

## **Universities: potentials created by the Nelson reforms**

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### **Introduction**

Universities in Australia are undergoing their biggest shake-up for many years. We are in the early stages and there is more reform to come, especially after 1 July. But it is already clear that this is the greatest transformation since the Dawkins reforms of the late 1980s, probably since mass higher education began in the 1960s. It is happening on many fronts. It is replacing the Dawkins system with the Nelson system. It creates different laws of motion and a different set of incentives and options, and will remake the identity and mission of many individual universities.

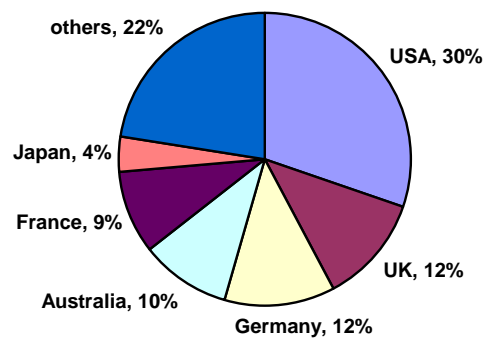
### **The Dawkins system**

The Dawkins system created larger and more business-like universities premised on conglomerate missions and economies of scale, mixed public/private funding, non-market undergraduate education, and a 50 per cent expansion of participation financed by students but supported by income contingent loans financing. All universities competed against each other for prestige and revenues, but were protected from outside competition by protocols confining the funded HECS places, and the title 'university', to the historically-sanctioned institutions. The dominant incentives were to secure more funding from both public and private sources, and broaden the mission to take on an ever widening arc of teaching, research and service functions. The one institutional template was that of the comprehensive research university. The competitive position of each individual institution was determined by how well it compared to the strongest comprehensive research universities, the 'sandstones' – Sydney, Melbourne, Queensland, Adelaide, WA - and their modern cousins such as ANU and New South Wales. While Dawkins universalised the research mission, he failed to finance the essential growth of blue sky research in the new universities. Universities cannot become serious research players on the basis of commercial research alone; and the universities with blue sky capacity will get most of the commercial opportunities.

Dawkins was more successful in engineering growth and the export industry. All but the universities benefiting from exclusive status, the sandstones, wanted the maximum possible HECS places. Local access only began to close down after the 1996 Vanstone budget placed tighter limits on HECS places and even then there was

marginal funding for a while. All universities, including the sandstones, wanted to maximise fee-paying students. International enrolments grew at 15 per cent a year until second semester 2004. The fact that all universities had doctoral standing, all were comprehensive and all had similar incentives no doubt strengthened aggregate growth in a market where national identity is more important than institutional identity. By 2002 Australia had 10 per cent of the world's international students, a quarter of them offshore. Australia specialised in high volume medium quality standard cost degree programs in business studies and associated technologies. (Figure 1).

*Figure 1. Worldwide distribution of international students enrolled in tertiary education, by country of study, 2002*



Note: Two thirds of Germany's 'international students' are actually the children of migrant workers not granted citizenship. Australia is really third largest export nation

Source: OECD, *Education at a glance*, 2004

In all 15 per cent of university revenues came from international students, and \$5 billion in export income. In the context of continued reductions in public funding per student from 1996 (Marginson, 2001), these 'soft' revenues became part of 'core' funding. In the process some universities became heavily exposed – Central Queensland earned 38 per cent of its revenues from international students in 2003, Curtin 24 per cent, Macquarie 23 per cent, RMIT 22 per cent, Wollongong 21 per cent. Even at Melbourne the ratio was 15 per cent (Table 1; DEST 2005a).

In the Dawkins system, universities used non-academic services, business entrepreneurship and acumen and executive management as the main engines of strategic development and competitive advantage, rather than academic development; though this was true more of the new universities than the old. The new dollars went into general staffing, marketing and managing 'quality', and facilities on new sites or servicing fee-paying students. Academic resources were increasingly stretched. Average student-staff ratios blew out from 14 to 21 (DEST 2005a).

Table 1. Largest Australian providers of international education, 2003

University and State	Number of international students	International student fee revenues	Proportion of all uni revenues
		\$s million	%
Monash (Victoria)	15,996	138.3	17.9
RMIT (Victoria)*	14,024	111.9	21.7
Curtin (WA)*	13,624	95.0	24.2
New South Wales (NSW)	10,179	118.6	16.0
South Australia (SA)*	9892	49.1	16.0
Sydney (NSW)	9391	102.2	11.7
Central Queensland (Qld.)	8916	78.2	38.2
Melbourne (Victoria)	8821	137.3	14.9
Charles Sturt (NSW)*	8558	12.3	6.0
Western Sydney (NSW)*	8276	39.1	12.6
Macquarie (NSW)	7879	69.8	22.8
Wollongong (NSW)	7669	49.1	20.7

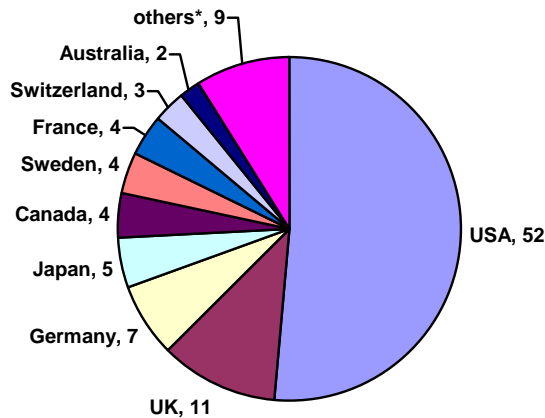
\* more than 40 per cent of international enrolments offshore

Source: Department of Education, Science and Technology (DEST, 2005a)

Potential tensions were defused by the cranking down of expectations by the federal Treasury, dominant in policy, for which the primary objective was always fiscal minimisation; and by increases in fee-base revenues, though in the outcome most of these were ploughed back into the costs of revenue raising itself. Downward pressures on the quality of research infrastructure were masked by the quantity incentives governing research performance. These factors had diminishing returns. Academic resources looked increasingly threadbare and this became one of the drivers of the Nelson reform. It was also apparent that Australia's global standing in research was not as strong as its presence in the global degree market suggests.

According to the Shanghai Jiao Tong University study, in 2004 Australia with about 2 per cent of world economic capacity had 14 (3 per cent) of the world's top 500 research universities, though just two (2 per cent) of the top 100, ANU at 53<sup>rd</sup> and Melbourne at 82<sup>nd</sup>. The rest of the Go8 was in the top 300 (SJTUHE, 2004). This was not a strong performance given that English language nations dominate international research capacity, especially but not only the USA. Canada had four of the top 100 research universities, and the UK had 11, more than double the number its economic capacity would suggest. In the Dawkins system there were few synergies between Australia's export strength, driven by commercial incentives, and its global research performance. The students were from Asia but most of the offshore research collaboration was in North America, UK and Europe. Australia was globally weak in doctoral education: only 4.5 per cent of Australia's internationals were research students, compared to 16.6 per cent in the USA and 10.0 per cent in the UK (OECD, 2004), a sign that Australia had positioned itself as a global polytechnic and offered few international research scholarships. High calibre students went elsewhere.

*Figure 2. Best performing research universities by nation, 2004: number of universities in the world's top 100 research universities*



\* Netherlands 2; Italy, Israel, Denmark, Finland, Austria, Norway, Russia all one each  
 Source: Shanghai Jiao Tong University Institute of Higher Education

### **FEE-HELP and the new undergraduate market**

The Dawkins assumptions have now been knocked away by Nelson. The Nelson system is not about uniformity, growth, access and research quantity in a protected sector mixing market and bureaucratic incentives. The one-size-fits-all formula no longer applies. Access is scarcely mentioned. Nelson is about mission diversity, status differentiation, research quality and student debt in an open market. The surviving mechanism from the Dawkins system is income contingent financing, which underpins the universal market and its stratification of students and institutions.

The crucial part of the first stage Nelson reforms is income contingent FEE-HELP, which parallels HECS. It makes the full fee market not only viable, but central. Students unable to secure their optimum HECS place (i.e., almost every potential undergraduate student) can now secure a preferred course/ university with FEE-HELP help by going deeper into income contingent debt. Repayments only cut in at an annual income of \$35,000, placing the new full fee market within reach of many people, though poorer families will remain more debt averse. Decision-making about tertiary courses has been transformed. As well as maximising the positional leverage of student scores, families can now maximise the leverage of financial investment, with the help of subsidised loans in which the present public picks up the cost of a zero interest rate – as with HECS debts are adjusted only for movement in the CPI - and the future public pays for the non-payment of part of the debt. Already this is driving up relative student demand for prestigious courses, and for the leading research universities, despite a decline in applications overall. The full fee domestic market, only 12,305 students in first semester last year (DEST, 2005a), is growing rapidly. And most of the new revenues are going to the leading universities.

FEE-HELP also makes a large private sector viable, with small specialist institutions and elite comprehensive private universities subject to government approval. This of

course fits with the 'Building university diversity' paper which signals the clear intention to open the market to local and foreign private providers (DEST, 2005b). Although he would like to dictate programs, Nelson probably wants federal legislative control to shape market entry, including who gets major prizes such as the right to establish Ivy League private institutions in Sydney and Melbourne - though most states will also favour a mixed public/private sector. Now that the UK has followed the USA in endorsing teaching only universities, the pluralisation of nomenclature will be difficult to resist. I suspect there will be little public opposition to opening the market. The more contentious issues will be who to let in, under what conditions, and whether students can use FEE-HELP offshore in the USA, UK or Singapore.

FEE-HELP is more important than the HECS increases, though these have drawn most of the public attention so far. The significance of variable HECS determined by institutions is that it transfers policy responsibility for increases in funding from government to universities, completing the transformation of universities into self-seeking corporations, first instigated by Dawkins; and that it is part of the architecture of a future undergraduate market. Given government control of the Senate and the electoral attractions of FEE-HELP as a cheap loans scheme, it will be relatively easy for the government to draw together the HECS strand and the full fee strand. It only needs to lift the limits on maximum HECS, the limits on FEE-HELP places, the limits on FEE-HELP debt and the surcharge on full-fee places, and reconfigure the current publicly subsidised HECS places as merit scholarships. Presto! A unified full-fee student market, in which universities rather than government impose the financial burdens; and with a range of prices, so the government can point to cheaper access at the bottom.

In my judgment the long-term public costs of FEE-HELP as a no interest loans scheme, with a relatively high repayment threshold, will prove to be unsustainable. As with HECS not all graduates will earn enough to discharge FEE-HELP debt, some will join the 1 million Australian expatriates living overseas, and some will just default as in the USA. Judging by HECS, non-repayment could exceed 25 per cent of total FEE-HELP debts. The Treasury will press for more commercial rates of interest, once the unified market is established. Meanwhile, though, FEE-HELP is transforming the sector. It creates high fee high aid higher education; embracing private as well as public institutions, along American lines (though without the alumni endowments, the public donations and the foundation funding that provide additional support for the American doctoral sector and help to preserve its institutional freedoms). FEE-HELP is the most important piece of Australian university policy since the abolition of fees in 1974, perhaps since the Murray report structured federal funding in 1957.

### **Stratification under Nelson**

As I noted the full fee market is a market in prestige, and the 'sandstone' universities and a handful of others are best placed to draw full fee income, though others will do so in selected areas. The Go8 will use it to strengthen staffing and research in strategic fields such as life sciences, biotechnology, nanotechnology and geo-science. It looks likely that at the same time, a British research Assessment Exercise-type system will be introduced to regulate research funding. The British RAE shapes that system. It allocates about 40 per cent of all public funding; and it is one of the reasons why the UK sustains such a globally strong research performance in a system otherwise similar to ours. An RAE would focus on disciplinary assessments

and introduce incentives to improve research quality that the Dawkins system lacked. At the same time it will centre more of public funding on the Go8. Their research capacity and performance will improve. But what about the other universities?

Here again we need to compare the Dawkins system and the Nelson system. The two systems have different implications for system competition and stratification.

Higher education is naturally competitive, in that it distributes scarce prestige goods such as high value Law and Medicine places in universities which provide a limited number of such goods in only some institutions; and because research – which rests on selectivity and priority and generates hierarchies within knowledge – is the main source of academic value and university prestige. All over the world, even where higher education is free of charge, it has a natural tendency to polarize between institutions with a predominantly research focus that attract students by prestige rather than teaching quality; institutions with a predominantly teaching focus; and a bunch of institutions struggling in the middle, like the newer pre-1987 universities in Australia. Table 2 describes this natural system structure, which is shaped by the exclusive character of the positional goods provided in higher education.

**Table 2. Typical segmentation of competition in national higher education systems**

<b>Segment 1</b> Elite research universities	Self-reproducing, combining historical reputation, research performance, and student quality/ degree status. Driven by status attraction/ accumulation not revenues per se. Non-expansionary in size. Limitless ambitions for social status and power. Wealthy. Relatively closed
<b>Segment 2</b> Aspirant research universities	Struggling to live as Segment 1 but unable to break in. Tendency to brain drain of best students and researchers to Segment 1. May engage in selected commercial activities to generate revenues, but not so efficient in commercial terms. Resource scarcity. Semi-open
<b>Segment 3</b> Teaching-focused (university or other)	Student volume- and revenue-driven. Some are private for-profit institutions, or public sector operations with a large commercial component, tending to expand. High resource scarcity. Tendency to hyper-marketing and shaving costs/quality under market pressure. Open

source: author

It is a sad irony that the prestige research universities become seen as the prestige teaching universities due to the halo effect of their positional value - while teaching specialist universities rarely get full credit for teaching quality because they lack prestige (that is, unless they are one of the elite American liberal arts colleges).

Thus the natural tendency in higher education is for a development of a few high status universities with high value degrees and globally competitive research across the board. Their research standing attracts students and academic staff and this in turn provides resources for research. Thus the mechanisms of elite status operate as

a charmed circle; and this is true also of their reproduction. It is very hard to become elite in the first place: in a status competition there is room only for a small number of leaders. But once achieved (or more likely inherited) staying is much easier. Elite universities stay elite even when they are badly managed or the central executive is weak: a classic case is Cambridge in the UK. There have been Australian examples.

Nevertheless, in most nations this natural hierarchy, with its tendency to mirror the social hierarchy and reproduce privilege, is modified by government regulation and funding, for example the publicly distributed research funding that ensures that every doctoral university in central and northern Europe is of roughly equivalent standing. This was also the animating principle of the pre-1987 university system in Australia. Because of it nations such as Switzerland, Sweden and Netherlands are very strong research performers relative to economic capacity. In Australia the Dawkins system abandoned the principle of universal public funding of research capacity, but it modified the tendencies to polarization, social hierarchy and mission differentiation in other ways, by the incentives to follow the one-size-fit-all template, and by universal HECS which quarantined undergraduate education from direct market forces.

In this regard the Nelson system could scarcely be more different. It enhances the natural tendencies to polarization, hierarchy and mission differentiation. The Nelson reforms generate an extraordinary dynamic of stratification. The leading universities will benefit at one and the same time from two kinds of concentration of resources that over time will reinforce each other: an American high fee tuition market, underpinned by publicly-subsidised loans as in the US, and a British-style publicly funded RAE in which the mechanisms of stratification are bureaucratically shaped and academically driven. Full fees will lift research performance, securing yet more RAE support for research capacity. This in turn will augment the local, national and global standing of the top universities, and their power to secure high fees.

It's a good time to be a sandstone. The Nelson reforms better protect the top universities from competition from below, by not just concentrating academic capacity, but installing academic prestige and research performance, rather than business acumen and high volumes, as the main driver of competitive success (except at the teaching only bottom of the market). The only new problem, more in the longer term, will be competition from the top universities in the emerging private sector elite. Some elite institutions will use student scholarships, financed by full fee revenues, to underpin a well publicised access policy though this will remain subordinate to the main high score game. For some, an international focus will remain core to identity, for example New South Wales. But becoming less dependant on high volume full fee international enrolments, leading universities will follow ANU in devoting most of their international operations to research linkages, especially (if they are wise) in the Asia-Pacific. They will be in a better position to pick and choose the most able international students, supporting some with scholarships funded by the new domestic fee revenues, and thereby lift their global standing further.

In the longer term, just how many elite universities will the nation sustain? This will be partly driven by the dynamics of the Nelson system itself, which reduces the potential number, and partly a function of economic growth and private wealth which over time will increase it. As I see it, 8 to 15. We can foresee at least two (WA and Notre Dame) in Perth and also Adelaide University. ANU is the nation's premier research university and will increasingly benefit from the fact that it has only 6000 undergraduates and

few fee-paying internationals. The potential is less clear in Brisbane and Melbourne. Monash is a classic Dawkins university but its research mass places it at the head of the queue to be the second elite university in Victoria after Melbourne. Beyond that Victoria is hard to pick though a comprehensive private university will probably appear. FEE-HELP means Bond U will finally merit the sandstone that Bond A built, alongside the Queensland at St Lucia. There might be scope for Griffith with its Medical school or even QUT with its Law school on the edge of the CBD, though QUT would need to broaden and deepen its research profile. Sydney is big enough support a larger number of elite universities than the other capitals. After Sydney and New South, and a private university, Macquarie, which has stayed smaller and focused on ARC Discovery grants, has a real chance. Perhaps UTS or even Western Sydney, in the longer term. UWS will soon have a Medicine Faculty.

At this point, the position of universities in the middle of the league table, such as the Innovative Research Universities (the newest pre-1987s) and the stronger ATN universities is ambiguous. Some universities that are unable to develop as comprehensive research universities will be successful in sustaining selected areas of research; but not if they attempt to maximise teaching volumes at the same time. Much will depend on where the existing research capacity lies, given that universities that already have it will have the greater flexibility to move quickly into new areas. Table 3 reminds us how centralised is research capacity at present.

What about the rest of the market? The second half of the table is more varied than the top. There are many post-1987 universities with different contexts, capacities and trajectories inherited from the pre-Nelson period. Looking at it overall the post-1987 universities will be relatively uncompetitive in the full-fee domestic student market except in selected areas where they can control prestigious credentials, such as aerospace at RMIT. They will be able to enrol full fee students but not to set them high fees across the board, so that they run the risk of losing money on full fee students, as some already do in international education programs. They will have to keep growing where they can to generate marginal funding, but will be forced into constant tradeoffs between marketing costs and teaching costs, and between volume and teaching quality (and the potential for research). No doubt most of them will remain dependant on high volume international enrolments, but will be handicapped by downward pressures on their global status, particularly if RAE-based research funding pushes them into largely teaching-only functions, and the current downturn in the international market. Here regionally-based universities are somewhat better placed because the federal department of migration, DIMIA, is using them to build regional development via the selective allocation of visas to students whose main purpose in studying in Australia is to obtain permanent residence. .



Table 3. Some indicators of research capacity and performance

Segments and universities	Medicine Faculty?	research students 2003			National Competitive Grants per EFT staff member 2001	Institutional Grants Scheme allocations 2003	New ARC Discovery Grants starting 2005
		number	share of all students	international research students			
			%		\$s	\$s m	
<b>SANDSTONES</b>							
U Melbourne	Yes	4120	10.1	592	29,788	29.8	135
Australian National U	Yes	1691	12.5	427	n.a.	16.6	115
U Sydney	Yes	3578	7.8	417	22,943	27.1	110
U New South Wales	Yes	2780	6.6	540	23,529	25.4	104
U Queensland	Yes	3695	9.7	558	21,452	28.3	88
Monash U	Yes	3081	5.7	398	15,786	19.3	69
U Adelaide	Yes	1621	9.3	241	32,382	15.3	48
U Western Australia	Yes	1883	11.4	314	31,157	16.1	38
<b>ASPIRANT RESEARCH UNIVERSITIES</b>							
U of Newcastle	Yes	1307	5.4	224	13,835	5.4	39
Macquarie U	No	1216	4.2	225	12,409	6.2	38
U of Wollongong	No	1143	5.6	211	14,931	7.0	37
La Trobe U	No	1308	4.7	145	10,332	6.3	21
Griffith U	Yes	1285	4.0	112	7996	6.1	20
U Tasmania	Yes	1034	7.0	85	20,499	7.0	19
Flinders U	Yes	944	6.7	120	18,192	4.5	11
James Cook U	Yes	728	5.4	122	11,040	4.9	9
Murdoch U	No	805	6.3	80	14,954	4.3	9
Deakin U	No	954	2.9	64	6624	2.9	9
U New England	No	790	4.2	91	13,880	3.8	8
<b>AUST. TECHNOLOGY NETWORK</b>							
Curtin U Technology	No	1602	4.5	448	6432	5.2	20
Queensland UT	No	1274	3.2	139	5121	4.9	20
U South Australia	No	1658	5.3	893	5297	4.5	9
Royal Melbourne IT	No	1811	4.7	254	3346	4.5	8
U Technology Sydney	No	1023	3.3	166	6892	3.6	27
<b>OTHER POST-1987 UNIVERSITIES</b>							
U Western Sydney	Yes	894	2.4	80	5159	3.2	15
Swinburne UT	No	560	3.8	67	6294	1.7	7
Edith Cowan U	No	798	3.3	140	3289	1.4	3
Southern Queensland	No	273	1.1	85	3832	0.9	3
U Canberra	No	264	2.4	48	7332	1.7	2
Charles Darwin U	No	232	4.2	15	7885	1.2	2
Victoria U Technology	No	622	3.0	115	4372	1.7	1
Charles Sturt U	No	438	1.1	95	4132	1.2	1
Central Queensland	No	314	1.5	45	2995	1.0	1
U Sunshine Coast	No	70	1.7	15	98	0.1	1
Southern Cross U	No	501	3.9	122	5920	1.2	0
U Ballarat	No	173	2.4	17	3754	0.5	0
<b>PRIVATE UNIVERSITIES</b>							
Bond U	Yes	87	6.6	22	n.a.	0.1	1
Australian Catholic U	No	380	3.2	20	1496	0.5	0
U Notre Dame Aust.	Yes	40	1.1	6	0	0.1	0
<b>MINOR SITES</b>							
[various]	--	316	--		--	0.4	3
<b>TOTAL</b>	<b>--</b>	<b>47,295</b>	<b>5.1</b>	<b>7821</b>	<b>15,165</b>	<b>277.6</b>	<b>1042</b>

Sources: DEST 2005; Nelson 2003b; Australian Vice-Chancellors Committee; Australian Research Council. For discussion of segments see Marginson and Considine 2000, pp. 175-232 [draft, requires checking]

## Some hard choices about mission

In the short term no doubt most universities will hang onto to their current functions, waiting to see where the land lies. In the longer term this will not do. The Nelson will sustain sub-markets, especially in fast-tracked business education, though this is likely to be the province of the commercial sector. There is always scope for entrepreneurship on the margins, and strategic benefits through creative partnerships as Sydney and ANU have shown already. But large universities will stand or fall on the outcomes of the main head-to-head competition with other institutions. In turn this will rest on the reputation of the university brand – which in the Nelson status market cannot be split between the different roles and markets that were all part of the Dawkins mix – and in turn this will be underpinned by the capacity to research better than others, and to a lesser extent to teach better than others. The internal pressures to specialise and concentrate, to trim costs and functions, to abandon loss-making operations with cloudy futures, to liquidate assets marginal to mission, and build specialised expertise and capacity so as to drive institutional reputation (which is what competition on the basis of ‘quality’ really means) will become very strong.

Will it be possible to sustain a comprehensive research mission – or at least keep moving towards one – alongside a high volume approach to domestic and international enrolments and a mission as an access university? This is the key question for many universities. It is the acid test of strategising the Nelson system.

As I see it the answer is ‘no’. We can read this from the system logic. Research development is *the* key to viability as a university with national and global standing. How can an institution finance research development in the Nelson system? There are three ways. The first is from the RAE funding distribution, but that will depend on prior research performance. The second is from commercialisable research. But it is an illusion to imagine that commercial research can underpin comprehensive blue sky research. Commercial research has limited potential to provide on-going funding for research infrastructure, even in American biotechnology. The third source is full fees for teaching with a sufficient profit margin. But that rests on winning the competition for prestige so as to be able to levy high fees on enough students; either in a carefully tailored set of niche credentials (note that these can be quickly imitated by competitors unless they are research dependent) or across the board. Universities that seek to maximise teaching volumes, with the attendant low student scores, problems of quality and the inability to build academic concentrations that can secure superiority, especially in research, will not win that competition.

The tension at the heart of the Nelson system is that research performance is more crucial than before in determining university mission and potential; but the capacity for broad-based research will be more narrowly distributed than at any time since 1987, perhaps since 1965. The Nelson system is a patrician system but its incentives are no less potent for that. The brutal fact is that universities that try to be all things to all people, as in the Dawkins system, now run the risk of dissipating research potential and consigning themselves to bulk teaching in the bargain basement.

## Global prospects

It is impossible that any Australian institution could achieve the global power of Stanford or Cambridge unless Australia became a more powerful nation. The

Australian sandstones and their modern cousins such as ANU belong in the second echelon of the global hierarchy of universities that is described in Table 4. No doubt an Australian university could achieve global recognition equivalent to, say, a mid-West American state university, or Warwick in the UK, though its role in the Asia-Pacific region could be more important than this suggests.

**Table 4. Segmentation of global competition in higher education**

<b>Segment 1</b> World market of elite universities	The American doctoral sector and the high prestige universities in UK. Prestige not profit-driven. Prestige rests on research reputation and global power of degree.
<b>Segment 2</b> Exporting national research universities	Research universities in the UK, Canada, Australia, Europe, Japan. Prestige-driven at national level but often run foreign degrees as a profit-making business.
<b>Segment 3</b> Teaching-focused export institutions	Lesser status institutions in the export nations, operating commercially in the global market, catering to a lower cost/ lower quality echelon of foreign education.
<b>Segment 4</b> Nationally-bound research universities	Prestige providers within a single nation, normally research intensive universities. Nationally competitive with Segment 2 (but not 1), minor cross-border role.
<b>Segment 5</b> Lesser status national/ local institutions	Confined to national competition and local demand. No cross-border role. The largest group of institutions, especially in importing nations.

Source: author. See more discussion in Marginson, 2005

In terms of research ANU is closest to achieving such a role. In teaching NSW, Monash, Melbourne, Curtin and others are creating a strong tradition in the region. The potential for merger between these two modes of global interaction is unclear.

Another uncertainty is future international enrolments. Though the decline in international student intake might continue, the market will not collapse. This decline is partly a function of Australian visa policy and partly a function of the downturn in mobility affecting all English-speaking nations. Undergraduate enrolments in the USA dropped by 5 per cent in 2003-2004 (IIE, 2004), and the *Guardian* has just reported a 6.4 per cent decline in applications to enter UK higher education from non-EU foreign countries. There appears to be mobility/security trade-off here. This adds to the pressures on post-1987 universities, reducing the scope to innovate at a crucial time.

What is clear is that a more differentiated Australian system will send out contradictory global signals. Given that global reputation is determined more in terms of nation than in terms of institution (OECD, 2004), which signals are likely to predominate? What will be Australia's main worldwide reputation? Will we be seen as a regional research powerhouse, or as a global polytechnic, or as something else? All else being equal the broader is the spread of world class research universities in

Australia, the stronger Australia's position will be in the global degrees market. Although it lifts global research performance in the sandstones, the Nelson logic is less than optimal for the export industry and thus for fiscal objectives. This is a new tension within policy. It will be interesting to see if attempts are made to resolve it.

## Rankings

A status market of the Nelson type requires a credible set of rankings to order the competition. A good ranking system should satisfy five criteria. It should be simple and easy to use. It should be transparent, with assumptions, methods and data inputs open to scrutiny. It should be soundly grounded in material realities. It should be free from bias, as far as possible, across the universities included in the study. And it should encourage improvement at university and national system levels. I have one caveat. There is a world of difference between university rankings based on material criteria of capacity or performance (resources, staff quality, research outputs, teaching performance, internationalisation of enrolments, etc.); and university rankings based on reputation or the subjective opinions of those polled. Subjective reputational measures are interesting in themselves – they tell us who has standing in the market – but they do not reflect actual quality, capacity or performance. Changes in reputation lag behind changes in performance; and there is no guarantee that an existing reputation is always 100% well founded. Reputation is open to hyper-marketing, and also to 'halo' effects that benefit venerable older universities. In higher education status tends to perpetuate itself – newer universities find it hard to break into the elite group – because that is how a status market works. It is important to know if reputation is soundly based, and that takes us back to measures of real things. Rankings systems should not mix subjective measures of reputation, with measures of real things. These are two different kinds of league table. It's like mixing chalk and cheese.

The Melbourne Institute rankings index released late in 2004 in collaboration with the *Australian* has learned from the weaknesses of *US News and World Report*, the *Times Higher* and others. It is simple to use and fully transparent in calculation. For the most part it is solidly grounded in the measurable material realities of the sector. It is a good first effort for national ranking; and with fine-tuning – there is much scope for minor work in the different parts of the index – it will be very good.

I will mention only three concerns. First, it is stated that the rankings are a measure of the 'international standing of Australian universities' but this could only be done from outside Australia. These rankings simply measure national standing, in terms of internationally recognised criteria. Second, none of the measures used really constitute a comparison of teaching quality, as everyone knows. Resource inputs and student throughput rates are quantity not quality measures, and subjective student evaluations are affected by site-specific matters that cruel comparisons. There are no valid comparative measure of teaching quality and until we develop them we should not use proxies. These can only mislead. Third, it is unfortunate that the index uses reputational judgments by foreign university CEOs and Australian deans, which provide 8% of an otherwise materially-based index. Not only were the response rates poor, these subjective opinions are not compatible with the other data. It is the chalk and cheese problem. And the same respondents have been asked to weight the index, which should have been theorised by the researchers themselves. The result

is that the exercise is open to the charge that the choice of opinions has been used to manipulate the final outcome. It would be better to drop this part of the index.

### **Predictions and variables**

Let me conclude with some tentative predictions, and some policy variables which could modify the picture I have painted.

In the short to medium term the barriers to full fee charging and FEE-HELP funding will be removed, accelerating the growth of full fee places. Domestic student numbers are likely to fall, especially if the economy keeps running down, though despite the intimidating money costs it would be unlikely if domestic participation fell substantially in the long term. It has already been depressed for more than half a decade; degree holders gain real status and earnings benefits, and HECS-HELP and FEE-HELP makes it easy for most families to pay..

In the longer term, the HECS-based and full fee strands will become unified as described above. There will be a single fee-based market, across postgraduate and undergraduate education, with merit-base scholarships reducing the debts of some students. In this system total access to higher education will be less important than 'Access to what?' and 'Who obtains it? Scholarship support and the public subsidy of FEE-HELP will disproportionately benefit the middle class – just like free education did: you will recall that this was the fact that ushered in user pays financing. The federal government will not monitor the equity of the differential rewards received by different social groups unless public pressure puts this on the agenda. Still less will it develop policies designed to equalise the standing of universities. It will leave status to determination by 'market forces', while reinforcing the outcome of those forces. Government subsidies will be confined to payments to individuals (FEE-HELP and scholarships) together with RAE-type allocations to research infrastructure. High quality academic staff will be in serious shortage because of the age structure of the profession (Hugo, 2004) and because despite the growth of opportunities in the sandstones, the narrowing of research training and research work to a smaller number of institutions will send more young academics offshore.

he sandstones and some others will become notably stronger in global terms. Australia's share of the global teaching market is likely to decline. Its share of the top 500 research universities could drop, though its share of the top 100 could grow.

Nevertheless, there is more than one set of political possibilities, and a range of policy options within the terms of the Nelson revolution. The different options and possibilities can affect the position of individual universities. The picture of institutional stratification that I have painted could be modified if there are serious dollars targeted to the role of universities in regional development, and/or the RAE includes a substantial allocation to build blue sky research capacity in some of the post-1987 universities. If I was in a post-1987 university, that is what I would be pressing for now. If 25 per cent of the RAE was distributed to the post-1987 universities separately from the competitive allocations, including components for APAs and post-doc fellowships in those institutions, it would make a major difference to the long term evolution of national research infrastructure. More than the self-interest of the post-1987 universities is at stake here. Arguably, unless the Nelson

stratification is modified by policy, the Nelson system will concentrate and narrow research capacity to a degree inappropriate to a broad-based knowledge economy. .

The harder question to assess is whether the tensions and downsides of the Nelson revolution will prompt its modification and even reversal in certain areas. To some extent it depends on the political cycle, though it would be electorally difficult for Labor to take away the benefits of FEE-HELP until it proves too expensive. Between elections, there is the possibility that business leaders, the more far-sighted economists in government, and newspaper editors, might become concerned at the effects of the Nelson system in narrowing Australia's research capacity. In the longer term, the problem is not the trade-off between research breadth and depth - which was the policy tension generated by the Dawkins system in the context of fiscal restraint - it is the tension between the need to deepen research in the strongest universities, versus the need to both broaden and deepen research capacity overall.

The Nelson reforms should improve research quantity and quality at the top. Australia needs stronger research universities. But in some respects this outcome cannot be taken for granted. There's no doubt that the sandstones and their cousins will have more resources but exactly how this translates into performance is a more open question. The reduction of functions below the elite group, with their institution-building energies channelled into hyper-competition in the commercial teaching market, rather than blue sky academic quality, will reduce performance pressures on the top universities. There is a danger some sandstones will become complacent, referencing themselves against the local fee-paying elite not global higher education, and wasting resources on prestige-building facilities that adds little to academic infrastructure, as happens in the USA (Frank and Cook, 1995). The worst case scenario is that Nelson will bifurcate Australian higher education between a race to the bottom in the lower reaches of the market, coupled with social closure at the top.

## **Summary**

The income contingent FEE-HELP loans system introduced this year is the most important piece of university policy making since the abolition of fees in 1974. It makes a US-style high-tuition high-aid market viable in both public and private sectors. In conjunction with opening the market to specialists and teaching-only universities it enables a more diverse system of higher education. The long-term public costs of FEE-HELP might be unsustainable, given the government carries the costs of the sub-commercial interest regime, default and lifetime graduate payments insufficient to discharge debts. Meanwhile, though, FEE-HELP is transforming the sector. Over time there will be greater differentiation between institutions in status, resources, missions and global roles (and price). Universities that try to be all things to all people, as in the Dawkins system, now run the risk of dissipating research potential and consigning themselves to bulk teaching in the bargain basement. The logic of a status market is such that the leading research universities will mostly be seen as the leading teaching universities. Nevertheless, the high end game is now to build research performance and reputation and to use this to maximise student Enters, raise prices, expand full fee revenues, and further build research and global university presence; the strategies of American Ivy League institutions. International recruitment will become less essential at the top of the market. A positive feature of the Nelson system, compared to the Dawkins system, is that academic capacity will be more instrumental than business acumen in shaping institutional success (except

in the lower echelons of the market); especially if it is supported by a British RAE-style research funding distribution focused on disciplinary quality, and sound university rankings. Research universities need resources to become more globally competitive. Nelson gives them those resources.

At the same time there is a tension at the heart of the Nelson system. While research performance is more crucial than before in determining university mission and potential, the capacity for broad-based research will be more narrowly distributed in Australia than at any time since 1987, perhaps since 1965. This might leave Australia less than fully equipped for the demands of a global knowledge economy. How could research capacity be broadened beyond the expected outcomes of Nelson-style competition? The Dawkins assumption that commercial research can flourish without 'blue sky' research capacity has been proven incorrect. However, selective 'blue sky' research funding in post-1987 universities, over a sustained period, might make a crucial difference to the long term economic and social effects of the Nelson reforms, and would broaden the global attractiveness of the Australian system.

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