- Another approach is to set a higher cap with reference to total base funding, rather than student contributions. For example, a cap could be set such that the student contribution took total funding to a maximum of 130 per cent of the base amount. At current rates, this would set the maximum student contribution at $12,342 (or 36 per cent above the current cap of $9080). If base funding were increased by 10 per cent before any deregulation, the new maximum student contribution under this proposal would be $13,576.

A partially deregulated system would have to be overseen by an independent pricing regulator, operating at ‘arm’s length’ from Government, but empowered to provide binding advice on the cost and appropriate level of funding for particular courses. The Australian Competition and Consumer Commission (ACCC) may be a useful model for a higher education pricing regulator.

Any deregulation of student contributions will raise concerns about equity and access. Universities will have to commit to initiatives to ensure equity in access, regardless of their pricing strategy, and to support students from low SES backgrounds and other traditionally under-represented groups in courses with higher fees. This could be achieved through a system of self-regulation, monitored by the price regulator, subject to minimum commitments set by the regulator. Government might consider as an example the ‘access agreements’ required by the Office of Fair Access (OFFA) in England of those universities that wish to charge above the minimum fee. University initiatives could include:

- Outreach activities
- Support for student retention and success
- Financial support for students
- Targets and monitoring
- Provision of information about access and support to prospective students
Appendix 1.
Further background research and analysis

Purpose:
To inform a series of information and policy papers intended to
a. Inform public discussion on higher education funding policy issues and options
b. Contribute to the evidence base available to DEEWR and the Review Panel to assist them in their work

Papers will canvass the issues and examine a broad range of options. They are intended to be information and policy papers, rather than advocacy documents as such.

Papers will be published on the Go8 website and/or made available to DEEWR and the Review Panel, as appropriate in each case.

1. Historical background on transition from elite to mass (and post-mass) higher education system
Background paper on policy and financing issues and changes associated with the evolution of higher education in the past circa 70 years.

2. Literature review
A comprehensive review of the research literature on higher education financing in Australia and internationally.

3. Discussion of funding policy principles
A paper discussing some threshold funding policy issues, and the pros and cons of alternative options.

Q1: Should rates of public funding be common across institutions and/or courses, or should they be allowed to vary? What are the implications of a demand-driven funding system on this question? If funding rates are to vary, on what principles and to what extent?

Q2: How flexible should student contributions be allowed to be? On what principles should this be decided? What protections are needed for disadvantaged (financially or educationally) or more debt-averse students?

Q3: What is the appropriate balance between centralised funding decisions for the sector as a whole and customised funding arrangements for individual institutions? Where are the boundaries best drawn? Is there a greater role for compacts in funding institutions?

Q4: What scope is there to improve funding by increasing the efficiency of teaching and learning? What strategies could be considered to achieve efficiency gains?

The paper will include a discussion of how different countries have asked and answered such questions in structuring their higher education funding systems.
4. Context

Document the policy context for the current funding review:

1. Increasing demand/participation (as both Government policy and observed trend)  
   i.e. changing demography
2. Change in policy settings for international education – Government has broken the nexus  
   between international education and migration leading to a downturn in international demand  
   with negative financial consequences for universities.
3. Shifts in patterns of participation by level of course, mode of study, time to complete,  
   load/intensity.
4. An international comparison of ratios of student contributions to government funding.
5. Investigate the extent to which the assumptions of the current higher education funding system  
   remain valid for the contemporary higher education sector, and identify changes and their drivers.

5. Comparison of international practices and development

Examine recommendations, policy analysis and policy changes from around the world to inform  
options for funding policy development in Australia. Examination would include, but by no means  
be limited to:

- The Browne Review and the UK Government’s response
- CHEPS papers on the review of Dutch higher education
- Policy analysis by the European Universities Association (EUA)
- OECD Thematic Review of Higher Education
- Any relevant work by the World Bank, UNESCO

Go8 Secretariat will conduct a scan of higher education funding regimes around the world. In particular,  
we will liaise with HEFCE for information and advice on the operation of English funding clusters. We  
will also consider the Danish ‘taximeter’ system.

As noted above at 2 we will examine how different countries have answered fundamental questions  
about basic principles of higher education funding in structuring (and reviewing) their funding systems.

6. Analysis of public and private benefits of higher education

1. Enumerate an array of public and private benefits from higher education and examine how to  
   quantify these.
2. Re-examine private rates of return to higher education in Australia, with a focus on  
   a. the relativities between rates of return to different levels of post-secondary qualifications  
      (different VET certificates, VET diplomas, Bachelors degrees, Masters degrees and PhDs); and  
   b. the cost of exclusion from post-secondary study compared to returns to different levels of  
      post-secondary study.
3. Examine how to calculate the social rate of return to higher education (theoretical and  
   methodological considerations) and attempt to quantify it (using the most appropriate available  
   measures and/or proxies).

The Go8 Secretariat will liaise with recognised experts in the field to develop credible approaches and  
models. We will engage consultants as necessary to undertake detailed research and analysis to inform  
our policy and information papers.
7. Models of fee deregulation

Examine possible models for deregulating student contributions. The project will consider:

- Experiences in other countries
- Price elasticities of demand for higher education courses
- Operation of markets where fees are deregulated (international students, full fee paying postgraduates)
- Possible caps on partially deregulated student contributions: at what level would caps have to be set to encourage price point competition between universities?

Deregulated fees and income-contingent loans:

- Possible effects of income-contingent loans on price elasticity of demand and supply
- Impact of (partial deregulation) on costs of operating HECS-HELP loan scheme
- Options for a price regulator: models for an independent agency
- How would it set a basic amount for base funding?
- On what basis could institutions charge a higher student contribution?
- Options for deregulation of particular fields and levels
- Options for setting student contributions within broad bands