Higher education supply and demand

What do applications and offers data tell us?

Mike Teece, Group of Eight
Demand-driven funding

- Demand-driven funding of Commonwealth-supported places (CSPs) from 2012
- No cap on numbers
- Places no longer allocated by Government
- Progressive lifting of over-enrolment caps
  - 5% in 2009
  - 10% in 2011
Why demand-driven funding?

• Recommendation of the Bradley Review
• To increase higher education participation
• 40% attainment target
• A more flexible, deregulated system
  – ‘Politicians out; students in’
What hasn’t been deregulated

• Postgraduate coursework CSPs
• Undergraduate medical places
• Most importantly: PRICE
  – Volume is deregulated but price is still fixed
A blank cheque?

• Could a demand-driven funding system be seen as a blank cheque?
• Does the Government believe they can afford it?
• Assumptions:
  – ‘unmet demand’ was low and falling
Unmet demand

Source: DEEWR (2011), *Undergraduate Applications, Offers and Acceptances 2010*
Applicants and unsuccessful applicants

Source: DEEWR (2011), *Undergraduate Applications, Offers and Acceptances 2010*
Applications and offers data

• DEEWR set up a unit record data collection in 2009
• A uniquely valuable lead indicator of demand for university places (and universities’ response to demand)
• Vital information for transition to demand-driven system
• Under-used
• Data in this presentation sourced from applications and offers collection, unless otherwise noted
The last two years

- Biggest increase in applications for years
- Very large increase in offers
- Very high over-enrolments
- ‘Sheltering’ – poor labour market at time of GFC
- Announcement effect – participation agenda
- Increased supply
Change in behaviour

- Assumption of low unmet demand and fairly static applicant numbers
- In an environment where supply was capped
- Removing caps means:
  - Institutions can grow faster and increase offers
  - Students more likely to apply because it’s easier to get in
  - Staged move to demand-driven system: universities positioning themselves for 2012
Government has underestimated the response

DEEWR Portfolio Budget Statements, 2009-10; 2010-11; 2011-12
Change in applications to 2011

Source: DEEWR (2012), *Undergraduate Applications: Preliminary Data for 2011*
What will a demand-driven sector look like?

• What further scope is there for supply to meet previously excess demand?
  – Field of education
  – Age and prior qualifications of applicants
  – Year 12 performance
  – Applications and offers data can tell us a lot about likely trends
Unsuccessful applicants by FOE

[Bar chart showing the number of unsuccessful applicants in various fields. The y-axis represents the number of applicants ranging from -4,000 to 14,000, and the x-axis represents different fields including Agriculture, Architecture, Education, Engineering, Health (Dental Studies), Health (Medical Studies), Health (Nursing), Health (Veterinary Studies), Health (Other), Information Technology, Management/Commerce, Natural and Physical Sciences, Society/Culture/Creative Arts, and Law.]
Unsuccessful applicants: Year 12s and others
Unsuccessful applicants: ATAR

- 70 and below
- Above 70
Trends: Year 12s and other

Eligible applicants

Current Year 12 applicants
Change in applications by age, 2009-2010
17-19 year olds are still two-thirds of applicants.
Non-Year 12 applicants, 2010

<table>
<thead>
<tr>
<th>Highest prior educational participation</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete postgraduate</td>
<td>2576</td>
<td>2.0%</td>
</tr>
<tr>
<td>Complete bachelor</td>
<td>10 990</td>
<td>8.5%</td>
</tr>
<tr>
<td>Complete sub-degree</td>
<td>4118</td>
<td>3.2%</td>
</tr>
<tr>
<td>Incomplete higher education</td>
<td>45 856</td>
<td>35.4%</td>
</tr>
<tr>
<td>Complete VET</td>
<td>15 179</td>
<td>11.7%</td>
</tr>
<tr>
<td>Incomplete VET</td>
<td>4228</td>
<td>3.3%</td>
</tr>
<tr>
<td>Complete secondary education</td>
<td>25 324</td>
<td>19.6%</td>
</tr>
<tr>
<td>Other qual - complete or incomplete</td>
<td>10 767</td>
<td>8.3%</td>
</tr>
<tr>
<td>No prior education attainment</td>
<td>10 426</td>
<td>8.1%</td>
</tr>
<tr>
<td>Total</td>
<td>129 464</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Trends in offers: ATAR
Future Year 12 cohorts

• Largely driven by demography of prime age cohort
• Some uncertainty about Year 12 retention rates (but not a really big factor)
• Likely trends in rate of transition to university (but current rates already high)
Projected demographic growth

Source: Go8 (2010), *Future Demand for Higher Education in Australia*
Propensity to apply (Year 12s)
Comparison of upper secondary gross graduation ratio for ISCED 3A and tertiary ISCED 5A gross entry ratio, 2007

Note: ^1 Data refer to 2008; ^2 Data refer to 2006.
Source: UNESCO Institute for Statistics, Statistical Table 7.
Trends in mature age participation

• Demand (applications) move in response to labour market conditions
• ‘Skills deepening’ not a big factor in undergraduate demand
• Credentialism? Move to degrees as entry-level qualification for broader range of jobs
Cost implications of future growth

- Student numbers are growing rapidly and outstripping government projections
- Potential for Budget blowout
- Government is clearly concerned: HESA amendment sets up brake levers
Future budget impact

Source: DEEWR *Portfolio Budget Statements*, 2009-10; 2010-11; 2011-12
Projected CGS spending to 2020

Source: Unpublished Go8 projections
Cost implications of shifts in FOE

• If universities respond to unmet demand by FOE, there will be significant budget implications for Government and universities.

• If share of CSPs in high cost disciplines grows, increase in aggregate CGS budget could be bigger.

• But universities may be constrained by their own budgets.
Base funding rates and funding gap, by BFOE

Source: Universities Australia (2011), *A Productive Country: The contribution of Australian universities to national productivity*
Are students equipped to study high demand subjects?

• Demand is growing fastest in Health, Engineering and Science
• But participation in the relevant enabling subjects in Year 12 is falling
• Likely need for more intensive teaching, including bridging and remedial units will further increase costs to universities
Year 12 participation in Maths

Source: Ainley et al (2008), Participation in Science, Mathematics and Technology in Australian Education
The Base Funding Review

• Budget figures and projections are based on current base funding rates
• Much could change depending on what the Base Funding Review recommends and how Government responds
• Easy to have low expectations: difficult fiscal circumstances and commitment to return quickly to surplus
Unfinished business

• HESA amendment as ‘capstone’ of Government’s higher education reforms
• No sign of willingness to extend demand-driven funding to other provider types (as recommended by Bradley Review)
• Bradley also recommended full-fee domestic undergraduate places (or courses)
Soft international demand and universities’ bottom line

• In 2009 (still the latest available data), universities sourced 17% of their revenue from international students’ fees
• International demand has been soft; declines in commencements expected in 2012
• Some evidence of fee discounting
• Knight Review should improve things but this will take time
‘Where’s the money coming from?’

- In view of current economic, fiscal and political circumstances, it is perhaps appropriate to conclude with a famous old Liberal Party slogan: ‘Where’s the money coming from?’

- The Liberal tradition of the ‘razor gang’ may also be relevant.
Thank you

Questions?

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