Student demand: trends, key markets and the movement towards demand-driven enrolment

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Introduction

The landscape of Australian higher education is currently undergoing a substantial reshaping. This is occurring on a number of fronts and for a variety of reasons, many of which will be addressed in the Joining the Dots Research Briefing series throughout 2011.

One of the key factors reshaping higher education provision in Australia is the policy to implement a demand-driven funding and enrolment system, as stated in Australia’s higher education policy blueprint: ‘From 2012, Australian public universities ... will be funded for student places on the basis of demand’ (Australian Government, 2009, p. 17).

The precise impact of this policy is yet to be fully understood, as are the added complexities of incentives for increasing the proportion of students from low socioeconomic status (SES) backgrounds, high university attainment targets, the introduction of a new quality and standards regulator, and the outcomes of the Base Funding Review.

This research briefing explores the introduction of the policy for funding universities based on student demand. It is intended to provide a synthesis of information currently available, but that until now has not been presented cohesively. This briefing offers university leaders and policy makers a resource from which to draw when making planning and strategic decisions.

The briefing covers the following areas:

- An outline of the background to the demand-driven funding policy;
- Trends in student demand over the past decade;
- The response to demand – national-level enrolments over the past decade;
- The response to demand – university-level enrolments in 2010 and 2011; and
- Expectations for the future.
The main findings presented here are:

1. **Government policies** focusing on demand-driven funding, attainment rates and SES targets are closely linked – it is unlikely that targets will be met without the existence of a demand-driven system.

2. **The current (pre-2012) system** for allocation of student places has not been effectively able to respond to student demand over the past decade.

3. **Demand and supply** of university places has only worked in synchrony since 2009 when policies relating to demand-driven funding were announced and enrolment caps were eased.

4. **There has been significant growth** in demand for student places at universities in the past two years, not all of which can be explained by the Global Financial Crisis (GFC). As a result of this growth, the level of demand for university has never been higher.

5. **Universities** have already begun to prepare for the onset of a demand-driven system, with substantial investments being made by several institutions.

6. **The growth in demand** by students and supply by universities was not anticipated when the demand-driven system was initially presented to Government.

7. **Demographic projections** suggest a near-term ‘flat-lining’ of growth in the core undergraduate age cohort, meaning that for institutions intent on continuous growth in the future, other age groups and non-traditional populations will need to be reached.

8. **Over the past decade,** universities have made only limited progress in pursuing non-traditional university cohorts, suggesting that much is yet to be learned in this respect.
Background

Recommendation 29 of the Bradley Review of Australian Higher Education called for a ‘demand-driven entitlement system for domestic higher education students, in which recognised providers are free to enrol as many eligible students as they wish in eligible higher education courses and receive corresponding government subsidies for those students’ (Bradley, Noonan, Nugent, & Scales, 2008). The grounds set out by Bradley and her panel members for this recommendation were essentially linked to another recommendation of the Review – to increase participation and attainment levels in higher education in Australia. It was argued that the likely result of a demand-driven system would be an increase in student numbers, seen by the panel as ‘a desirable outcome’ for the country (Bradley, et al., 2008, p. 155).

The Review recommended that the initial roll-out of a demand-driven system be limited to Table A higher education providers and to undergraduate courses – but that consideration be given to expanding this to postgraduate courses and to other providers in due course.

The Australian Government response to the Bradley Review, which formally came through the document ‘Transforming Australia’s Higher Education System’, supported Recommendation 29 of the review. In the Government’s response, policy was set in place to introduce the new system in 2012 for undergraduate domestic students at Table A institutions (Australian Government, 2009).

As part of this announcement, the Department of Education, Employment and Workplace Relations (DEEWR) introduced ‘transitional arrangements’ in 2010 to assist institutions in building student numbers – by increasing the level at which universities could ‘over-enrol’ to 10 per cent – and in building infrastructure, management processes and collaborations via a $400 million Structural Adjustment Fund.

Other relevant policy initiatives to come out of the Government’s ‘Transforming’ document that have direct relevance to the provision of places in Australian higher education were the introduction of targets for attainment levels across the population and participation levels of persons from low SES backgrounds. The attainment target, adapted from the Bradley Review recommendations, is an ambition for 40 per cent of the Australian population aged 25–34 to be qualified with a bachelor degree or above by 2025. The participation target (also a Bradley suggestion) aims to ensure that 20 per cent of the undergraduate student population are from low SES backgrounds by 2020.

Given that both these policy targets necessitate growth in enrolments, universities have been given the power to determine the number of Commonwealth Supported Places (CSP) and have been encouraged to increase enrolments through various other incentives. The Structural Adjustment Fund mentioned above is one of these. In addition, $433 million in funding over four years has been offered to universities as an incentive to reach the SES target (Australian Government, 2009).

While there have been questions raised about the ability of Australia to meet the attainment target (Birrell & Edwards, 2009; Birrell, Rapson, & Smith, 2010; Lee Dow, Adams, Dawson, & Philips, 2010), there is substantial political capital invested in the target, which is unlikely to be achieved without an open system for student enrolments and funding.

The evidence presented below suggests that the policy changes and preparations for the introduction of a demand-driven system are already having an impact on enrolment patterns, with figures indicating an already marked expansion in the number of students in the system. These increases will assist in achieving the attainment levels at least in the medium-term. In addition, new enrolments are expected to come disproportionately from groups of students that are traditionally under-represented in the sector, thus contributing an equity effect and potentially a positive trend in the enrolment of students from low SES backgrounds.

The largely unanswered question in this policy context remains the likely costs of an expansion of enrolments that an open enrolment system will generate. Given the real reduction in per capita funding in Australia between the mid-1990s and mid-2000s highlighted by Bradley (2008, p. 153), the need to balance funding and growth in student numbers is acute. Government policy relating to the indexation of funding (Australian Government, 2009) has provided some reassurance. However, the outcomes of the Base Funding Review in late 2011 will be particularly pertinent in this regard.
Demand for university places has fluctuated considerably over the past decade or so. Data collected from each state tertiary admissions centre (TAC) by DEEWR provide an indication of these variations between 2001 and 2009. Commencement numbers from the DEEWR Higher Education Statistics Collection used later in this paper also provide an indication of the trend in enrolments over this time.

Figure 1 shows the recent national trends in applications for undergraduate places made through state and territory TACs. In the 2001–2009 period, demand for university placement (as measured by the number of eligible applicants) has charted an uneven trajectory. During the decade there was net growth in applications, from 209,713 in 2001 to 227,408 in 2009. However, it is important to note that in this time series there was a five-year period from 2004 to 2008 in which applicant numbers experienced a decline before a substantial growth in demand in 2009, taking levels back towards the high-point of this series recorded in 2003.

While no national data for the 2010 or 2011 entrant years are currently available, evidence gathered from state TACs and education ministries for this paper suggests that demand has risen further in the last two years.

A synthesis of state-based data collections undertaken for this briefing provides clear evidence of growing demand for university places in 2010 and 2011 in Queensland (QTAC), Victoria (VATC), New South Wales (UAC), Western Australia (TISC), South Australia, and the Northern Territory (SATAC).

Estimated growth in 2010 and/or 2011 for these states, synthesised from a range of sources, is shown in Table 1. The growth (5.2 per cent) recorded at the national level between 2008 and 2009 appears to have at least continued on this trajectory into 2010, with increases in demand as high as 13 per cent in Queensland. The slightly more limited picture available for 2011 suggests that there has been a tempering of demand this year, with modest growth in New South Wales and the suggestion of slight declines in Victoria and Western Australia.

These demand figures suggest that the notable rise in demand in 2009 was at least replicated, if not improved on, in 2010, making the level of demand for university places by Australians the highest ever recorded. The trend apparent for 2011 suggests that the unprecedented level of demand in 2010 was not a one-off, with levels either being maintained or at worst only limited reductions at the state level.

While the economic downturn has no doubt influenced the rise in student demand, as was the case in earlier periods of high unemployment (DEEWR, 2009), the actual impact of the GFC was not as devastating on employment in Australia as initially feared, with the affect being felt much more heavily in the Northern Hemisphere than in Australia (Stevens, 2011).

The fact that strong demand for university places seems to have continued in 2011 suggests there are additional factors influencing the current levels of demand. The hypothesis that the policies and practices of some universities (responding to government policy) may have contributed to this growing interest is presented in the following section.

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1 Due to the fact that national data for 2010 offers and acceptances and data relating to student enrolments have yet to be publicly released by DEEWR, data to 2009 is the most up-to-date available at the national level.

2 ‘Eligible’ applicants as recorded in the DEEWR offers and acceptances publication are deemed to be all those applying on the basis of a Year 12 final ranking of 54.55 or above (for 2009 – this benchmark fluctuates slightly year-on-year), and all non-Year 12 applicants (DEEWR, 2009, p. 12).
Figure 1: Applications for undergraduate courses in Australian universities, 2001–2009 (’000)

Source: DEEWR Undergraduate Offers and Acceptances Report 2009
Note: Data is for applications made through state tertiary admission centres (TACs) only.

Table 1: Estimated trends in applicant numbers for university – percentage growth for 2010 and 2011 by state

<table>
<thead>
<tr>
<th>State</th>
<th>2009 to 2010</th>
<th>2010 to 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSW</td>
<td>2.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Victoria</td>
<td>6.8%</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Queensland</td>
<td>13.2%</td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>10.5%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>SA/NT</td>
<td>5.1%</td>
<td></td>
</tr>
</tbody>
</table>

Note: Tasmania not included due to lack of public data.

Responding to Demand – University enrolments

Until the demand-driven system is launched in January 2012, universities in Australia are curtailed in the number of places they can offer domestic students as a result of enrolment caps negotiated with the Australian Government. It has been argued that the increased provision of places in the past few years and the softening of these caps to allow universities to over-enrol at levels of five per cent in 2008 and 2009, and 10 per cent in 2010 and 2011, while still receiving government funding has resulted in a system that is largely demand-driven in all but name (see for example commentary by Bradley, et al., 2008, p. 156).

The report of the Bradley Review noted that in 2007 (before the policy change allowing up to five per cent over-enrolment), only three universities exceeded the five per cent limit and it was predicted that few would take advantage of the introduction of funding for over-enrolments in 2008. The report argued this demonstrated that Australia was essentially operating in a demand-driven mode.

The Bradley Report seemingly suggested that the introduction of a demand-driven system would not necessarily result in substantial spikes in enrolments in higher education, but that it would contribute to steady growth in the long-term. However, the reality of a fully uncapped system may (at least in the short term) be somewhat contrary to these expectations.

National trends

Evidence of national trends in university applications is presented here in a synthesised form, drawing on two main sources of national level data – application numbers and actual commencement figures. Demand (represented by application trends) and supply (represented by commencement numbers) are tracked alongside each other in Figure 2.

This figure provides the total number of university applicants and the total number of university commencements for a nine-year period, beginning in 2001. It indicates that despite a trend of increases in applicant numbers between 2001 and 2004, university commencement numbers actually declined during this time, suggesting that the system was not responding to demand. This occurred for a number of reasons, one of the most prominent being lower levels of government funding for higher education and hence fewer available student places.

From 2005 to 2008 a similarly perplexing pattern is evident. As demand for university slowly declined, the number of places being made available in undergraduate courses (commencements) increased.

Figure 2: Number of eligible undergraduate applicants and number of undergraduate commencements, 2001 to 2009 (domestic students only)
However, these counter-intuitive patterns were broken in 2009, when growth in applications was matched with an increase in supply (Figure 2). In the only instance over the time series presented here, there was a synchronised movement in supply and demand. This final year in the time series witnessed a 5.2 per cent growth in applications, responded to by institutions with an 8.1 per cent increase in the number of undergraduate commencements.

### Institutional trends

While the most recent national data have not yet been released by DEEWR, there is evidence to suggest that the additional growth in applications in 2010 and 2011 estimated in Table 1 has also been matched by increased placement offers from universities. The ability of institutions to respond to demand has certainly been assisted by the offer of funding for 10 per cent above allocation, but there is also evidence that universities are beginning to prepare for the full removal of caps in 2012 and are using their own funding mechanisms to support this.

The policy movements and discussion within the sector suggest that universities began to prepare for the demand-driven funding system as soon as the policy was announced. The surge in commencements in 2009 shown in Figure 2 provides evidence of this. However, it is the enrolment practices of universities in 2010 and 2011 that demonstrate many institutions are substantially investing in the new system and are preparing for the removal of capped enrolments.

Based on publicly reported data about the enrolment levels of individual institutions, Table 2 highlights the range of universities that have decided to push their enrolment loads close to or above the 10 per cent limit in 2010 and 2011. It is worth noting that for those with more than 10 per cent over-enrolment, the extra enrolments are funded by the institutions themselves until 2012. This list of institutions is certainly not exhaustive – it is likely that a number of other universities are in a similar position, but have decided not to put their figures in the public domain.³

The point of highlighting these institutions is to demonstrate the significant trend and the apparent impact that the demand-driven funding system has had on the enrolments, load planning and finances of Australian universities before it has even been implemented.

Whether this growth is sustainable is a key question. Sustainability of growth is dependent largely on Government funding, and is something that the Base Funding Review is currently grappling with. However, this sustainability also relies on the strategies, infrastructure and personnel of institutions, which while linked to funding are equally dependent on good leadership, long-term planning and the maintenance of quality. These are all substantial issues, some of which will be specifically addressed in future briefings in this series.

### Table 2: Estimates of levels of over-enrolment, 2010 and 2011 – reported levels only

<table>
<thead>
<tr>
<th>Institution</th>
<th>2010 estimate</th>
<th>2011 estimate</th>
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<tbody>
<tr>
<td>Australian Catholic University</td>
<td>39%*</td>
<td>32%</td>
</tr>
<tr>
<td>Curtin University</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>Flinders University</td>
<td>14–18%</td>
<td></td>
</tr>
<tr>
<td>Griffith University</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>La Trobe University</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Macquarie University</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Monash University</td>
<td>12%*</td>
<td>12–13%</td>
</tr>
<tr>
<td>RMIT</td>
<td></td>
<td>13%</td>
</tr>
<tr>
<td>Swinburne University</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>University of Adelaide</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>University of Canberra</td>
<td>27%*</td>
<td>27%</td>
</tr>
<tr>
<td>University of New South Wales</td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>University of Queensland</td>
<td>10%*</td>
<td></td>
</tr>
<tr>
<td>University of South Australia</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>University of Southern Cross</td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>University of Western Australia</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>University of Western Sydney</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Victoria University</td>
<td>17%</td>
<td></td>
</tr>
</tbody>
</table>

³ It is also possible that some of these institutional figures have been incorrectly reported previously in the sources used in this paper. As such these figures should be considered as indicative only.

Sources: Various media outlets including (Hood, 2011; Lane, 2010a, 2010b; Trounson & Harr, 2011).
Expectations for the future

The analyses presented provide some indications of the impact of the announcement of the policy to introduce a demand-driven funding system in Australia. The evidence shows a strong growth agenda in a substantial number of institutions – seemingly more substantial than expected when the policy was recommended. However, the consequences of implementation – either for the actual introduction of the system in 2012 or beyond – are still unknown.

Advice from New Zealand would suggest that such a system might be short-lived (Walsh, 2011), although differences in context and in implementation make assumptions based on these comparisons potentially premature at this stage. Equally, the direction suggested for the UK in the Browne Review (Browne, et al., 2010), recommending deregulation of tuition fees for universities but not of the number of places in the system (essentially the opposite of the current policy direction in Australia [Ross, 2010]), provides a reference point for Australia higher education, especially given the implementation of some of these reforms are beginning to gain traction.

Examining the Australian data, evidence suggests that in purely demographic terms, some change in universities’ scope and provision may be necessary to facilitate further growth in the sector in the medium-term. Figure 3 shows the number of 18 to 22 year-olds forecast in the Australian population over the coming 30 years, based on ABS Series B projections (ABS, 2008). It indicates that the number of persons in this age group between now and 2022 will remain relatively stable. From 2023, growth in this cohort is forecast to progress somewhat rapidly.

One challenge for universities embarking on a growth phase in the new demand-driven system is to find new populations with which to engage. Clearly the low SES group is being pursued as a result of Government impetus and incentives – and also as a result of universities independently attempting to diversify their student cohorts. Other areas for building enrolments do exist, but on basic inspection of a number of broad categories, it appears that more may need to be done in terms of attracting the non-traditional undergraduate cohort.

One example of this relates to age. Figure 4 shows that there has been little change in the age distribution of Australian undergraduate students in the past decade. As is clear here, the younger age groups dominate this population. Despite changes in university access and practices relating to flexible learning, there has been no discernible impact on attracting a greater share of mature-aged students to undergraduate degrees this century at the national level. Any discernable change in this pattern is also unlikely to be witnessed given that the university attainment targets set by the Australian Government pertain to the 25 to 34 years of age cohort, and presumably any future incentives to enrol new students will be focussed on the traditional ages as a result.

![Figure 3: Projected number of 18 to 22 year-olds in Australia, 2010 to 2040](Source: ABS Population Projections Australia, Cat. 3222.0. Series B projections.)
Another interesting statistic at the national level relates to the extent of external or multi-mode students enrolling in the system. Analysis of the domestic undergraduate commencements by mode of education reveals that over the past decade, while the number of external or multi-mode students has risen (up 23 per cent compared with 15 per cent growth overall), in reality this growth is relatively modest and coming from a low base. This is reflected in the overall share of all commencers in this group, which has increased its share by only one percentage point over the 2001 to 2009 period, from a 14.8 per cent share to a 15.8 per cent share of all commencers (Figure 5).

While there are different trends in the participation of students in these two examples at the institution and state levels, the national picture does tell an interesting story of the potential characteristics of undergraduate commencing cohorts for the future. At this level of analysis, it seems these new markets have yet to be embraced fully. With the introduction of potentially greater competition for enrolments, the trends presented here will probably need to change in 2012 and beyond if a sustainable higher education system is to be achieved.
Conclusion

This briefing has provided an overview of the introduction of demand-driven funding for Australian universities. It has discussed the background to its introduction and charted student demand and university responses to demand over the past decade. Key findings in this paper show:

- There is a close relationship between the introduction of demand-driven funding, attainment rates and SES targets set by the Government – it is unlikely the targets will be met without the existence of a demand-driven system.
- There is evidence to suggest that the current (pre-2012) system for allocation of student places has not been able to respond effectively to student demand over the past decade.
- Only in 2009, when policies relating to demand-driven funding were introduced (relaxation of enrolment caps), did demand and supply of university places begin to work in synchrony.
- There has been significant growth in demand for universities in the past two years, not all of which can be explained by the GFC.
- There are a substantial number of universities that have already begun to prepare for the onset of a demand-driven system, with substantial investments directly injected by institutions. Demand for university over the past two years has never been higher.
- The growth in demand by students and supply by universities was not anticipated when the demand-driven system was initially presented to Government.
- Due to a flat-lining of growth for the core undergraduate age cohort over the coming decade or so, if continued growth in the sector into the future is to be achieved at sustainable levels, there will be a need to tap into other age groups and different populations.
- Over the past decade, universities have not necessarily made much progress in accessing new populations. Enrolment trends show that on some key characteristics such as age and mode of attendance very little has changed in the make-up of domestic undergraduate enrolment profile in Australia.

This analysis takes place on the eve of the implementation of demand-driven funding in Australia. It suggests that growth in the sector is likely in the immediate future, but ongoing sustainability and quality are as yet unknown. Important policy decisions stemming from the Base Funding Review and the establishment of TEQSA are likely to provide some answers in this regard over the coming year.

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References


