Reversing the slide

Michael Gallagher

The Government is embarking on a grand market-based vision for the sector just at the moment when university enrolments will begin a long and perhaps inexorable slide. And according to Michael Gallagher, higher education is becoming a less attractive investment for the private sector even as the Government is pushing the sector towards ever higher proportions of non-government funding.

My aim in this article is to do two things: first, to analyse the present policy position in tertiary education and research; and second, to suggest directions for future policy development – keeping in mind changes in the operating environment.

Even though I will mainly discuss higher education here, I choose to use the term 'tertiary' education because a coherent policy is needed to cover all forms of post-secondary education – vocational education and training, university undergraduate and graduate education, and professional development, as well as adult and continuing education. It is inapt for the Howard Government to talk of, indeed to legislate for so-called 'learning entitlements' that apply to only one part, the higher education part, the more elite part of the tertiary education sector, and that part – undergraduate degree education – that will possibly grow the least in the future. Even the West Committee in its otherwise inconsequential 1997 report, *Learning for Life*, saw the logic of a universal tertiary education entitlement that allowed people multiple points of access for varying purposes at different times; the only thing they got right the Government ignored.

Deliberately too, I distinguish between education and research – because we need in Australia urgently to develop a coherent policy for building research capability. That is lacking at present, not only through inadequate levels of investment. The Howard Government has confused its approach to research with its policies for higher education and we have a lack of clarity about the respective roles of universities and public research institutes, a set of conflicting signals and perverse incentives, and a dissipation of effort that will cause Australia to slip further off world pace. It has failed to integrate approaches to bio-sciences, ICT and other emerging fields, where responsibilities and programs are scattered across a plethora of portfolios, each with their own rules and conditions, and application and reporting procedures. And it has failed to work cooperatively with the states, especially in the important area of investment in, and collaborative use of, research infrastructure.

Higher education after the 'crossroads' exercise

In international as well as Australian experience, policies for large and complex education systems rarely depart suddenly from one direction to another. Rather they shift incrementally over a decade or more, and over such a period can take a radical change of course, depending on particular decisions along the way. At times, such decisions may be taken for other than educational policy reasons or be the outcome of political compromises, yet have profound impacts on the direction of policy.

When we look back over the last decade in Australian tertiary education policy we now see in retrospect a series of incremental shifts since the opening up of places to overseas students on a fee-paying basis. Among these incremental shifts were such as the persistent tampering with HECS rates and repayment thresholds, the opening up of postgraduate fee-paying places, the reduced rate of indexation of operating grants, the ending of triennial block funding, the introduction of fee-paying places for domestic undergraduates, marginal funding for enrolments above targets, the differentiation of HECS rates by field of study, the separation of funding for research training from university operating grants, the introduction of loans for postgraduate students, and the inclusion of private institutions on the higher education funding schedules.

When the *Crossroads* papers were rushed out in 2002 there were a couple of 'core' policy shifts envisaged: pricing deregulation, expansion of fee-paying access and associated extension of loans for domestic undergraduates, and the entry of private providers. Few expected the *Higher Education Support Act* of 2003 to have been so prescriptive and narrow in redefining the relationship between universities and the state in 'purchaser-provider' terms, and to have been so intrusive into areas of longstanding university autonomy in Australia – autonomy of governance, curriculum, pedagogy, assessment, staffing conditions and student admissions.

The recent raft of changes to higher education policy, if implemented, will I believe only be able operate for between two and four years before they implode. They are transitional policy measures to shift the system radically from a publicly-oriented to a privately-oriented model. Political compromises made in the process of gaining the passage of the legislation through the Senate have ameliorated some of the problems that would otherwise have been encountered in the transition through to around 2008–2009. What worries me is that it is a transition in the wrong direction for the future beyond 2011, when the 15–24 age cohort that has dominated higher education participation will be declining not growing, when the private rate of return to a Bachelor degree will be diminishing, and when the imperative won't be to expand the size of the system but to encourage people, particularly young people, to participate.

Raising the amounts and proportions that students have to pay is an outdated as well as perverse agenda; it is a kind of anachronistic flashback to the Dawkins era. In the mid 1980s demand was escalating and higher levels of skills formation were required. As a result Australia developed the HECS scheme as a fair way of sharing the costs between general taxpayers and private beneficiaries. Yet circumstances have changed radically since then. Further increasing the proportion of the costs levied onto new entrants to tertiary education now, when the system is entering a period of stagnation or contraction of demand, will risk serious under-investment in the human capital formation that is essential for generating the productivity growth we need to sustain living standards as our population continues to age. Why is it necessary to make such a cost shift now? What is the imperative for it? Why have we not had a serious investigation and debate of the most important questions?

- What are the basic purposes of our tertiary education and training systems and research institutions?
- What is the most appropriate scale and shape of the system for meeting future needs?
- What is the appropriate balance between public and private funding sources for system sustainability?
- What is the appropriate balance between market mechanisms and government regulation for system steering?

There are three basic policy purposes for opening up sources of growth in income for the supply of education services: to expand the system to accommodate increasing demand; to substitute private for public expenditure; or to stratify the system. The case for system expansion only makes sense through to around 2011, after which time the demographic trends will go into reverse. The case for substitution is largely an ideological one; empirically the data suggest that the private rate of return to higher education is falling while costs are rising and that the social rate of return exceeds the private rate. That leaves stratification as the surviving rationale. And that is what the policy shift is basically about – on the demand side, creating privileged pathways for the affluent in an otherwise massified system and, on the supply side, differentiating institutional types and funding rates.

I believe there is a case to revisit the post-Dawkins structure of higher education institutions. But it is a case based on the emerging need for universities to make more diverse contributions to research and scholarship, and the cost imperative for concentration and collaborative use, rather than duplication, of expensive research infrastructure. There is no case for system differentiation solely on the basis of undergraduate student demand.

With regard to stratifying student access, already the signs are ominous. There has been growth of 30% in the number of non-overseas students starting a higher education course over the period 1993 to 2003 (see Table 1). The largest component of growth (43%) has been Bachelor degree enrolments but the fastest rate of growth has been in higher degree coursework enrolments (122%). Interestingly, higher degree research student numbers have risen only modestly since 1997. Undergraduate starts as a share of all starts fell from 70% in 1993 to 64% in 2003. Non-award commencements almost doubled from 6,028 in 2001 to 11,620 in 2003, as universities cut back intakes to avoid a flow through to higher over-enrolments,

Table 1: Commencing Domestic students by level of course from 1993–2003

Course Level	*1993*	*2003*	*Change*
Higher Degree research	8,656	9,130	474 (5.5%)
Higher Degree coursework	14,214	31,565	17,351 (122%)
Other postgraduate	30,818	36,672	5,854 (19%)
Sub total postgraduate	53,688	77,367	23,679 (44%)
Bachelor	133,373	160 219	26,846 (20%)
Other undergraduate	7,866	6 280	-1,586 (-20%)
Sub total undergraduate	141,239	166 499	25,260 (18%)
Enabling	1,560	5,273	3,713 (238%)
Non Award	4,222	11,620	7,398 (175%)
Total	200,709	260,759	60,050 (30%)

which the Government had indicated they would be penalised for. Non-award enrolments are not subject to price controls. Non-award intakes of students aged 19 and under more than doubled between 2000 and 2003.

These structural changes in opportunities for undergraduate admission have had a particular impact on recent school leavers. Direct school leaver commencements in higher education in 2002 and 2003 were the lowest in a decade, falling from 74,754 in 1996 to 64,675 in 2003. This decline does not reflect a diminution of demand from demographic or participation rate factors. There has been some increased student take-up of a 'gap year' between school and university, and many would regard that as a sensible break for those who can afford it. There has also been a 50% growth in training commencements among young people aged 15 to 19, from 31,800 to 48,500 over the period March 1999 to March 2004, including some 5,335 school-based training contracts and that is to be welcomed. Pathways for articulation from vocational education and training enable students to move on to higher education. School leaver applications for university places have continued to hold up nonetheless, according to data from university admission centres. In fact, for the period 1996–2004, when young people's access fell by 10,000, the number of eligible applications from that age group rose by 6,265.

The level of 'unmet demand' – the proportion of all eligible applicants through the Universities Admissions Centre (UAC) not receiving an offer of a place, as estimated by the Australian Vice-Chancellors' Committee, has grown from 24% (55,023 applicants) in 1996 to 28% (63,329 applicants) in 2004. When this level of unmet demand was last reached in the early 1990s, the then Government introduced school leaver targets to safeguard opportunities for young people.

Now we are seeing a tightening of cutoff scores for admissions. The relative difficulty of obtaining a place varies across states according to levels of demand. A culture of high expectations of tertiary participation in Victoria gives rise to 68% of admissions coming direct from school (compared with 53% in NSW); the strong competition results in 98% of Victorian university intakes having Universities Admission Index (UAI) scores in the top 50% of all applicants in the state. Demographically-driven demand in Queensland where only 55% of university starters come direct from school, results in 92% of offers of a place going to those applicants in the top 50% of UAI.

The proportion of domestic undergraduate starting students admitted on the basis of recent school attainment varies across universities, from 61% at the University of Melbourne to 5% at the Australian Maritime College, with a national average of 35%. By and large the Group of Eight (Go8) universities draw around half of their intakes direct from school (see Table 3).

Table 2: Proportion of offers made to applicants under 20 yr age, by percentile distribution of UAC scores, by State, 2004

	Applicants made offers in top 50% of UAI	*All applicants given an offer of a place*	*Proportion offers in top 50% of UAI*
NSW	22,765	29,140	78
Victoria	22,117	22,484	98
Queensland	16,276	17,749	92
South Australia	5,486	7,685	71
Western Aust	6,486	10,102	64
Tasmania	1,628	2,454	66
Total	74,758	89,614	83

Table 3: Domestic students who are recent school leavers as a proportion of all domestic students commencing a course at Bachelor level or below in 2003

University & State/Territory	*Completed Year 12 in 2002 or 2003*	*Total domestic commencing students*
University of Sydney	54%	8 746
University of NSW	53%	4 899
Charles Sturt	15%	9 403
New South Wales	33%	58 569
University of Melbourne	61%	5 797
Monash University	45%	8 240
Victoria University	28%	4 702
Victoria	43%	40 054
University of Queensland	45%	7 483
Griffith University	37%	7 836
University of Southern Queensland	17%	5 639
Queensland	33%	38 833
University of Western Australia	56%	3 122
Curtin University	32%	5 286
Edith Cowan University	23%	5 365
Western Australia	32%	17 774
University of Adelaide	55%	3 570
Flinders University	35%	3459
University of South Australia	34%	3459
South Australia	40%	12 630
University of Tasmania	35%	4 116
Australian Maritime College	5%	1 110
Tasmania	28%	5 226
Charles Darwin University	12%	1 892
Northern Territory	7%	2296
Australian National University	50%	2 164
University of Canberra	25%	2 599
ACT	23%	5 123
Australian Catholic University	36%	2 887
AUSTRALIA	35%	183 392

The Go8 universities tend to pull the high achievers from the pool of school leaver applicants in their State and from interstate. This sends out signals of prestige to the community, as the quality of student inputs is an element of the quality of learning. An option available to others is to reduce the proportion of intakes through the UAC system and so artificially inflate advertised cut off scores for admission. Such behaviour results in greater pressure being put on young people in their final years of school to achieve high scores.

The decline in young people's access to university appears to reflect changes to the supply of places and the basis of student admission. The deterioration in access opportunities for young people is occurring ahead of the forthcoming predicted decline in Australia's youth population. It appears to be driven, at least in part, by the market incentives that have been injected into the system in recent years, creating conditions that will not well suit future needs.

The Government has been de-funding the higher education system since 1996 such that it is now poorly positioned to accommodate the demographically-driven demand growth through to 2010 on a national basis. Particular pressure is being put on students and universities in regions of fast growth. The post-1996 surge in supply of marginally-funded places is now being rapidly wound back. The Government is belatedly funding catch-up places that will only begin to replace the withdrawn marginally-funded places by 2008. By the time its new transitional policies come to a head, around 2008–09 (when variable HECS revenue will have hit its currently legislated limit, and FEE-HELP loan limits will be too low to cover the prices charged in high status courses) the policy challenge will be to encourage participation from a different pool of applicants for a different range of educational services. Growth can be expected in non-award and post-initial tertiary education and training, that part of the higher education system that has already been deregulated. It is neither necessary nor timely now to start deregulating the provision of undergraduate education and erecting new financial barriers to the access of new entrants.

Fee rises

Howard Government ministers, from Vanstone and Kemp to Nelson, have persisted in arguing that some Australians who fail to win a university place on merit should be able to buy their way in, on the grounds that we let foreign students buy a place. The argument is often presented as if it's a matter of equal rights between Australian and foreign students. But we do not provide access to overseas students on equal terms to Australian citizens. We make foreign students pay fees, at least at cost-recovery levels, because they and their parents do not pay tax in Australia, either before they participate or after they graduate; that is, because they do not contribute to public investment in Australia's higher education system. Australian students should not have to pay full fees, at least for their initial period of tertiary education, because they and/or their parents have contributed and will contribute to Australia's public investment capacity through the tax system, as well as through arrangements for sharing the costs of higher education participation through HECS.

We open our system to overseas students because we seek to internationalise the educational experiences of Australian students in preparing them for a more globally integrated future, and because we seek to build networks of influence around the world for advancing our diplomatic, business and trade objectives. Foreign students pay full fees so that Australian taxpayers do not subsidise their access and so that Australian students are not denied a place. We do not distort our national principles and systems of merit-based selection by admitting fee-paying overseas students. Foreign students generally, except for those in the schooling system, do not participate in our national merit selection processes for tertiary admission. We distort those principles and systems when we admit individuals on the basis of financial ability to a place they lacked the relative ability to win; when we allow domestic queue-jumpers.

Former Higher Education Minister, Amanda Vanstone, used to get cranky about complaints of 'creaming' – letting in the rich and thick to higher education. She thought an error band of around five percentage points in the thickness of the cream didn't seem to matter. She was probably right in relation to the relative prospects of success of students with attainment scores in the top decile. And for the universities attracting those students it makes little sense to widen intake quality too much. But why only 5%? There was and is no such limit on the range of scores for fee-based admission. The only limit on fee-payers was that initially imposed by the Senate of 25% of enrolments in a course. That has now been raised to 35%.

In 1996, the Howard Government first opened up fee-paying places like an icing on the cake; now it is making fee-paying access an essential ingredient of the cake. The policy enables some universities to rent seek in areas of strong demand for professional qualifications such as Medicine and Law, pulling the top talent pools on the basis of prestige away from other universities who have to back-fill with others to meet their government funded enrolment targets. This is a recipe for 'dumbing down' Australia's higher education system.

Now the Government argues that universities will be denied revenue if fee-paying access for domestic undergraduates is closed off. The argument is made as if all the revenue is profit and there are no costs incurred. I've not seen any calculation of the net returns. Nor do I understand why those universities that attract the top students should need more funds for teaching than those universities that face a greater challenge to add value. Undoubtedly the top universities need more funds for research so that Australia can keep up with the world pace of

knowledge growth, but undergraduate students should not be milked for that purpose. However, the key point is that our universities do not exist to make a profit but to accumulate quality and serve the community. And when policy calls must be made, the integrity of the national system is more important than the financial aspirations of a few universities.

DEST has estimated that, on the basis of decisions of universities, top-up HECS should increase their revenues by $828 million over 2005–2008. What happens after that? Salary rises and other costs will have to be met; the variable HECS income might cover one round of enterprise bargaining. There is potentially a further year to gain revenue from the measure but beyond that there is no growth. Unlike indexation, a once-off lift in the HECS ceiling has a time-limited effect. Of course, the Government could agree to increase the permissible HECS rates yet again, or collapse HECS with FEE-HELP and move to a fully price-deregulated system. As has been said of the UK experience: "in the same way as the fixed fee gave way to the capped fee, the capped fee will soon give way to the uncapped fee".[1] Then we may see wider usage of fee-based access, widening the merit margin of access well in excess of the ten percentage points range we see today.

Rates of return to higher education

There was a time when arguably it was appropriate to raise the student share of costs to achieve a better balance between private and public contributions. That was the period of the mid 1980s which gave rise to HECS. But the case for further shifts to students is not apparent now. Miller (1982)[2] using 1976 Census data, found the private rate of return to higher education to exceed the social rate of return by about 5%. Borland et al (2001) in replicating Miller's method estimated the private return "at about 15%" and the social rate of return at "about 16–17%", noting:

> Interestingly, the social rate of return is now above the private rate of return whereas Miller [1982] finds the opposite. The introduction of HECS payments seems likely to be an important explanation for this finding.[3]

Chapman & Ryan (2002) report declining private rates of return to higher education investment, with increases in HECS charges, of –0.5% between 1988 and 1993-94 and of –1.3% after the 1996 changes.[4]

Two factors are working to lower the private rate of return to bachelor degree graduates: the increasing private costs of education and the falling salary differentials as graduate supply to the labour market expands. The proportion of the labour force aged 15–64 years with degree level qualifications has almost doubled from 12% in 1993 to 21% in 2003. The stock of sub degree qualifications has stabilised at around 33% over the same period. The ratio of bachelor degree graduate earnings to average earnings has fallen from 96.8% to 91.9% for men, from 1995 to 2001, and from 105.4% to 93.9% for women over the same period.[5]

Johnson and Lloyd (2000) estimated that a university graduate earns more than a secondary school graduate, with the difference accumulating to about $438,000 during working life. My estimates are set out below (see Table 4). They show the accumulated lifetime benefit of the Bachelor degree graduate over the year 12 school leaver to be about $375,000. The case for shifting further costs onto undergraduate students is not self-evident. Indeed, there is no case. If anything, there is a moral obligation as well as a social imperative not to pass on to the next generation – a generation that will by virtue of its smaller size absorb a proportionately lower level of public expenditure – a higher burden per person for the equivalent amount of higher education enjoyed by the present generation and its predecessor generation of baby boomers for many of whom higher education was free.

There are some serious inter-generational issues associated with that cost shifting that we need to ponder. We would be unwise to take for granted some sort of naturally rising level of higher education participation among young people into the future. The bachelor degree may not be as attractive an investment in the future as it has been in the past. As Princeton's Wythes Report noted in 2000:

> We do not really know whether the economic benefits of an undergraduate degree will continue to grow over time, or whether an increase in the number of citizens holding degrees, changes in the nature of work, greater emphasis on the acquisition of specifically measurable skills, the availability of on-line education and training services, an erosion of the general quality of traditional undergraduate education or other factors will lead to a devaluation of the Bachelor degree, if not in general then from some universities".[6]

There are also some regrettable losses of educational choice for students as well as system efficiency losses resulting from the policy of tuition price differentiation. These problems will worsen as knowledge continues to expand, new fields of study emerge and demand for older fields, whether specific languages, classics or specific sciences, is insufficient to support courses in other than a small number of institutions. For over a decade, Australian policy has encouraged institutional collaboration in fields of small enrolment so as not to diminish student choice and to sustain important if not popular fields of scholarship. What is likely to happen when University A admits students at a higher HECS rate than University B, and a student who would not have met admissions standards for entry to University B seeks to take a unit of study at University B? Why would University B accept the student it may not have admitted, in preference to one who would meet its entry requirements, and provide educational services to that student at lower costs than University A and effectively give University A a windfall gain? It just won't happen. Educational collabora-

tion, credit transfer and other features of the Australian system that we have long valued may well wither.

What are the logical next steps of the Nelson agenda? The following measures would be consistent with the long-term policy intent of the transition:

- Removal of enrolment targets.
- Removal of fee limits on both student numbers and prices.
- Combining of HECS and FEE-HELP loans with identical provisions.
- Raising the loan limits, with a real rate of interest.
- Restricting the eligibility of some institutions for Commonwealth support for research and research training.

What are the alternatives? The first need is to restore a system of adequate indexation to the higher education system. Over the eight years from 1996 to 2004 there was a $1.1 billion gap between the miserly index, the Safety Net Adjustment (SNA), the Government has been using to adjust its payments for rises in salary-related costs, and rises in average ordinary time earnings (AWE). The main advantages of the indexation approach are that it avoids shifting costs to undergraduate students, has universal applicability across the system, protects horizontal equity, and provides some level of predictability for institutional planning purposes.

Adequate indexation reflects a commitment to sustain sufficient levels of public investment in the system to meet normal rises in costs. The failure of the Australian Government to provide adequate indexation for universities' core operations explains Australia's slippage in international terms. Whereas most other OECD nations have increased public investment in higher education in recent years, Australia has reduced its commitment. The proportion of total higher education system revenue that derives from students has now reached 38% - the highest level in Australia's history.

The second is to develop a coherent approach to tertiary education to meet Australia's future needs in ways that will encourage increasing participation, not discourage it. The third is a policy framework for tertiary education on the one hand, and research and innovation on the other hand – both of them linked to broadly-defined national economic and social objectives. It's time to revisit the structure of incentives for research and research training. The current Research Training Scheme (RTS) and its companion Institutional Grants Scheme arose out of a compromised policy initiative of the then Minister David Kemp in 1999. The schemes were designed to concentrate research and research training activity through performance-based funding. RTS was initially conceived as a portable scholarship allocated to students, hence its duration limits. But there was no method of national merit allocation and no student tracking system in place.

There was a very clear understanding at the time that without additional funds the schemes could do damage after five years – they were designed as transitional measures to achieve a shock impact on the academic culture and to de-couple funding of undergraduate teaching from funding of research training – this would allow deregulation of undergraduate education, given that postgraduate education was already deregulated in terms of student volumes and prices. The schemes have indeed proven themselves to be clumsy and confusing and unsustainable, and they have failed to achieve the concentration intended.

Rather than head in the direction of undergraduate fee deregulation, with all the regressive consequences that path involves, we would do better to restore the balances between public and private investment that will encourage the next generation to invest in tertiary education. A sensible goal is to rebuild the foundations that underpin productivity improvement through skills formation, and research and innovation.

Table 4. Graduates and Non-Graduates: Lifetime Earnings

Non Graduates	Assume:	42 working years	
		Average salary in 2002	$38,324 gross
	LIFETIME NET EARNINGS (a)		$1,823,237
Graduates	Assume:	4 year degree	HECS Debt $20,000
		Books and Sundries	$2,000
		38 working years	
		Foregone net earnings[1]	$125,029
		Average grad salary in 2002	$57,616
	LIFETIME NET EARNINGS (b)[2]		$2,171,120
Difference between (a) & (b)			$374,883
Cost of Investment:		Foregone Earnings	$125,029
		Books	$2,000
		Total	$127 029
			347,883 / 127,029 = 2.7386

1 Non-graduate's net earnings over first 4 years.
2 With HECS deducted until debt paid off, after 6 years.

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Endnotes

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2 Miller, P (1982) "The rate of return to education: Evidence from the 1976 Census", *Australian Economic Review*, 3rd Quarter, 23-32

3 Borland, J., Dawkins, P., Johnson, D. & Williams, R. (2001) "Rates of Return to Investment in Higher Education", Australian Social Monitor, Vol. 4, No. 2, August. Institute of Applied Economic and Social Research. The University of Melbourne.

4 Chapman, B. & Ryan, C. (2002) *Income – Contingent Financing of Student Charges for Higher Education: Assessing the Australian Innovation*. Centre for Economic Policy Research. ANU.

5 ABS 4230.0

6 *http://www.princeton.edu/pr/reports/wythes/05.htm* (2000)