



Increasing Australia's productivity through the effective delivery of the Government's higher education attainment policy

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Report by Access Economics Pty Limited for

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Contents

| | |
|---|-----|
| Executive Summary..... | iii |
| 1 Background..... | 1 |
| 1.1 Higher education in Australia | 1 |
| 1.2 The Bradley Review..... | 2 |
| 1.3 Implications of the proposals for the future of higher education..... | 4 |
| 2 Student growth scenarios..... | 6 |
| 2.1 Population projections..... | 6 |
| 2.2 Attainment and attrition | 8 |
| 2.3 Meeting demand | 10 |
| 3 Role of private higher education providers..... | 15 |
| 3.1 Classification of private providers..... | 15 |
| 3.2 Private providers’ share of the market | 16 |
| 3.3 Case studies..... | 16 |
| 4 Funding..... | 19 |
| 4.1 Public universities | 19 |
| 4.2 Private higher education providers..... | 20 |
| 4.3 Fiscal implications | 22 |
| 5 Results | 23 |
| 5.1 Key results | 23 |
| 5.2 Sensitivity analysis | 23 |
| 5.3 Limitations and areas requiring further study | 25 |
| References..... | 27 |
| 6 Appendix 1..... | 28 |
| 6.1 OECD classifications | 28 |
| 6.2 Non-self accrediting institutions..... | 29 |

Charts

| | |
|---|----|
| Chart 1.1 : 25-34 year olds with bachelor-level or above qualifications, 2007 | 3 |
| Chart 1.2 : Number of university commencements | 4 |
| Chart 2.1 : Australian population projections | 7 |
| Chart 2.2 : Attainment rates..... | 9 |
| Chart 2.3 : Forecast of graduates aged 25-34 | 10 |
| Chart 2.4 : Age distribution of immigrants (2008)..... | 11 |
| Chart 2.5 : Educational attainment of primary applicants..... | 12 |
| Chart 2.6 : Qualified migrants aged 25-34 by year of arrival | 13 |
| Chart 2.7 : Publicly provided domestic undergraduate university places..... | 14 |

| | |
|--|----|
| Chart 3.1 : Share of enrollments (2008)..... | 16 |
| Chart 3.2 : Holmes Institute - undergraduate students | 17 |
| Chart 4.1 : Public university funding split for domestic undergraduate students..... | 19 |
| Chart 4.2 : Government funding split for public universities | 21 |
| Chart 6.1 : NSAIs by State | 29 |
| Chart 6.2 : Private providers by broad field of education..... | 30 |

Tables

| | |
|---|----|
| Table 1.1 : Government funding of demand-driven funding for higher education (\$m)..... | 4 |
| Table 2.1 : Key assumptions for projections of student numbers..... | 6 |
| Table 2.2 : Population projection assumptions | 7 |
| Table 2.3 : Number of 25-34 year old domestic graduates..... | 9 |
| Table 3.1 : Non-self accrediting institutions..... | 15 |
| Table 4.1 : Public university funding- domestic undergraduate students (2007 \$’000)..... | 20 |
| Table 4.2 : Comparison of HECS-HELP and FEE-HELP | 22 |

Executive Summary

Currently, Commonwealth subsidised places are not available to students who choose to study at a Private Higher Education Institution.

A demand-driven higher education model that allows publicly-funded students to attend private higher education institutions will help the Australian Government meet its undergraduate higher education attainment target in a more efficient and effective manner than the current policy settings allow.

Public expenditure per student studying at private higher education facilities is likely to be less than expenditure per student at public institutions.

It is estimated that public funding of a student at a private institutions would be roughly three-quarters of the financial outlay of funding student places at public institutions – or even less when the public university Government funding split is accounted for. This is largely because the Government does not fund infrastructure or subsidise tuition fees at private institutions.

Private higher education providers have demonstrated their capacity to rapidly grow to meet increased student demand.

Research commissioned by ACPET found private providers claim higher completion rates than public universities, which would result in higher efficiency and less government funding (of students who do not complete their degree).

Targetting the number of graduates

The Australian Government has set an ambitious target to significantly increase the number of 25-34 year olds with at least bachelor-level qualifications to 40% by 2025.

- This requires an increase in the rate of attainment for 25-34 year olds from 32% in 2009 to 40% in 2025. Under previous arrangements, the attainment rate was expected to rise to about 34% in 2025.
- Access Economics estimates that the number of graduates in the target age group will increase from around 972,000 in 2009 to 1,472,000 in 2025. Without a change in Government policy, the number of 25-34 year olds with bachelor-level qualifications is expected to increase to around 1,251,000 in 2025.

The number of graduates in the target age group will be met through skilled migration and increasing domestic graduates.

- Skilled migration is expected to supply around 240,000 graduates, and therefore higher education providers in Australia will need to train around 1,230,000 graduates.

However, not all students who are enrolled in higher education courses will complete an undergraduate degree. Currently, 72% of domestic Australian students complete their degree which implies that the Government has to also fund the additional 28% of students for a period of time.

- Based on these figures, Access Economics estimates there will need to be, approximately, an additional 12% of funded places – or 1,385,000 undergraduate places for domestic students in total - through to 2025.

A shortfall in places?

To facilitate this, the Government has announced an additional 80,000 public places at a cost of \$491 million over 4 years.

- As a result, there is expected to be 458,000 domestic undergraduate annual places at public universities in 2012.
- Based on historical trends (growth of 1.14% per annum between 2000 and 2008), this capacity may grow to around 531,000 annual places by 2025.

The number of places for domestic students required to meet the target is extremely uncertain, but it seems likely that more places – in addition to those announced – will be required.

- Approximately 639,000 places may be required in 2025, indicating that there may be a substantial shortfall in places at public institutions.
 - In 2009, there were 422,000 publically provided undergraduate places for domestic students and 972,000 25-34 year olds with at least bachelor-level qualifications. That is, there were 2.3 qualified people for each undergraduate position. This ratio indicates that, in 2025, 1,472,000 qualified people aged 25-34 years are associated with 639,000 public domestic places.
 - This calculation is simplistic, most notably because of timing differences between students and graduates, and may significantly underestimate or overestimate the true relationship.

The role of the private sector

The government has limited the private sector's ability to compete for students, and therefore its capability to contribute to meeting this target. This is because the government has removed enrolment caps from public institutions and Australian Government Grants, which comprise the largest source of public funding at public institutions, are not available to private providers.

If the Government is prepared to fund all the additional places at public institutions that are likely to be required to meet its target, this is not an issue. However, if budget priorities dictate that public funding for education is not sufficient to fund all places at public universities, then the need for a viable private sector, able to expand to fill any gap that may arise, will be important.

Private sector providers have increased their delivery of tertiary education, offering flexible services and have demonstrated the ability to meet student demand. Also, private sector higher education institutions require a lower financial outlay from the Government than public providers. This is largely because the Government does not fund infrastructure or subsidise tuition fees at private institutions.

Based on the information available, the Government's financial outlay to a private student is approximately \$15,000 per year, or roughly three quarters of the outlay of a publicly provided

place (estimated to be \$20,338 in 2007). However, tuition fees (i.e. HECS-HELP) only account for around one-third of Government funding of public undergraduate places and all of the funding (i.e. FEE-HELP) of private places, indicating the difference in funding outlays could be larger.

Alternatively, announced funding of \$491 million for 80,000 places at public institutions implies a cost of \$6,138 per student, excluding tuition fees.

Limitations and areas for future work

This report used a simplistic approach to modelling future supply and demand for undergraduate positions. An integrated model would provide a number of benefits.

- More rigorous and integrated projections:
 - take into account different entrance and completion characteristics of different age cohorts; and
 - take into account the courses offered (which may have a significant bearing on costs to student and Government).
- Ability to look at individual years in isolation:
 - can evaluate costs and financial outlays etc more accurately; and
 - incorporate policy changes.
- Scope to run a wide range of simulations, and incorporate a wider range of parameter variations:
 - potential to identify countervailing effects (for example, migration increases the number of current *foreign* graduates and future *local* graduates).
- Funding and cost assumptions are affected by data availability. Limited information on private funding leads to uncertainty about the full costs and benefits to government of opening up demand-driven funding and providing other support for private higher education providers. Further analysis should be undertaken to understand the full costs and benefits of the Government subsidising places for students who choose to study at a private higher education institute.

Access Economics

1 Background

This report examines the importance of private providers of higher education to the achievement of the Australian Government's target for educational attainment. The Government has proposed to increase significantly the percentage of 25-34 year olds with bachelor-level qualifications by 2025. Meeting this target requires creating and supporting a significant number of new places at higher education institutions. Encouraging private providers to actively participate alongside public institutions will enhance the higher education system's capacity to meet the Government's target.

1.1 Higher education in Australia

The Australian Government follows accepted international practice in defining the extent of the higher education sector. The OECD benchmarking system recognises six levels of educational attainment of which the top two levels are designated 'higher education'.¹ These comprise traditional university degrees (level 5a), shorter and often vocationally oriented courses (level 5b) and advanced research programs (level 6) (OECD 2009 p62). See Appendix 1 for more detail on these classifications.

In Australia, public and private sector organisations provide higher education. Commonwealth data reveals that 92% of students are enrolled in tertiary-type A courses (levels 5a and 6) at public universities (DEEWR). Enrolments at private sector providers have grown swiftly, albeit from a low base (see Section 3.3 for example).

International students are an important part of the Australian higher education landscape and they have been an important source of growth for private education providers. However, the Australian Government's attainment targets – which are the focus of this report – are couched exclusively in terms of domestic student numbers.

Around two-thirds of public spending on higher education is direct grants to public tertiary institutions. The other third largely comprises transfer payments: HECS-HELP/FEE-HELP outlays; grants and scholarships; and income support payments to students (O'Reilly 2009). While direct grants remained constant between 1995 and 2005 in real terms, transfer payments rose 64% (O'Reilly 2009).

It seems reasonable to assume that the proportion of higher education delivered by private providers may be linked to the changes in public funding to date. The increased emphasis on transfer payments has enabled more students to finance their studies at private sector providers.

If these trends in funding prevail – and recent policy developments suggest they will in some shape or form – then the private sector will continue to be an important source of additional places in Australia's higher education system.

¹ Primary education (ISCED 1), Lower secondary education (ISCED 2), Upper secondary education (ISCED 3), Post-secondary non-tertiary level of education (ISCED 4), Tertiary-type A education (ISCED 5A), Tertiary-type B education (ISCED 5B) and Advanced Research Qualifications (ISCED 6).

1.2 The Bradley Review

The Bradley Review was established 'to address the question of whether [the higher education sector] is structured, organised and financed to position Australia to compete effectively in the new globalised economy' (Bradley Review 2009, xi). To address the significant threats to the competitiveness of the current system, the review recommended a number of reforms to the financing and regulatory frameworks for higher education.

Two key recommendations of the Bradley Review are:

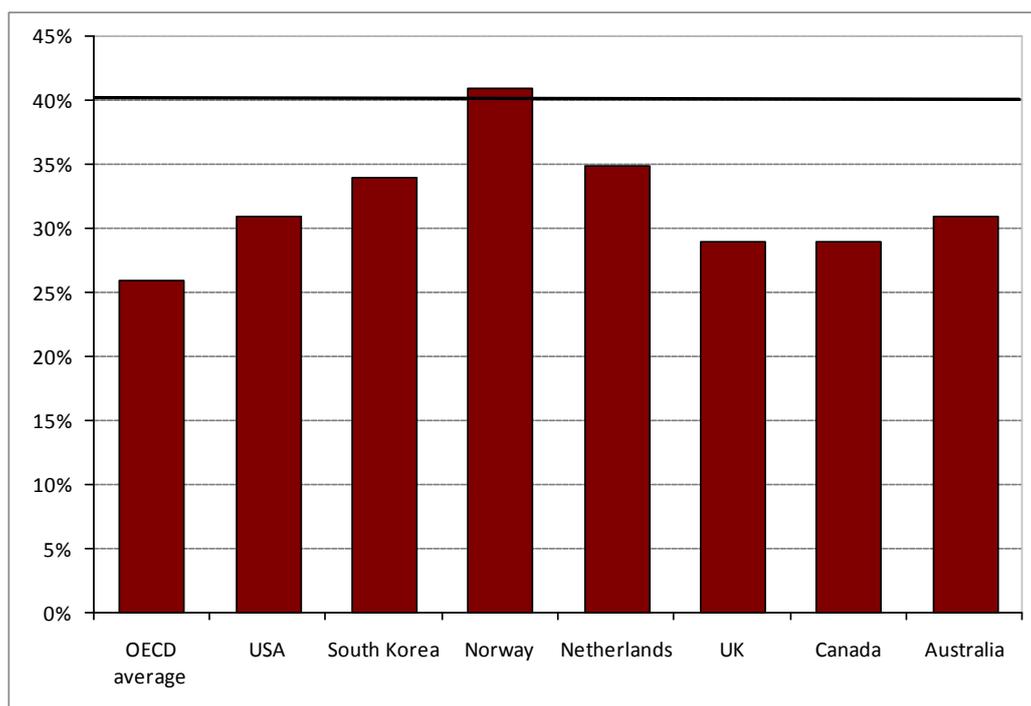
- a proposed target rate of educational attainment:
 - 40% of 25-34 year olds will have attained at least a bachelor-level qualification by 2020 (compared to 31% in 2007, see Chart 1.3); and
- the development of a demand-driven entitlement system for domestic higher education students:
 - students will have a choice of which institution to attend. Recognised providers are free to enrol as many eligible students as they wish in higher education courses and will receive corresponding government subsidies for those students.

1.2.1 Educational attainment

Over the last 20 years Australia has seen an increase in the rate of students attaining at least a bachelor-level qualification. However, this growth has been slowing recently which has prompted the call for reform.

Within the OECD, Australia is ranked 9th (out of 30) in the proportion of 25-34 year olds with degree-level qualifications, down from 7th a decade ago (Bradley Review 2009). Chart 1.1 shows the situation in 2007, with Australia on par with US and above the OECD median. However, other OECD countries have upgraded their targets, some up to 50% (Australian Government 2009). Continuing with current policy settings, Australian attainment rates are likely to rise only minimally to around 34% by 2025 (Australian Government 2009).

Chart 1.1: 25-34 year olds with bachelor-level or above qualifications, 2007



Source: OECD (2009)

In light of this, the Bradley Review recommended that Australia adopt an attainment target of 40% of 25-34 year olds by 2020. In response, the Commonwealth Government announced that by 2025, 40% of all 25-34 year olds will hold a qualification at bachelor level or above.

1.2.2 Demand-driven funding

The Bradley Review noted a hindrance to the growth of the higher education sector has been the current model of government funding. Reform of the funding model was recommended, to:

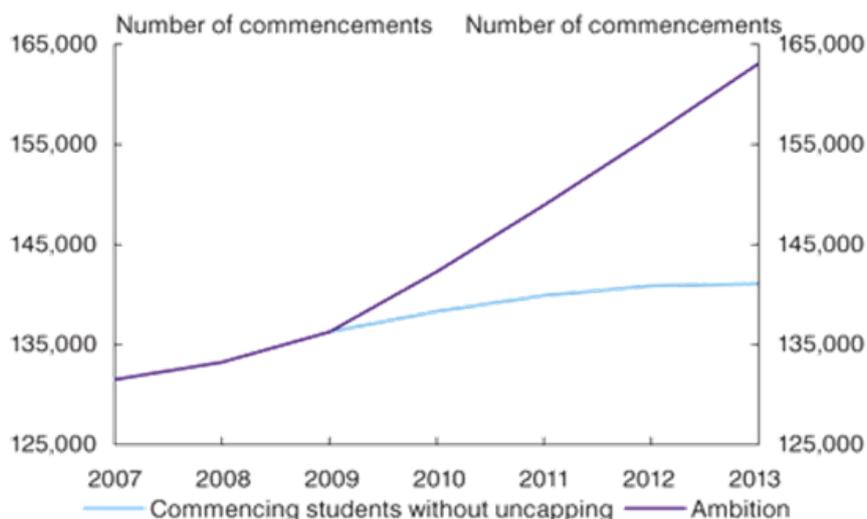
- provide students with the choice of where to study (at recognised institutions);
- allow government funding to follow the student; and
- enable institutions to better respond to student demand by granting them the freedom to enrol as many eligible students as they wish.

This demand-driven funding model will allow institutions the flexibility to decide the courses they will offer and the number of eligible students they will admit. However, at this time, the proposed new funding model is restricted to public higher education providers.

The Australian Government has announced that from 2012, Australian public universities (plus the Bachelor Institute of Indigenous Tertiary Education) will be funded for student places on the basis of student demand.² The current Student Learning Entitlement (which imposes a lifetime limit of seven years of full-time study for Commonwealth supported places) will be brought to an end from 2012 when the cap of the number of offered places will be removed.

² Transitional arrangements will also apply to the University of Notre Dame Australia.

Chart 1.2: Number of university commencements



Source: 2009-10 Commonwealth Budget

As Chart 1.2 shows, the Australian Government has estimated that an additional 80,000 student places will be delivered between 2010 and 2013 as a result of these reforms. The effective number of undergraduate places each year will rise from around 422,000 in 2009 to 458,000 in 2012. As part of this commitment, the Government announced it will invest \$491 million over four years to uncap the number of public university places from 2012. To allow institutions time to adjust, the Government will implement transitional arrangements for two years (with appropriate additional government funding). For 2010 and 2011, the cap on over-enrolments will be relaxed from 5 per cent to 10 per cent, with the current funding floor maintained. Places will be fully uncapped from 2012.

Table 1.1: Government funding of demand-driven funding for higher education (\$m)

| 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 |
|---------|---------|---------|---------|---------|
| - | 36.4 | 74.3 | 116.2 | 264.9 |

Source: 2009-10 Commonwealth Budget

1.3 Implications of the proposals for the future of higher education

The Government intends to dramatically change the higher education landscape. Key challenges to be faced include the following.

- Funding a significant expansion in the capacity of the higher education system.
 - The attainment targets indicate the need for additional places at higher education institutions.
 - This will entail an increase in physical capacity and academic and support staff.
- Building in sufficient flexibility to cope with swings in student-driven demand for different courses.
 - There may be increased need for flexible players able to respond quickly to the changing demand of the broader student population.
- Meeting the targets within the context of the overall Government fiscal position.

- The combination of the strong fiscal position and the Global Financial Crisis created a favourable climate for the large-scale infrastructure spending program announced by the Australian Government, which included a significant component of spending at primary and secondary schools. It may be more difficult to gain support for a large-scale spending program for higher education facilities.
- The aging population will account for an increasing share of public expenditure; education's share is likely to decline.

These issues are explored in the following sections and quantified to the extent that the data allow.

2 Student growth scenarios

This section provides a range of estimates of the number of additional graduates that will have attained a bachelor degree in 2025. Consequently, this analysis focuses on estimating the difference in the number of degree qualified 25-34 year olds in 2009 and in 2025.

The estimates are based on publicly available data on Australia's demographic and educational characteristics. Due to the complex nature of projecting student numbers forward to 2025, a number of simplifying assumptions were made and these are summarised in the following table.

Table 2.1: Key assumptions for projections of student numbers

| |
|--|
| Scenarios only include Australian citizens aged 25-34 years in 2025 |
| Population aged 25-34 in 2025 has similar characteristics to population aged 25-34 in 2009 |
| An undergraduate degree takes 3 years of full-time study to complete |
| University places only include students enrolled in undergraduate degrees |
| The proportion of migrants that have a bachelor degree or higher <i>currently</i> is same as for Australian residents. Forward projections assume migrants have higher attainment rates. |
| 32% of net immigrants are aged 25-34 |
| Scenarios assume 72% completion rate (consistent with OECD estimates (OECD 2009)) |

Note: For the Government to reach its 40% attainment target for 25-34 year olds in 2025, this implies that 2023 is the final year 22-31 year olds will commence an undergraduate degree (assuming a three year bachelor degree). The important point is that the additional capacity will have to be in place well before 2025.

2.1 Population projections

The Australian Bureau of Statistics (ABS) has published projections on Australia's population from June 2008 to 2101 illustrating the '*growth and change in population which would occur if certain assumptions about future levels of fertility, mortality, internal migration and overseas migration were to prevail over the projection period*' (ABS 2008).

Australia's population is ageing, reflecting higher life expectancy and lower fertility rates. For example, currently, Australians aged 15-24 outnumber Australians aged over 65 by 200,000. However, in 30 years time, the ABS projects that there will be 3 million fewer 15-24 year olds than over 65s. As a result, Australia's higher education sector will receive a diminishing share of public expenditure - if government spending patterns remain the same across different ages then, simply because young people are a declining share of population and education spending is targeted at them, then relatively less will be spent on education

The ABS projections consist of three main scenarios based on different assumptions about the key population drivers (see Table 2.2), where:

- Series B reflects current trends in fertility, life expectancy at birth, net overseas migration and net interstate migration;
- Series A reflects high assumptions for each of these variables; and
- Series C reflects low assumptions for each of these variables.

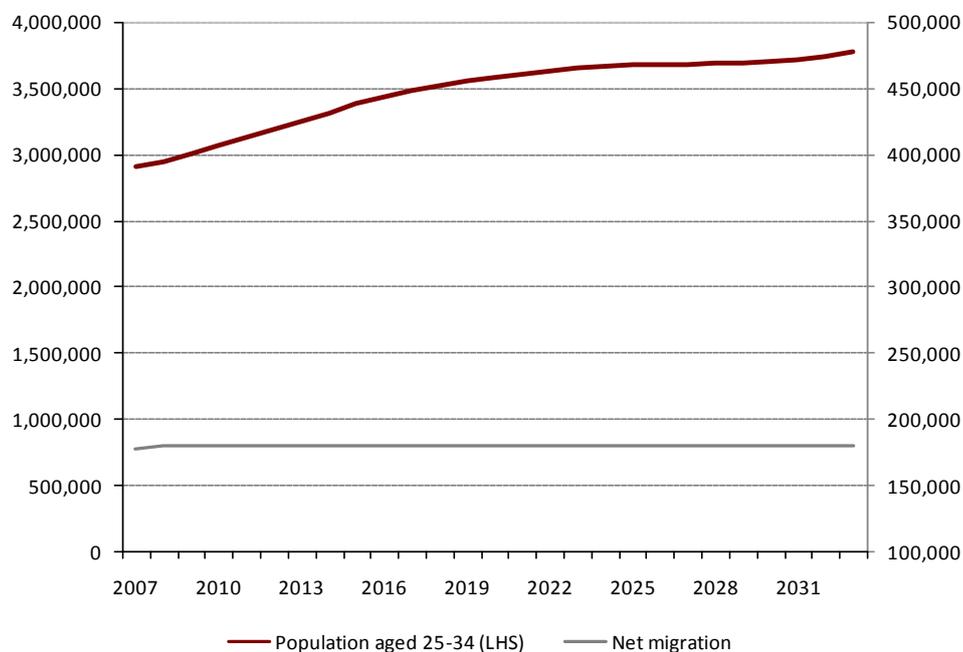
Table 2.2: Population projection assumptions

| | Fertility rate (b) | Net overseas migration (c) | Life expectancy at birth- Males (a) | Life expectancy at birth- Females (a) |
|----------|--------------------|----------------------------|-------------------------------------|---------------------------------------|
| Series A | 2.0 | 220 000 | 93.9 | 96.1 |
| Series B | 1.8 | 180 000 | 85.0 | 88.0 |
| Series C | 1.6 | 140 000 | 85.0 | 88.0 |

Source: ABS cat. no. 3222.0 (a) From 2056 (b) From 2021 (c) From 2010-11 in Series A and C. From 2007-08 in Series B

For the purposes of this report Series B (the ABS central-case scenario) has been used as the base estimate of Australia’s population. The projections are broken down in a manner that allows straightforward estimation of a particular demographic group at a specific point in time in the future. The size of the age cohort 25-34 years old is expected to increase from under 3 million to over 3.5 million by 2025 (Chart 2.1). Note the ABS assumes net migration is constant through this period.

Chart 2.1: Australian population projections



Source: ABS Cat No 3222.0

2.2 Attainment and attrition

Not all students who commence a degree complete it. This implies that some places at higher education facilities that are funded will not produce graduates. The completion rate for tertiary type-A studies was 72% in 2005 (OECD 2009, p76). However, students who do not complete the degree in which they are enrolled may continue at another higher education institution, or return at a later date.

In this analysis it is assumed that 72% of students complete their undergraduate degree within three years (consistent with OECD estimates), implying that these students require three years of enrolment. Of the remaining students, it is assumed that two-thirds of these students leave their course in the first year (which implies funding an undergraduate place for one year only), and one-third of these students leave their course in the second year (requiring two years of funding). Consequently, 112.4 places are required to produce 100 domestic graduates. Private providers report that their retention rates were at or above 90 per cent³.

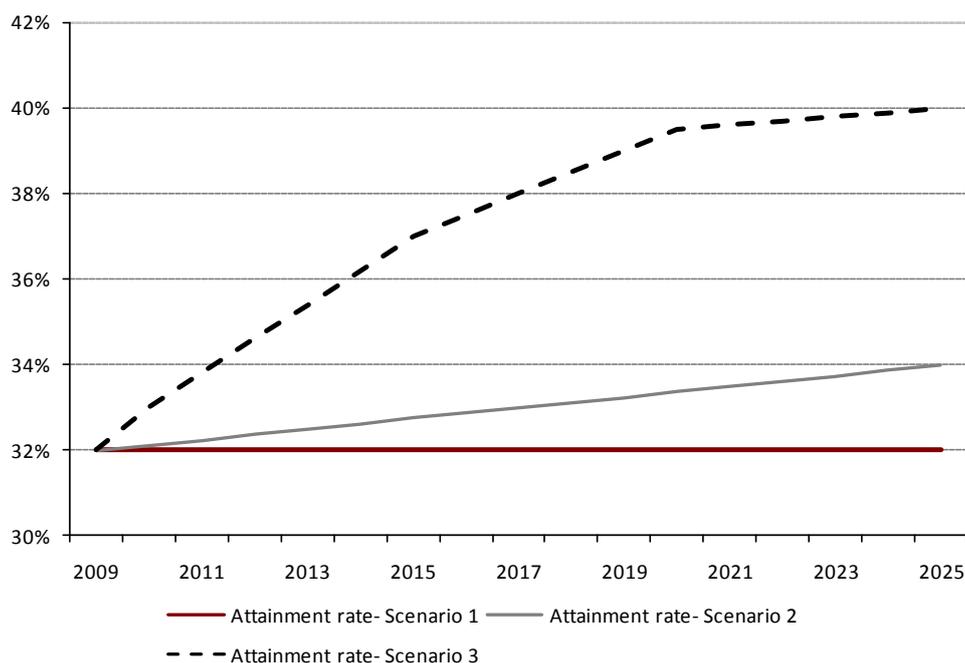
2.2.1 Attainment scenarios

The Government aims to increase attainment rates for 25-34 year olds, from the current 32% to 40% by 2025. The implications for student numbers are illustrated in the following scenarios:

- Scenario 1 assumes that the current undergraduate attainment rate of 32% continues through to 2025 – that is, the growth in student numbers is only due to growth in the population of 25-34 year olds. This is considered the base case scenario – see Chart 2.2.
- Scenario 2 assumes that the current higher education sector policies remain in place which is likely to see the attainment rate for bachelor degrees for 25-34 year olds rise only slightly to 34% (Australian Government 2009).
- Scenario 3 assumes the Government attainment target of 40% is reached by 2025. To reach this target it is assumed that there is an increase in the attainment rate each year in line with DEEWR benchmarks (DEEWR 2009).

³ Australian Council for Educational Research (2010) *Delivering Quality Higher Education: Understanding the standards processes and practices used by private providers*

Chart 2.2: Attainment rates



Source: Access Economics

Applying these attainment rates to the ABS population growth projections, adjusted for attrition, provides estimates of how many domestic graduates there are likely to be in 2025 under each scenario.

Based on a 32% attainment rate, at the end of 2009 there will be approximately 971,532 25-34 year olds with a bachelor-level qualification or higher and at the end of 2025, there will be approximately 1,177,623 25-34 year olds with this qualification.

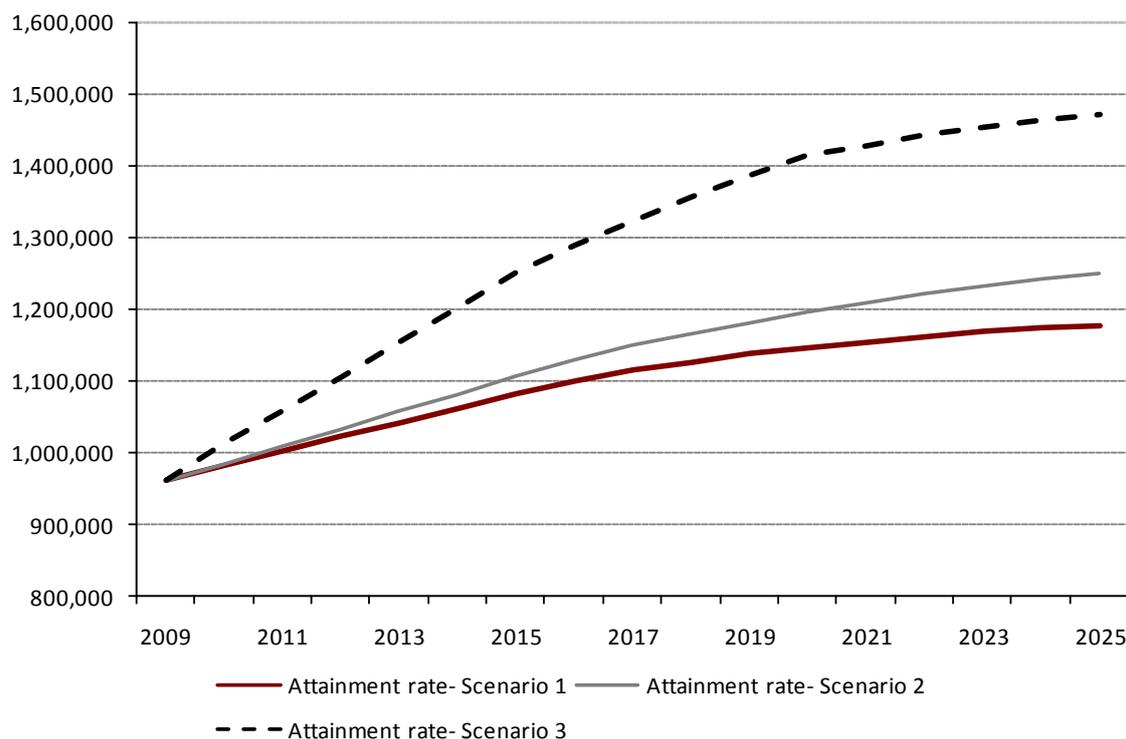
Table 2.3: Number of 25-34 year old domestic graduates

| | 2009 | 2025 | Extra graduates | Extra places (accounting for attrition) |
|---------------|---------|-----------|-----------------|---|
| Remain at 32% | 971,532 | 1,177,623 | 206,091 | 231,729 |
| Rise to 34% | 971,532 | 1,251,225 | 279,693 | 314,487 |
| Rise to 40% | 971,532 | 1,472,029 | 500,497 | 562,759 |

Source: Access Economics

Chart 2.3 illustrates how the number of suitably qualified 25-34 year olds will grow under each scenario. Note that most of the growth occurs by 2020, indicating that facilities and funding arrangements for domestic students will have to be in place well before 2025.

Chart 2.3: Forecast of graduates aged 25-34



Source: Access Economics

2.3 Meeting demand

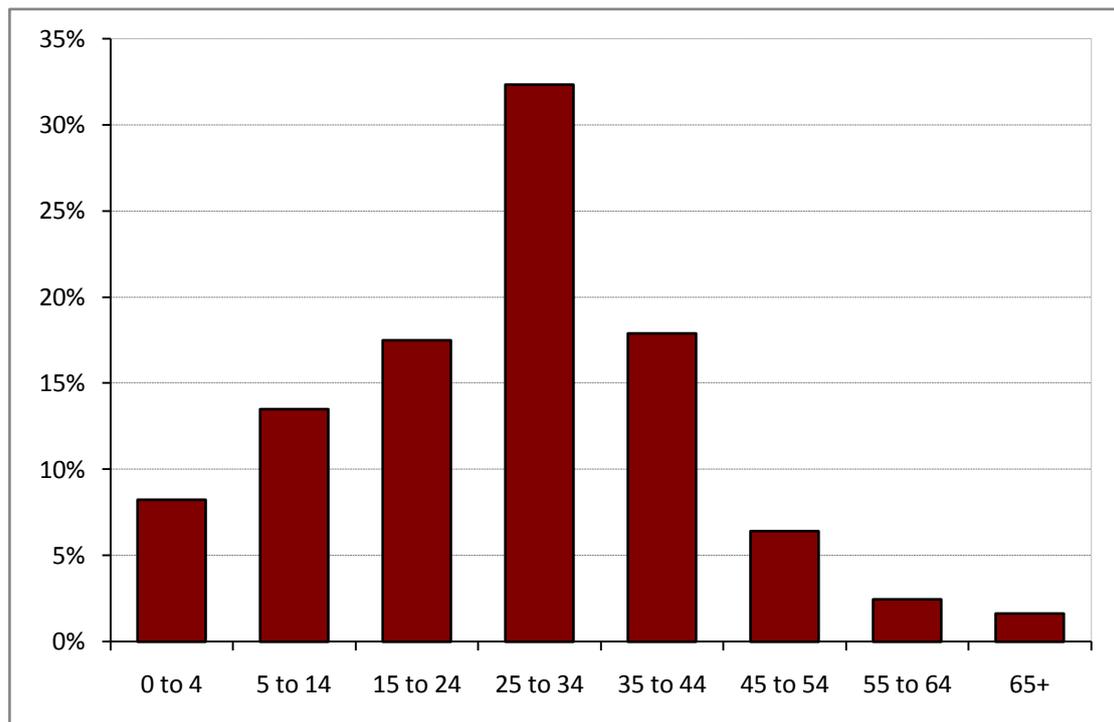
The Government’s target for 2025 envisages almost 1.5 million graduates being trained, beginning from next year – today’s 18-year old school leavers will be 34 years old in 2025. Some of the graduates of tomorrow will be trained overseas and enter Australia as skilled migrants, but the majority will be domestic students trained at public and private higher education facilities in Australia.

2.3.1 Overseas supply

Australia is a net importer of skills via migration – many Australian immigrants bring bachelor level qualifications with them. This has been apparent over the last decade as Australia’s immigration policy expanded and was skewed towards skilled migration. As such, the Government’s target of 40% attainment for Australians aged 25-34 in 2025 encompasses these skilled migrants. Taking into consideration that skilled Australians within this demographic are likely to migrate overseas, net migration is the relevant variable in the current context.

Overall, net migration added over 250,000 people to Australia’s population during 2008. As outlined in Section 2.1, Series B of the ABS population projections assumes an average net migration rate of 180,000 people per year. The age cohort targeted by the Government for increased education attainment also is the largest age cohort of immigrants (Chart 2.4), accounting for 32% of the total in 2005 (Department of Immigration and Citizenship 2009).

Chart 2.4: Age distribution of immigrants (2008)

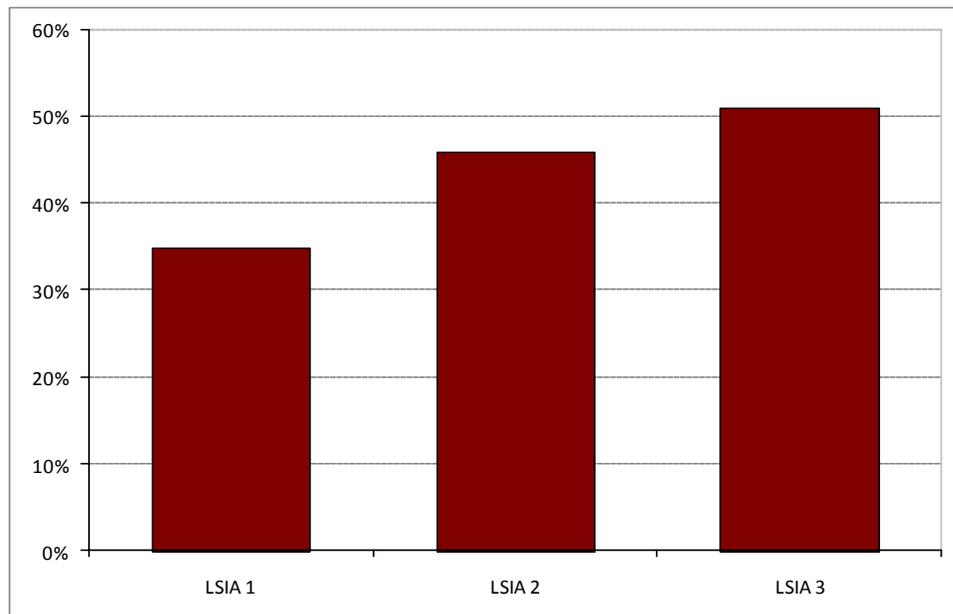


Source: Department of Immigration and Citizenship (2009)

The Third Wave of the Longitudinal Survey of Immigrants to Australia (LSIA) – the most comprehensive survey of immigrants to be undertaken in Australia – was conducted during 2005 and provides data on Australian immigrants' qualifications held at the time of citizenship.

The number of skilled migrants (as a share of total migrants) has been increasing – there was a 26 percentage point increase between 1993 and 2005. In 2005, 51% of primary applicants aged 25-34 years held a bachelor degree or higher (Chart 2.5).

Chart 2.5: Educational attainment of primary applicants



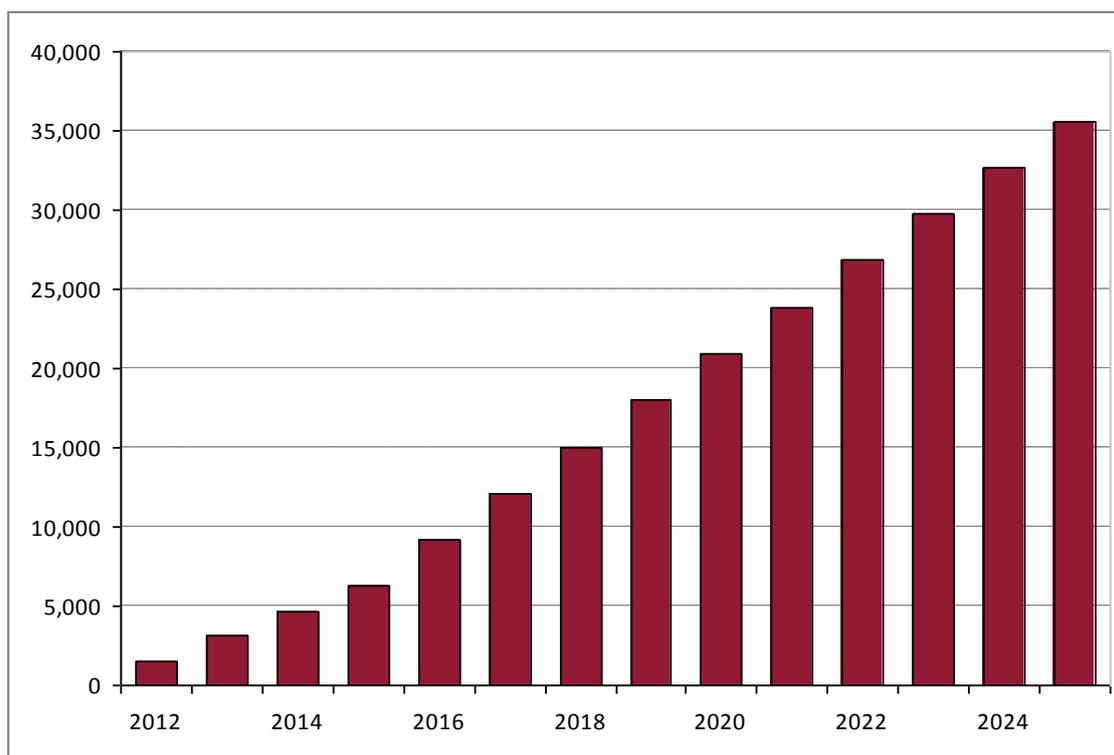
Source: Department of Immigration and Citizenship

To estimate the number of foreign-trained 25-34 year olds, the following assumptions were used:

- annual skilled immigration remains at 180,000 (the ABS central case);
- 32% of migrants will be 25-34 years old and 17% will be 15-24 years old;
- the youngest degree-qualified migrants are 21; and
- 51% of migrants will have obtained their qualifications before coming to Australia.

Based on this profile, it is estimated that 240,000 graduates will come from overseas. Chart 2.6 shows the year of arrival for foreign degree-qualified migrants who will be 25-34 years old in 2025.

Chart 2.6: Qualified migrants aged 25-34 by year of arrival



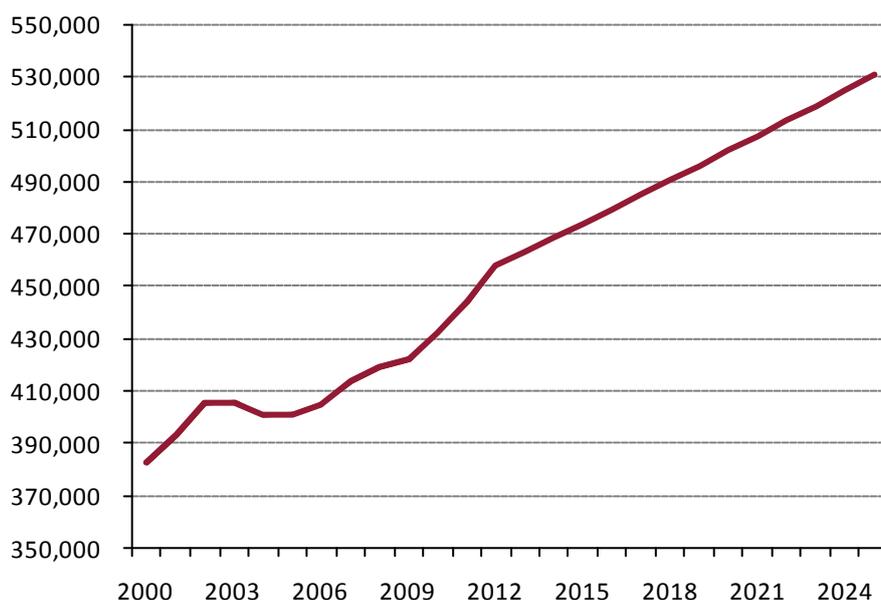
Source: Access Economics

Note that the 34% scenario (based on no change in policy, or the pre-Bradley Review world) takes overseas-trained graduates into account. Consequently, assuming the 240,000 estimate is in the right ball-park, the requirement for increased domestic graduates will essentially be the difference between the 40% and 34% target scenarios – approximately 220,000 additional graduates.

2.3.2 Domestic places

In 2008, there were 418,855 domestic undergraduate places at public universities (DEEWR 2009). Between 2000 and 2008, the number of places grew at 1.14% per year, on average. DEEWR projections indicate the number of places will grow from 422,000 in 2009 to 458,000 by 2012 (around 2% per annum), due to a temporary boost to public spending (DEEWR 2009). Attaining annual growth in student places of 1.14% from 2012 implies there will be around 519,000 public places in 2023 (when the last of the target group can commence studying) and 531,000 in 2025. This represents an increase of 97,000 from 2009 levels – see Chart 2.7.

Chart 2.7: Publicly provided domestic undergraduate university places



Source: DEEWR and Access Economics

2.3.3 Public places

While it is reasonable to assume that universities will try and limit their unused capacity, the relationship between the number of places made available to students in any given year and attainment levels is very complex and modelling this relationship is beyond the scope of this report.

Nonetheless, a simple ratio of Australians aged 25-34 to current domestic undergraduate enrolments summarising the relationship is useful for illustrative purposes. In 2009 there are 422,000 places at public universities for domestic undergraduate students and there are approximately 972,000 25-34 year olds with at least bachelor-level qualifications (including migrants and graduates from private higher education providers). Hence, there are 2.30 qualified 25-34 year olds per undergraduate place.

Based on this ratio, in 2025, the Government's target of around 1,472,000 qualified 25-34 year olds would be translated by 639,000 public places. This represents a substantial increase in public places, in excess of historical growth trends. However, fewer public places would be required if 1) skilled migration makes a bigger contribution and 2) there is a significant increase in undergraduate places provided by private higher education institutions.

To meet the Government's target requires 1,472,000 graduates. About 240,000 (16%) are expected to come from abroad, with the remainder graduating from domestic higher education institutions.

Based on past relativities, around 639,000 annual undergraduate places at public universities may be required by 2025 to meet this target. In 2012, there will be about 458,000 and based on historical trends this can be expected to rise to 530,000 by 2025.

3 Role of private higher education providers

3.1 Classification of private providers

For the purposes of this report, private providers are defined as bodies which have not been established by governments with the main purpose of delivering higher education (levels 5a and 6). A private provider must be recognised by a government accreditation authority listed on the Australian Qualifications Framework Register before it can deliver higher education awards.⁴ A private provider may be listed as a:

- university;
- self-accrediting provider; or
- non-self accrediting provider.

Australian universities and self-accrediting providers are established under relevant State, Territory and Commonwealth legislation and have the authority to accredit their own courses. Self-accrediting higher institutions are not able to use the title 'University'. In 2009, there are four self-accrediting higher education institutions and 38 universities. Non self-accrediting institutions are registered by relevant State, Territory and Commonwealth Government higher education accreditation authorities as a higher education institution and each course offered must be accredited by the authority.⁵

Table 3.1 provides a break down of the 143 Australian non-self accrediting institutions (NSAIs) by category. The largest category within NSAIs is private entities which comprise almost half of the market, followed by faith-based institutions with an additional 29% of the private education market. See Section 6.2 for further information on private higher education providers.

Table 3.1: Non-self accrediting institutions

| Type of institution | Number | Percentage share |
|-------------------------------------|--------|------------------|
| Private entity | 65 | 45% |
| Professional/membership association | 14 | 10% |
| Faith-based institution | 41 | 29% |
| Government instrumentality | 19 | 13% |
| University private arm | 4 | 3% |

Source: Dr Peter Ryan (ACPET)

The important distinction between public and private higher education providers is that the 149 private institutions (143 NSAIs, 2 foreign universities and 4 wholly-owned subsidiaries of publicly owned universities) do not receive direct public funding to provide higher education.

⁴ DEEWR (2009)

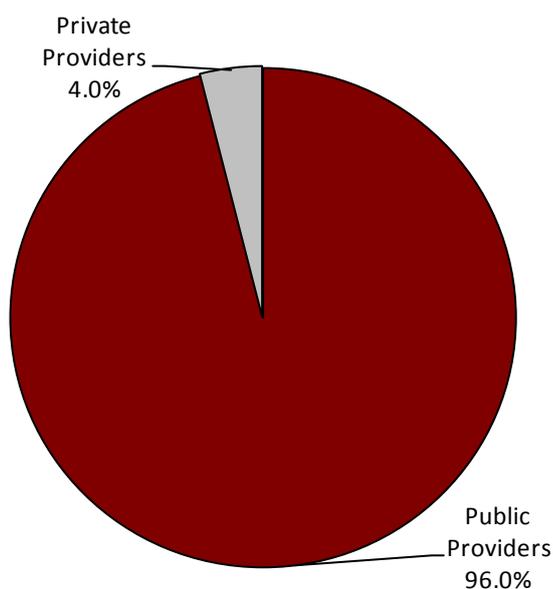
<http://www.goingtouni.gov.au/Main/CoursesAndProviders/ProvidersAndCourses/HigherEducationInAustralia/Default.htm#4>

⁵ For a list of these authorities, refer to <http://www.aqf.edu.au/>.

3.2 Private providers' share of the market

Chart 3.1 illustrates the current share of private higher education providers in the domestic undergraduate market. As can be seen, private providers accounted for 4% of the undergraduate enrolments in 2008. In 2007 private providers supplied 3.4% of the places.⁶

Chart 3.1: Share of enrollments (2008)



Source: DEEWR and Access Economics

It is important to take into account when analysing 2008 data that only 73 of the 149 non self-accrediting institutions are approved as Higher Education Providers and that there is no public record available for the measure of the contribution of the remaining 76 private institutions. Accordingly it is critical to note that the contribution to the sector by private providers is not fully represented by public data.

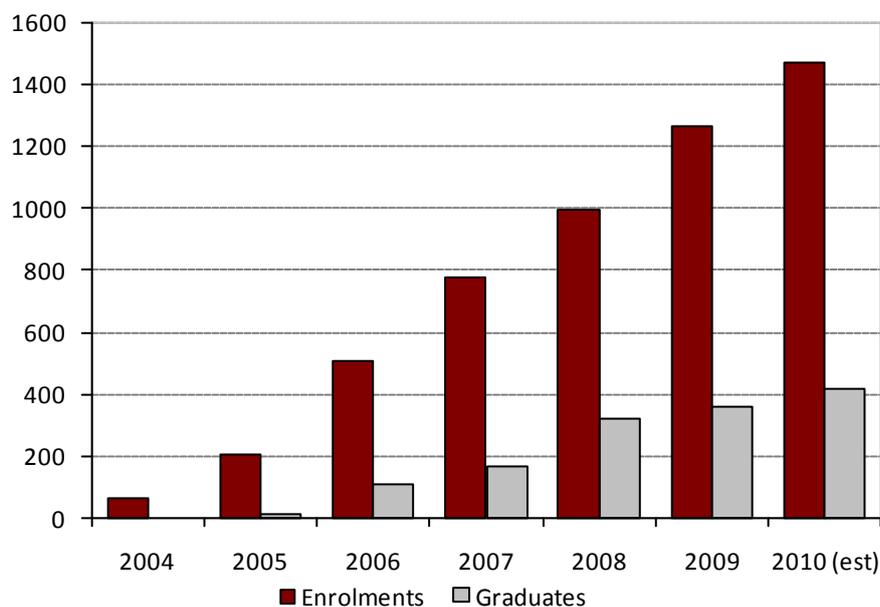
3.3 Case studies

Holmes Institute

Holmes Institute's Bachelor of Business was accredited by the Victorian Department of Education and Training in 2004, and was subsequently accredited in both New South Wales and Queensland. As can be seen in Chart 3.2, since the inception of undergraduate courses in 2004 student numbers have grown at a rapid pace – 60 students in 2004 to just under 1500 students expected in 2010. In the first year, there were 60 students enrolled and by 2010 there are expected to be almost 1500 students enrolled in an undergraduate degree. **This illustrates the capacity for private higher education institutions to rapidly grow to meet increased student demand.**

⁶ Comprehensive data on private higher education providers prior to 2007 is unavailable due to insufficient reporting standards.

Chart 3.2: Holmes Institute - undergraduate students



Source: Holmes Institute

Melbourne Institute of Technology

Here is an example of how one private higher education provider plans to expand.

“The Melbourne Institute of Technology (MIT) was established in 1996. Originally offering higher education programs in conjunction with the University of Ballarat, MIT gained approval to deliver its own suite of higher education courses in 2004. MIT currently offers higher education courses at both the undergraduate and post-graduate level in the disciplines of business and information technology.

Delivering courses to both domestic and international cohorts, MIT has gained recognition as a Higher Education Provider in order to offer FEE-HELP to its local students.

In 2009, MIT was the first higher education institution in Australia to undergo a concurrent re-registration / AUQA audit. The reports from these audit processes are yet to be analysed but feedback received forms an integral part of MIT's quality management system and will drive continuous improvement throughout the Institute.

Having completed its first registration cycle as a higher education institution, MIT is now undertaking a strategic review in conjunction with a broad range of the Institute's stakeholders in order to plan its development over the next 10 years. This review has identified a number of key strategic directions for the Institute including:

- *a purpose built campus to house the Institute's expanding higher education operations;*
- *further development of the Institute's quality management system;*

- *accessing Commonwealth Supported Places in order to support the Federal government to meet its future targets for undergraduate students arising from the Bradley Review;*
- *a move to self-accrediting status within five years followed by recognition as a University College/specialist university within the next ten years;*
- *further development of the Institute's current suite of higher education programs;*
- *building the Institute's research capability; and*
- *collaborating with other higher education institutions (including universities) both in Australia and internationally."*

(Source: ACPET)

MIT in Melbourne has about 2000 students, almost all of whom are taught on behalf of the University of Ballarat. It has a further 1000 Ballarat students and those undertaking the English Language Intensive Course for Overseas Students at its Sydney campus. Within five years Mr Ghale (MIT CEO) aims to increase MIT's student base from 300 now to up to 1200, of which half would be domestic students.⁷

This case study highlights the potential for private higher education providers to expand and the possibility of moving into the current public provider dominated market of universities under the new framework.

La Trobe University

In response to the Federal Government's target, La Trobe University announced growth targets to increase enrolments by one-third – an extra 9000 students – by 2025.⁸ Vice-chancellor Paul Johnson stated that La Trobe will increase domestic undergraduate numbers by at least 30% by 2025 while increasing coursework postgraduate students by 50% - this would raise the total number of students from 26,500 to 35,500. La Trobe also stated that they will increase flexibility in teaching times, upgrade distance learning, and offer foundational studies or associate diplomas as a pathway to undergraduate degrees. Between 2007 and 2009 La Trobe's share of first preferences in Victoria fell from 11.2% to 10%.

La Trobe University's targets illustrate that some public universities are also responding to the Government's higher education policy through growth in domestic undergraduate places.

⁷ Trounson, A 2009, 'Private bid by Melbourne Institute of Technology for deregulation dividend', *The Australian*, 14 October, <http://www.theaustralian.com.au/higher-education/private-bid-by-melbourne-institute-of-technology-for-deregulation-dividend/story-e6frgcjx-1225786422116>, accessed 14 October 2009.

⁸ Trounson, A 2009, 'La Trobe University sets growth target', *The Australian*, 16 September, <http://www.theaustralian.com.au/news/la-trobe-university-sets-growth-target/story-e6frgcoo-1225774166261>, accessed 16 September 2009.

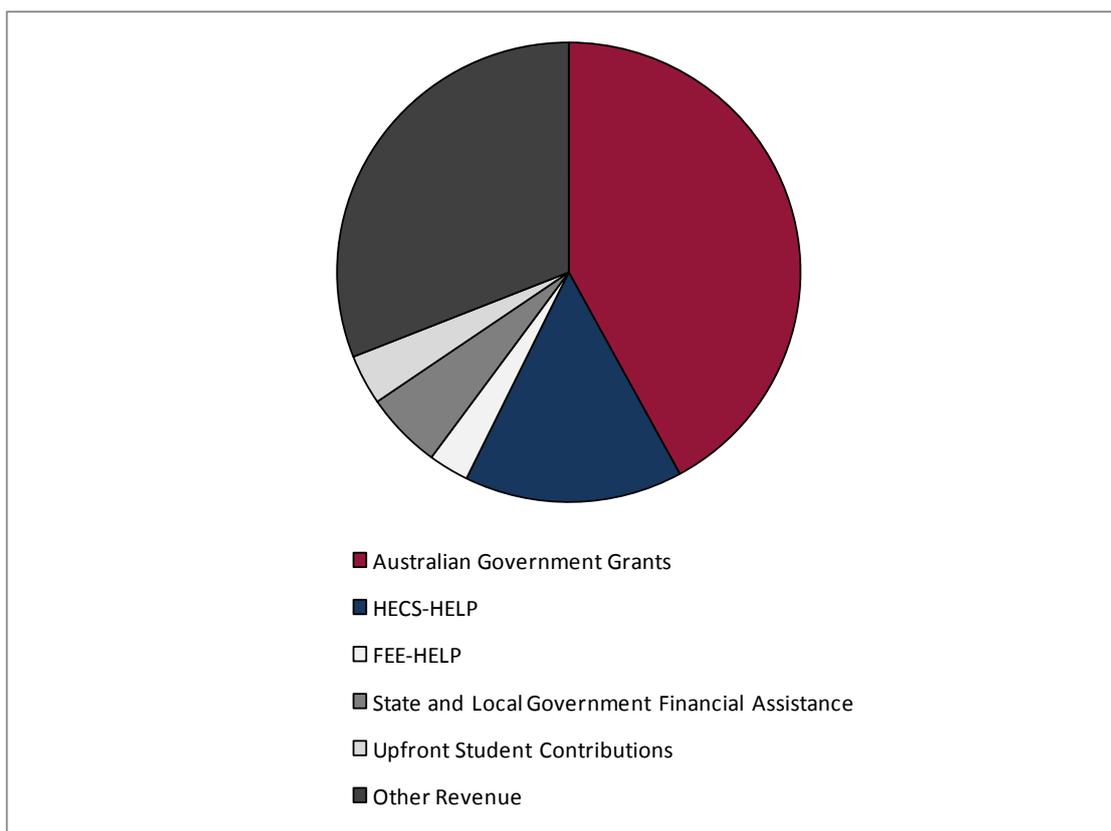
4 Funding

4.1 Public universities

Public universities receive recurrent funding from the Commonwealth Government for domestic undergraduate students in the form of Australian Government grants – including the Commonwealth Grant Scheme and scholarships – in addition to HECS-HELP and FEE-HELP. Chart 4.1 shows that 65% of total funding for public universities is sourced from the Government (including State and Local Government financial assistance) and 35% is from non-Government sources.

Australian Government grants provided the largest source of revenue for public universities in 2007 with over 42% of funding for domestic undergraduate students. This was followed by other revenue – including donations and bequests, non-government grants, investment revenue and consultancy work – which accounted for 31% of total revenue. Government support of domestic places (HECS-HELP and FEE-HELP) accounted for 18% of funding.

Chart 4.1: Public university funding split for domestic undergraduate students



Source: DEEWR (2009)

4.1.2 Cost of funding domestic students at public universities

The Government's financial outlay for funding each full-time equivalent (FTE) domestic undergraduate student for one year at a public university was estimated through an analysis of

university funding. Based on conversations with officers of DEEWR, Government spending on undergraduates was defined as:

- including Commonwealth Grant Scheme, Scholarships, Voluntary Student Unionism and other Australian Government financial assistance; and
- excluding DEEWR research grants and Australian Research Council grants which are assumed to primarily fund postgraduate and research places.

Given that there are proportionately many more undergraduate students than postgraduate students, it is assumed that all the funding sources included in the calculations were directed at undergraduate places.

Table 4.1: Public university funding- domestic undergraduate students (2007 \$'000)

| | |
|---|----------------------|
| Australian Government Financial Assistance | |
| <i>Australian Government Grants</i> | \$ 5,397,780 |
| <i>HECS-HELP - Australian Government Payments</i> | \$ 1,956,120 |
| <i>FEE-HELP - Australian Government Payments</i> | \$ 361,898 |
| State and Local Government Financial Assistance | \$ 691,297 |
| Upfront Student Contributions | \$ 452,370 |
| Fees and Charges | \$ 3,793,402 |
| Investment Revenue | \$ 837,062 |
| Royalties, Trademarks and Licenses | \$ 79,039 |
| Consultancy and Contracts | \$ 791,276 |
| Other Income | \$ 1,336,455 |
| Share of Net Result | \$ 852 |
| Total Revenue | \$ 15,697,551 |

Source: DEEWR (2009)

- Total Government funding for students studying for a bachelor-level degree is estimated to be \$8,407,095,000, comprising Australian Government financial assistance and State and Local Government financial assistance.
- In 2007 there were 413,440 domestic FTE students.
- It is estimated that public expenditure per FTE student at a public university per year is \$20,334.

4.2 Private higher education providers

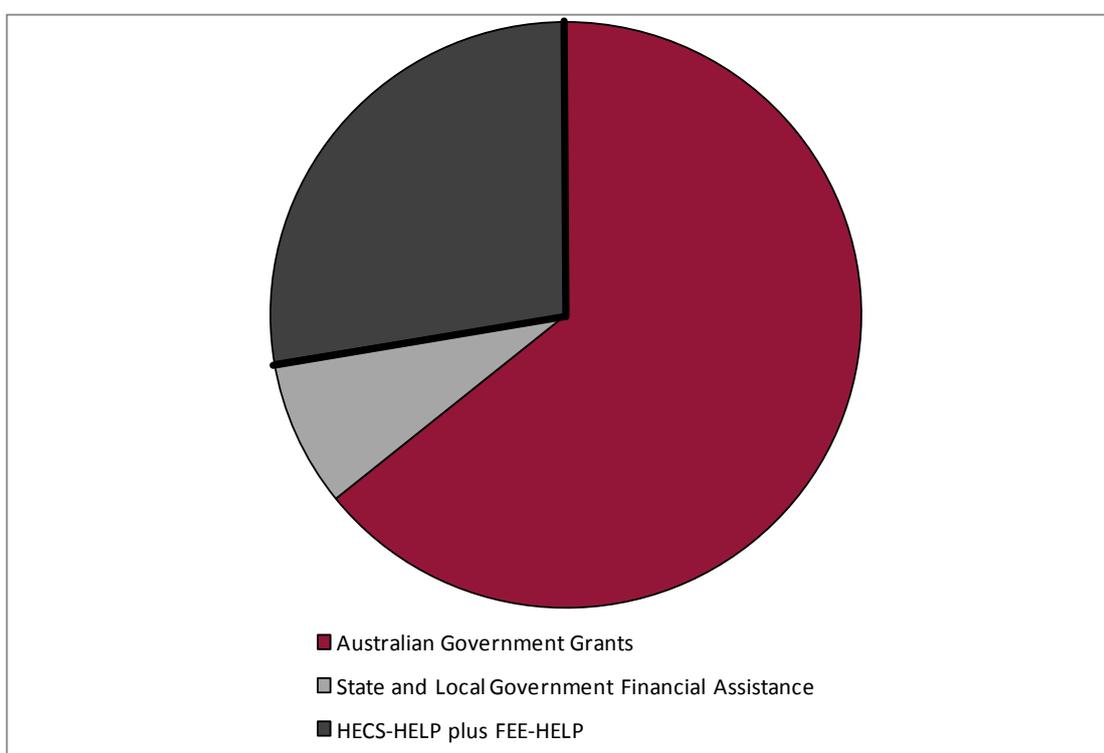
Private higher education providers do not receive recurrent grant funding from the Australian Government – most private providers are run largely on fee revenue. Private providers source their income from domestic students (FEE-HELP and full-fee tuition) and overseas students; FEE-HELP (a student loan which is repaid in full, plus an administration fee) is the only Government funded source of revenue.

Following the methodology used to determine the cost per FTE student at a public university, private higher education providers (ACPET members) indicated the public contribution for each FTE domestic undergraduate student at a private higher education institution was approximately \$15,000 per FTE student at a private institution per year – this is about three quarters of the financial outlay by government of a place at a public university.

Note that the break down of the cost of funding places at public universities illustrated in Chart 4.1, shows that public universities receive about 42% of their funding from Australian Government grants and 18% from HECS-HELP and FEE-HELP. That is, roughly one-third of public university funding comes from loans to pay for tuition and two thirds from Australian Government grants (Chart 4.2). Students at private institutions can receive loans to pay for tuition (FEE-HELP), but they do not receive government grants.

Based on these figures, public funding of a student place at a private education provider appears to require a financial outlay of about one-third of the outlay of funding places at public higher education institutions. (Of course, this does not take into account any differences in fees across institutions or cross-subsidies for research etc at public institutions.)

Chart 4.2: Government funding split for public universities



Source: DEEWR

This indicates that public expenditure for a domestic student at a public university is higher than if the same student was to attend a private institution. This seems reasonable because the Government provides funding for capital works infrastructure and maintenance costs at public universities. Whereas when the Government funds a student at a private institution, the Government is only covering the tuition costs as there is no additional funding or grants provided to the institution to support infrastructure and facilities.

Public funding of undergraduate student places at private higher education institutions is estimated to be an outlay that is about three-quarters of the outlay of funding places at public universities.

4.3 Fiscal implications

The decision to remove enrolment caps from public institutions and limit access to demand-driven funding may limit the private sector's ability to compete for students. If the Government is prepared to fund all the additional places at public institutions that are likely to be required to meet its target, this is not an issue. However, if budget priorities dictate that public funding for education is not sufficient to fund all places at public universities, then the need for a viable private higher education sector able to expand to fill any gap that may arise will be important.

4.3.1 Outlays

If all *additional* places are public and funded by Govt, this will cost roughly \$6 billion per 100,000 students (assuming a three year degree at \$20,000 per annum). This is approximately 1.9% of 2008-09 Budget expenses, which is equivalent to 0.5% of GDP.

If these additional places are 96% publicly provided and 4% percent privately provided, the cost to Government is estimated to be \$5.94 billion per 100,000 students (assuming a three year degree at \$15,000 per annum). Alternatively, if these additional places are 90% publicly provided and 10% percent privately provided, the financial outlay by the Government is around \$5.85 billion per 100,000 students.

4.3.2 Net outlays

From the Government's point of view, the repayments made once students are earning above the income thresholds are greater for private students than public students (Table 4.2). This is because FEE-HELP loans attract an additional fee of 20% than HECS-HELP loans (increasing to 25% on 1 July 2010). **Consequently, net outlays on private sector students will be relatively lower than for public students.**

Table 4.2: Comparison of HECS-HELP and FEE-HELP

| | HECS-HELP (Commonwealth supported place) | FEE-HELP |
|--------------------------|--|--|
| Cost per subject | = total cost per subject (full tuition fee) – Commonwealth contribution = student contribution amount | =total cost per subject (full tuition fee) |
| Interest per loan | no loan fees | additional loan fee of 20% ⁹ |
| Indexation | indexed to CPI (applied annually on 1 June). Current indexation rate of 3.9% | same as HECS-HELP |
| Total cost | =student contribution x Indexation | =total cost x indexation x 1.2% |

⁹ This is increasing to 25% on 1 July 2010.

5 Results

This section recaps the main results from the proceeding sections. It discusses the limitations of the estimates presented and ways in which the results could be made more robust, and notes areas that would benefit from conducting additional research particularly in the areas of estimating demand and supply of graduates and university places to 2025 and analysing the costs of studying at private and public institutions.

5.1 Key results

- The Government's response to the Bradley Review implies there will be about 1,472,000 Australians aged 25-34 years old with a bachelor-level degree or higher in 2025. Under previous arrangements, the corresponding attainment level is estimated to be 1,251,000. In 2009, there are about 972,000 25-34 year olds with this level of higher education.
- To reach this attainment level there will need to be an additional 563,000 places between 2009 and 2025, including an allowance for students who do not complete their degree.
- The current capacity of the public higher education system is about 422,000 students per year. Based on historical trends it is expected to grow to 531,000 in 2025. The ratio of the stock of degree qualified 25-34 year olds (972,000) to the stock of places (422,000) in 2009 is 2.3. This ratio implies that there needs to be 639,000 public places in 2025 corresponding to 1,472,000 qualified 25-34 year olds (keeping all else constant). This rough calculation indicates there is likely to be a large shortfall in places by 2025 if public universities are the only source of additional places.
- In 2025, around 240,000 graduates aged 25-34 years may have been educated overseas and 1,230,000 at public and private Australian higher education facilities. Skilled migrants will reduce the call on domestic public higher education facilities.
- The private sector accounted for about 4% of undergraduate enrolments in 2008. Private higher education providers also can reduce the call on public institutions to provide higher education places.
- Public expenditure on students studying at private higher education facilities is less than expenditure on students at public institutions.
 - In 2007 dollars, it costs the Government approximately \$20,338 per year for each FTE undergraduate student studying at a public university. This annual rate translates to outlaying over \$6 billion dollars per 100,000 students who complete a 3 year degree.

5.2 Sensitivity analysis

The central case outlined above hinges on a number of important assumptions. On balance, conservative values have been adopted. However, there are alternative assumptions that also are reasonable and will affect the results (Table 5.1).

Table 5.1: Sensitivity of key aggregates

| | | 2009 | 2025 |
|----------------------------------|-----------------------|---------|-----------|
| Stock of graduates, 25-34 | | | |
| Central case | 180K pa | 971,532 | 1,472,029 |
| ABS high migration | 220K pa | 975,488 | 1,550,761 |
| ABS low migration | 140K pa | 967,580 | 1,394,249 |
| Migrant graduates | | | |
| Central case | attainment rate = 51% | | 239,598 |
| High skill | attainment rate = 65% | | 305,370 |
| Growth in public places | | | |
| Central case | 1.14% pa | 458,000 | 531,000 |
| Stronger growth | 1.5% pa | 458,000 | 556,000 |
| High growth | 2% pa | 458,000 | 592,000 |

Source: Access Economics

5.2.1 Immigration

Population projections from the ABS incorporate a range of scenarios for natural population increase and net immigration. Adopting the ABS’s high (low) scenarios:

- increases (decreases) the target number of graduates for 2025; and
- decreases (increases) the requirement for these graduates to be educated locally.

Also, 51% may underestimate attainment levels for migrants and this rate may rise over period of forecasts. If so, fewer domestic places will be needed to meet the target.

Table 5.2: Sensitivity to skilled migration

| | Migrant | Domestic | Total |
|-----------------------|---------|----------|-------|
| Share of total | 1 | 5 | 6 |
| Attainment rate | 32 | 32 | 32 |
| Attainment rate | 51 | 38 | 40 |
| Attainment rate | 65 | 35 | 40 |

If 1 in 6 graduates are from overseas, as seems likely, and the attainment rate is 32% for domestic students and 32% for foreign students, the average attainment rate for all students is 32%. If, however, the attainment rate for foreign students is 51%, domestic students need average just 38% for the all-student average to be 34%. Finally, if overseas attainment is 65%, the average for domestic students can fall to 35% and the 40% target will still be met.

5.2.2 Capacity of the public system

Growth in the capacity of the public system may proceed at a different pace to that assumed. If growth in public places is funded with allowance for growth of 2% per year, then there may be 592,000 student places by 2025. Note that 2% growth is strong by historical standards and will require significant additional investment in physical infrastructure to accommodate it.

5.2.3 Capacity of the private system

Private providers are expected to continue to increase their share of the higher education sector, albeit from a narrow base. However, the Government's decision – at this stage – to restrict demand-driven funding to public institutions will limit private providers' ability to compete for students.

5.2.4 Attrition rates

We assumed 72% completion. However, the Government has stated that it would like the completion rate to increase in the future. This implies that there would not need to be as many undergraduate places to reach the Government's attainment target.

5.2.5 Cost of funding

Outlays

Access Economics took guidance from DEEWR to calculate the cost per FTE. Data for all public universities was available, but this will not be precise due to the assumptions on the distribution of funding between undergraduates and postgraduates.

We had very little information on costs to public or private providers. While they will be lower, it is not clear how much lower.

Net cost

Again, data were not sufficient to show how much the cost of public funding of private students will be, but it is reasonable to expect it will be lower based on the requirements of the different loan schemes etc.

To properly estimate these values, complicated NPV calculations potentially over a number of decades are required, using data on student borrowing from Government plus escalation factors plus repayment rates, plus information from private higher education providers.

5.3 Limitations and areas requiring further study

This report used a simplistic approach to modelling future supply and demand for undergraduate positions. An integrated model would provide a number of benefits.

- More rigorous and integrated projections:
 - take into account different entrance and completion characteristics of different age cohorts; and
 - take into account the courses offered (which may have a significant bearing on costs to student and Government).
- Ability to look at individual years in isolation:
 - can evaluate costs and financial outlays etc more accurately; and
 - incorporate policy changes.

- Scope to run wide range of simulations, and incorporate a wider range of parameter variations:
 - potential to identify countervailing effects (for example, migration increases number of current foreign grads and future local grads (higher birth rate)).
- Funding assumptions need to be tested. Insufficient information on private higher education institutions means it is not possible to satisfactorily estimate the full costs and benefits of opening up demand-driven funding and providing other support for private providers.

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6 Appendix 1

6.1 OECD classifications

Primary education (ISCED 1), Lower secondary education (ISCED 2), Upper secondary education (ISCED 3), Post-secondary non-tertiary level of education (ISCED 4), Tertiary-type A education (ISCED 5A), Tertiary-type B education (ISCED 5B) and Advanced Research Qualifications (ISCED 6).

Tertiary-type A education (ISCED 5A): Tertiary-type A programmes (ISCED 5A) are largely theory-based and are designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements, such as medicine, dentistry or architecture. Tertiary-type A programmes have a minimum cumulative theoretical duration (at tertiary level) of three years¹ full-time equivalent, although they typically last four or more years. These programmes are not exclusively offered at universities. Conversely, not all programmes nationally recognised as university programmes fulfil the criteria to be classified as tertiary-type A. Tertiary-type A programmes include second degree programmes like the American Master. First and second programmes are sub-classified by the cumulative duration of the programmes, i.e., the total study time needed at the tertiary level to complete the degree.

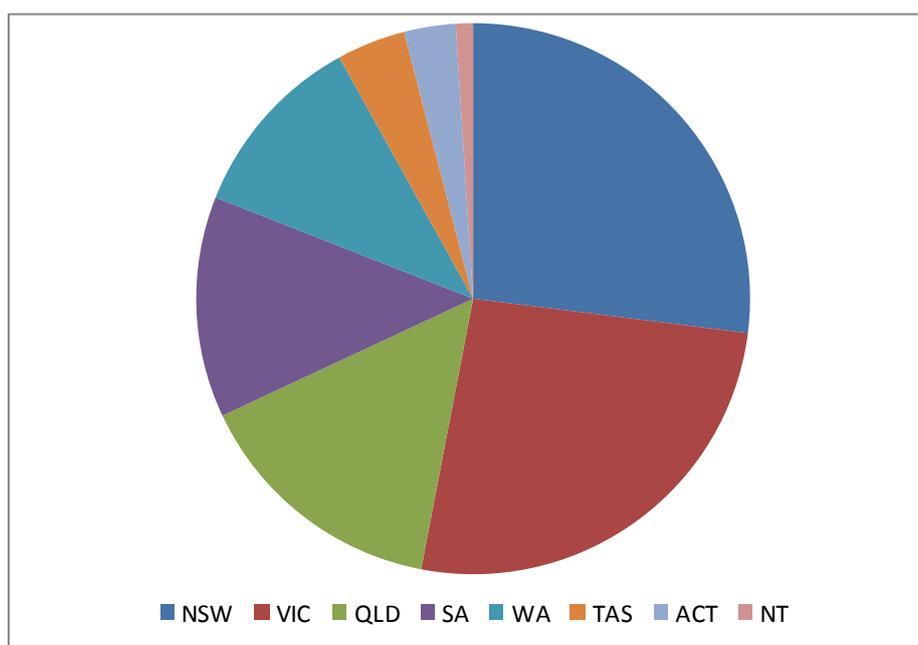
Tertiary-type B education (ISCED 5B): Tertiary-type B programmes (ISCED 5B) are typically shorter than those of tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered in the respective programmes. They have a minimum duration of two years full-time equivalent at the tertiary level.

Advanced Research Qualifications (ISCED 6): Advanced Research Qualifications refer to tertiary programmes that lead directly to the award of an advanced research qualification, e.g., Ph.D. The theoretical duration of these programmes is three years full-time in most countries (for a cumulative total of at least seven years full-time equivalent at the tertiary level), although the actual enrolment time is typically longer. The programmes are devoted to advanced study and original research.

6.2 Non-self accrediting institutions

As can be seen in Chart 6.1, New South Wales is the largest provider of NSAs – 27% of all private providers – closely followed by Victoria – 26%. Tasmania, the ACT and the Northern Territory each account for less than 5% of the market. There are also 23 NSAs that operate across multiple States.

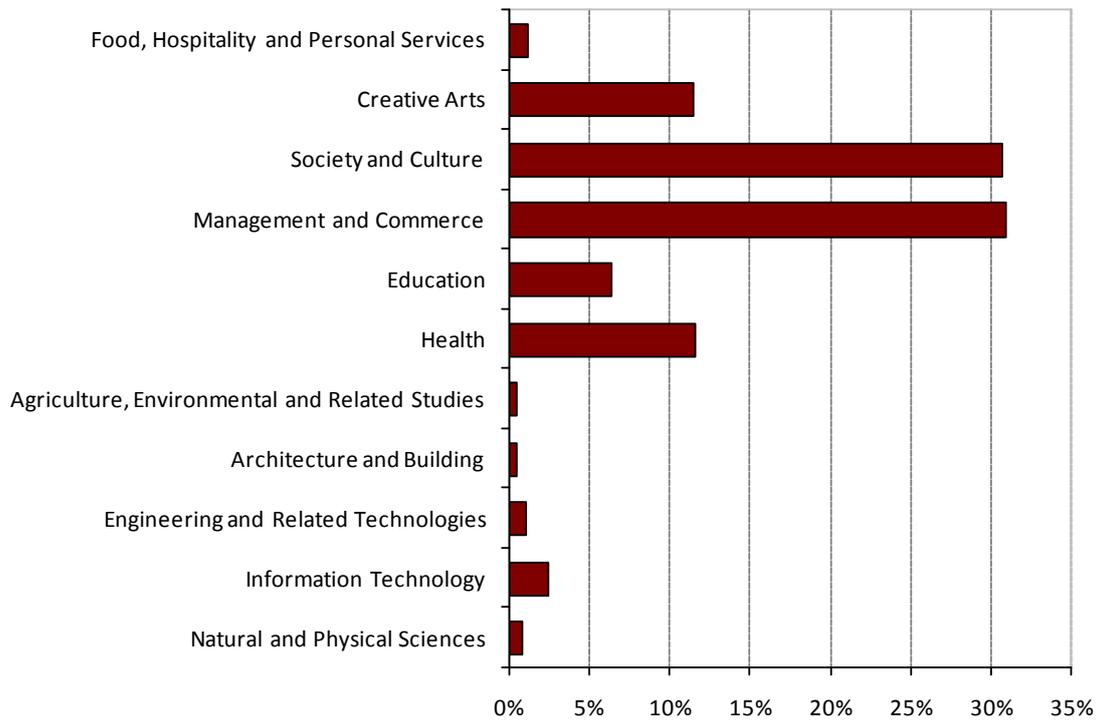
Chart 6.1: NSAs by State



Source: Dr Peter Ryan (ACPET)

Chart 6.2 highlights the key areas of the higher education market in which private providers deliver undergraduate courses. The two largest broad fields of education are management and commerce, and society and culture which both account for 31% of the total private higher education market. These are followed by health and creative arts, each with 11% of the total private market. Education and information technology account for 6% and 2%, respectively, with the remaining fields representing less than 1% of the total market.

Chart 6.2: Private providers by broad field of education



Source: DEEWR (2009)