



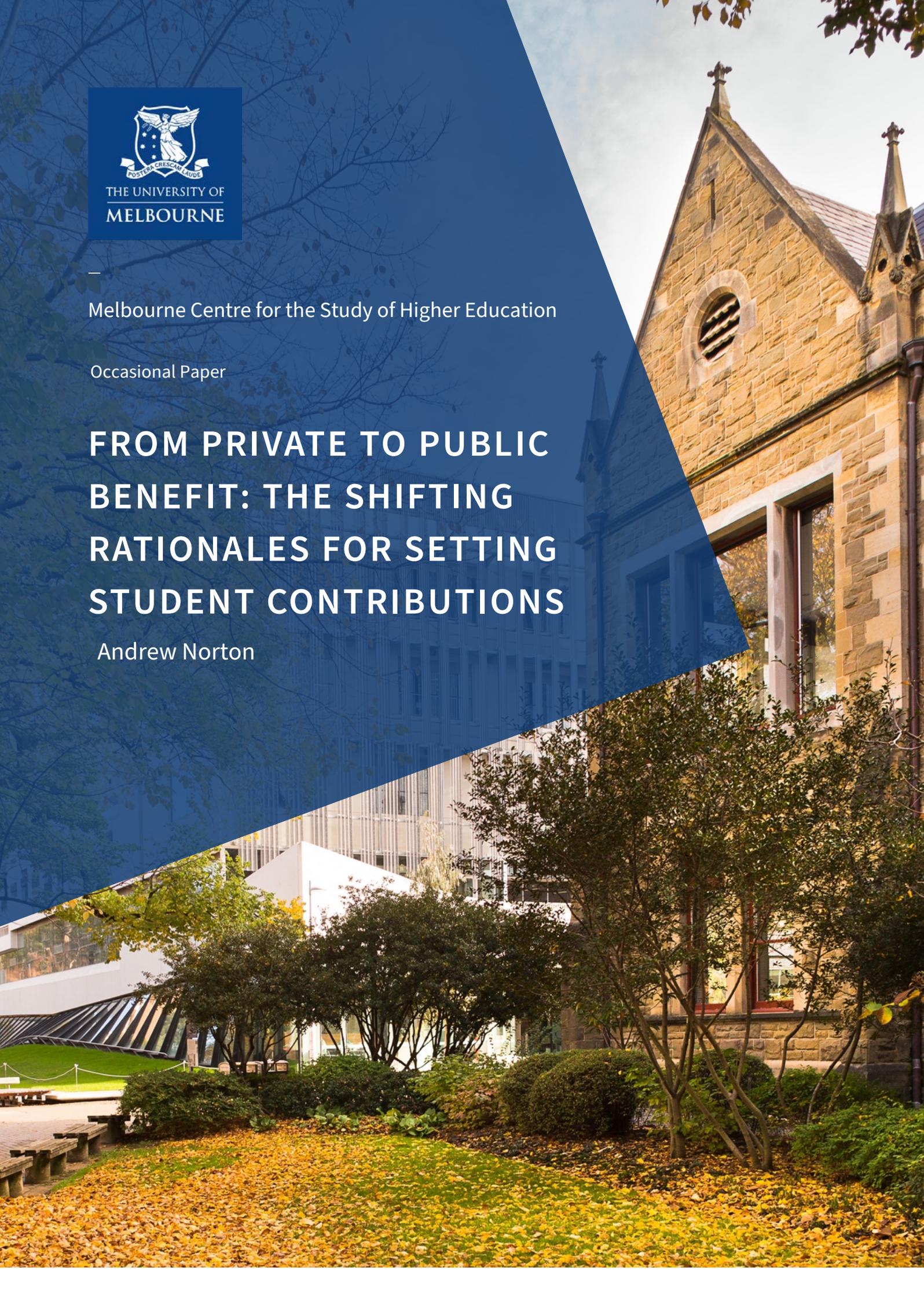
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Occasional Paper

FROM PRIVATE TO PUBLIC BENEFIT: THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

Andrew Norton



Andrew Norton is Professor in the Practice of Higher Education Policy at the ANU Centre for Social Research and Methods and an Honorary Fellow at the Centre for the Study of Higher Education at the University of Melbourne.

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TABLE OF CONTENTS

Introduction.....	7
Background to the reintroduction of student tuition charges in 1989	8
The Wran committee and the introduction of HECS	8
Private benefits	9
Flat or course cost charges?	10
Differential HECS	11
Specific course costs.....	11
Private benefits of the course	12
High demand.....	13
Differential HECS as implemented	13
Public benefits.....	15
Universities setting their own charges.....	16
The West review	16
The Nelson reforms.....	17
Influencing course choices.....	18
A failed rationale: the public-private balance	19
Influencing course choices, continued	19
The base funding review	19
The Pyne interlude	21
The Birmingham attempt at balance	22
The Birmingham decision	23
Job-ready Graduates	24
Public benefits.....	24
Mapping funding to courses	25
Changing enrolments	28

Comparing student contribution rationales	30
Dawkins and Vanstone: Moving costs to students	31
Nelson and Tehan: Student contributions steering student and university behaviour	32
Comparing effects of the student contribution rationales	33
HELP repayment times	33
Costs to government of the HELP loan scheme	34
Student contributions and the economics of ‘over-enrolment’	35
Conclusion	36
References	38

EXECUTIVE SUMMARY

Since 1989 domestic students in Australian public universities have been charged student contributions, originally called HECS. Three subsequent redesigns of the student contribution system commenced in 1997, 2005 and 2021. With each change the then government advanced different rationales or mixes of rationales for their price decisions. The five rationales are course costs, private benefits, public benefits, increasing resources per student place, and incentivising course choices. This paper documents and evaluates these rationales.

Higher education public and private benefits are recurring themes in student contribution setting, both as high-level justifications for government policy and in pricing specific disciplines. These ideas played a significant role in how various governments explained three of the four implemented student contribution systems.

In 1989 the general private benefits of a degree were one justification for HECS, which was originally a flat rate across all courses. In 1997 discipline-specific relative private benefits were a reason for making some courses more expensive for students than others. In 2021 the rationale moved to the public side, with courses the government believed generated more public benefits receiving higher subsidies and lower student contributions.

Policymakers have repeatedly returned to the metaphor of a 'balance' between public and private benefits, with the implication that the distribution of benefits should drive the sharing of costs. Reports commissioned as part of policy reviews have empirically estimated these benefits. Despite differing findings, the political problems were identical. If course costs are shared according to benefits then students in higher cost courses pay more. No government has been willing to charge nursing students more than law students.

A direct course cost rationale, that students whose courses cost more should pay more, suffers from the same political problem. In 1997, however, course costs were one of the stated reasons for allocating disciplines to student contribution bands. A relative private benefits argument, that students in courses leading to higher incomes should pay more, was used to modify a cost-based student contribution system to avoid the nurses and lawyers problem.

The 1989 and 1997 student contribution rationales were primarily normative, aimed at justifying moving some higher education costs from the government to students. In 2005 and 2021 additional rationales moved the student contribution system towards practical policy objectives. In 2005 an increasing per student funding rationale was used to justify a 25 per cent increase in student contributions, on the assumption that the additional money would improve the quality of education. More radical fee deregulation proposals in 1999 and 2014 shared this assumption, but never made it through the political process.

In 2005 nursing and teaching student contributions were exempted from the 25 per cent increase to attract more students, the first use of pricing to steer student choices. Later, science and maths were also discounted. All these incentive schemes were abandoned but the idea returned and was extended by the 2021 Job-ready Graduates policy. It used student contributions to attract students to some courses and deter them from others.

Despite reappearing as a policy several times, using student contributions to guide course choices is never likely to be effective. The courses students are willing to consider are shaped by their interests, with job prospects and salaries rather than student contributions dominating financial considerations. Student contributions do, however, have practical consequences. They affect how long it takes to repay student debt, how much of that debt the government will eventually write off, and the incentives universities have to enrol students. On the publicly available documents, no student contribution policy this century has considered these practical consequences. Future student contribution policymakers should make them central considerations.

Introduction

In 2021 Australia introduced a new system of student contributions, its tuition charges for government-subsidised higher education students. This was the third major revision of price-setting policy since tuition charges supported by income-contingent loans were introduced in 1989.

All these price-setting policy changes increased student charges as a share of total university revenue for government-subsidised students. The primary interest of this paper, however, is not in the relative percentages of total public and private funding but on the rationales policymakers gave for setting specific student charges. The same overall public-private funding divide, expressed as a proportion of total resources, can be reached in many ways. Which way is chosen has significant implications for how much individual students pay for their higher education.

In Australia to date student contributions have had five rationales: course costs, private benefits, public benefits, increasing resources per student place, and incentivising course choices. At the beginning, students were charged a flat volume-based contribution to the overall cost of the higher education system. They paid per subject so that taking more subjects led to higher total charges, but on a full-time equivalent basis all subjects had the same price. Volume charging has persisted, but subject-level student contributions have varied based on course-specific rationales. These are private financial benefits, so that students in courses associated with higher average salaries pay more; public benefits, so that students in courses deemed to be of high public benefit pay less; teaching costs, so that students in courses that cost more to deliver pay more; incentives to choose courses, so that students in target courses pay less; and increased funding per student, so that students in courses designated for greater resources pay more.

Different mixes of these rationales produced four student contribution systems. Since 1989 these are a government-set flat rate charge paid by all students (1989-1996), government-set charges differing by discipline, with course costs and assumed private financial benefits used to set prices (1997-2004), a university-set charge up to a legislated limit by discipline, with the maxima based on the preceding course costs/private financial benefits model, but increasing total funding per student and introducing incentive pricing for select courses (2005-2020), and a university-set charge up to a legislated limit by discipline, with the prices intended to steer students towards courses with higher assumed public benefits (2021 onwards).

Market-set fees for government-subsidised students, an uncapped variant of the increasing funding per student rationale, became government policy once but was rejected by the Senate. The concept of dividing course costs according to shares of benefits of higher education accruing to society broadly and students personally has recurred for decades, but never become policy. In its practical consequences for students public-private benefits based charging would resemble paying according to teaching costs, but conceptually it is sufficiently different to be classed as a sixth rationale.

As well as affecting the total dollar cost to students, the student contribution rationales have different practical consequences for how long it takes students to repay the HECS-HELP student loans most of them take out, how much it costs the government to run the loan scheme, and in some cases the financial situation of universities. In an oversight, on the publicly available evidence these consequences have rarely been considered when designing student contribution systems.

BACKGROUND TO THE REINTRODUCTION OF STUDENT TUITION CHARGES IN 1989

Historically Australian higher education was funded from a mix of public and private sources, including student fees. Fees were not nationally regulated. Under the Australian Constitution universities are a state government responsibility, although imbalances in revenue raising powers between the states and the federal government meant that they shared higher education financing from the 1950s (DEET 1993, p. 75). Data from the 1950s to the early 1970s shows that fees varied by university. Some universities charged flat fees for all courses, while others set lower fees for arts than for science, engineering or medicine courses (Tescher & Bain 1972). Most students did not pay these fees personally, with 80 per cent of full-time students holding scholarships in 1973 (Wran 1988, p. 3). With university tuition effectively free for most students, from the 1960s only about 10 per cent of university income came from student fees (Pietsch 2020, pp. 240-241).

From 1974 the federal government, under the Labor Party's Gough Whitlam as prime minister, took full financial responsibility for universities, channelling its funds to universities via conditional grants to the states. One condition was that universities not charge tuition fees. The abolition of tuition fees, in combination with an increased number of student places and reforms to student income support, was part of an intended 'transformation in accessibility of education [which] will offer greater prospects than ever before of meeting the reasonable and legitimate educational expectations of all Australians' (Beazley 1973, p. 317).

Similar goals motivated the decision to reintroduce tuition charges. A Labor government introduced a small \$250 per student Higher Education Administration Charge (HEAC) in 1986, but by late 1987 education minister John Dawkins had bigger plans for Australian higher education. He issued a green paper setting out multiple goals, including raising overall rates of higher education attainment, increasing opportunities for members of disadvantaged groups, and meeting skills needs in the labour market (Dawkins 1987). In the late 1980s a demographic spike in teenagers coincided with a much larger share of them completing the final year of secondary education required for entry to university (Norton 2020c). The higher education system as it stood in 1987 could not achieve the green paper's equity and attainment goals. Many more student places were needed.

Dawkins' problem was that the government's tight budgetary policies left too little public money to pay for these extra places. Their cost was estimated at between \$900 million and \$1.2 billion, or \$2.3 to \$3.1 billion 2021 dollars (Dawkins 1987, p. 79). The green paper canvassed various options for financing this expenditure, before concluding that another review was needed to investigate charging students, graduates, their parents, or employers (Dawkins 1987, p. 87). A committee chaired by former New South Wales premier Neville Wran conducted this review.

THE WRAN COMMITTEE AND THE INTRODUCTION OF HECS

The Wran committee needed a method of user pays that would achieve Dawkins' policy objectives and be politically acceptable (Macintyre, Brett et al. 2017, pp. 71-77). Charging fees required a change in the

governing Labor Party's platform, parliamentary approval, and electoral acquiescence. The committee's most important recommendation was for a world-first national higher education income contingent loan, so that while students would be charged for their studies they paid only if or when their income passed a threshold (Chapman & Nicholls 2013). Above the threshold, compulsory annual repayments would be a fixed percentage of the debtor's taxable income, collected through the taxation system, until their debt was cleared. Under this proposal, students only paid contributions upfront if they wanted to, loan default was avoided, and an after-the-event means test would adjust repayments to the ups and downs of each debtor's income.

The idea of income contingent loans was accepted by the government. Not all the Wran committee's recommendations on setting the underlying charges found favour, but its report remains an interesting document, as in 1988 it discussed most of the concepts used to debate student charges over the subsequent decades (Wran 1988).

PRIVATE BENEFITS

The Wran committee's report dwelt on the ideas that university students tend to come from affluent backgrounds (Wran 1988, pp. 4-6) and that graduates receive significant private benefits, including higher employment rates and earnings than non-graduates (Wran 1988, pp. ix, xi, xiv, 12, 15). The committee noted that recent graduates with no experience earned salaries similar to the average weekly wage of all Australian workers. They also saw as significant that the costs of free higher education were paid by typically less affluent, non-graduate taxpayers (Wran 1988, pp. x, 15). In his successful Cabinet submission seeking support for new student charges, Dawkins recommended that this logic be accepted (National Archives 1988).

This view also had support in the Liberal Party. In 1972 future Liberal prime minister Malcolm Fraser had criticised free higher education, saying that it led to a 'wharf labourer paying taxes to subsidise a lawyer's education' (Fraser & Simons 2010, p. 241). The same argument appeared in a Fraser government Cabinet submission on reintroducing university fees (National Archives 1979).

That the private benefits argument resonated in both major Australian political parties may reflect the broader nature of Australian politics and social policy. Compared to other wealthy countries, especially in Europe, Australia makes greater use of means-tested benefits and at least partly self-funded social services (Buckmaster 2009). With higher education a social service used more often by high than low-income households, free university was anomalous in the broader system of public financial support.

In the Wran report, the idea that graduates received private benefits was primarily used as a high-level, in-principle justification for restoring student charges. Its main practical consequence was the income threshold at which student debtors began repaying. The Wran committee recommended a threshold at around average annual labour market income for the workforce as a whole (Wran 1988, p. 57), which the government accepted. This threshold implied that income exceeding average earnings was a private benefit that the government wanted to share in, but any debtor earning less than this, receiving no private financial benefit, would repay nothing for that year.

Private benefit was not, however, proposed as the basis for setting what students should be charged in the first place. The reason the Wran committee gave became a recurring idea in higher education policy discussions. It put forward the proposition that there was a sum total of private benefits and benefits to

society from higher education, and assumed that it was necessary to know both to set a private benefit-based charge. The logic seemed to be that if students were to pay due to their private benefits, the government on behalf of the community should pay for public benefits. But as it was 'not possible to ascertain' the exact proportions of each the idea of charging according to private benefits was not pursued (Wran 1988, p. 53). Instead, the Wran committee turned to the concept of costs.

FLAT OR COURSE COST CHARGES?

Under the user pays policy of the Wran report students were expected to contribute to the cost of their education; the 'contribution' in the new charging system's eventual name of the Higher Education Contribution Scheme (HECS) was a reference to that. But was this the specific cost of their own course, which could vary according to the methods used to teach it, or was it the cost of the system as a whole?

The policy task the committee had pointed to system costs. The prices students paid were not going to set funding levels for courses or universities; there were separate processes for that (Williams 2013). Students were instead going to pay the government to offset the overall cost of expanding enrolments.

The committee decided that total student charges should be equivalent to 20 per cent of system costs. One reason they gave was that the average fees prior to their abolition in 1974 would, if adjusted for inflation and charged to all students, total roughly twenty per cent of outlays. Another reason was that in most countries that charged fees these covered up to twenty per cent of operating costs (Wran 1988, p. 53). Parallels with prior prices and the practices of other countries were heuristics more than funding principles. These ideas reflected the political task the Wran committee had, to make their proposals sound reasonable to politicians and voters while also raising enough money to fund additional student places.

This committee's goals were consistent with a flat charge; they had decided that revenue per student should average \$1,800, the equivalent of about \$4,000 in 2021 dollars. But they instead concluded, without really explaining why, that students should pay 20 per cent of the cost of their own course. Perhaps they had an eye on pre-1974 links between course costs and fees, but universities seeking to cover their own expenses had a different problem to solve. The various numbers arrived at through the 20 per cent process were compressed, 'for simplicity', to three course cost related bands – \$3,000 a year for medicine, dentistry, veterinary science and agriculture, \$2,500 for engineering, science, surveying, and health except nursing, and \$1,500 for other courses (Wran 1988, pp. 54-55). These prices have a user pays logic, but it was not essential to the policy goal.

The Cabinet decided against course-related costs and opted for the average instead (National Archives 1988). Their reasons are not directly explained in the released Cabinet papers, but the views of the Labor caucus consultative group, which appear in the Cabinet submission, may have been influential. They preferred a single price that avoided the complexities of students paying varying rates for different subjects and were concerned that students might be deterred from taking higher cost courses.

One reason for policy caution was that in the late 1980s nobody could know for sure how HECS would affect demand, in total or for specific courses or types of students. The income contingent loan removed any need to pay student charges upfront, which should reduce price sensitivity, and transferred the tuition costs of debtors with low lifetime incomes to the government, which should alleviate risk aversion. But at a higher

education system level this kind of deferred repayment system had never been tried before anywhere. It was an experiment.

Against these uncertainties about prospective student reactions was a policymaker understanding that, in the late 1980s, demand for higher education was not the problem. Ten to twenty thousand qualified applicants already missed out on offers every year (AVCC 1996, p. 12), with this number likely to grow significantly due to increasing numbers of students completing Year 12. Possible effects on demand that could not be met anyway under 1988 policy settings were much less important than building capacity. Dawkins' view was that 'the most important measure to increase equity in the system is growth' (Dawkins 1988, p. 28).

On 1 January 1989 the HECS system began, with a flat charge of \$1,800. Additional student places were allocated to universities at the rate of \$8,000, giving a 22.5 per cent student contribution. Additional intake places of 6,500 in 1989 were scheduled to rise to 17,100 in 1991 (National Archives 1988).

DIFFERENTIAL HECS

The years after HECS began allayed concerns about student price sensitivity. If some potential students were deterred by the price they were greatly outnumbered by others looking to continue their education. In 1991 applications soared as people turned to universities during a recession. Due in part to universities 'over-enrolling' – taking more students than the government was funding – domestic student numbers surged by more than 100,000, to just over half a million, between 1988 and 1991 (DESE 2000).

In 1996 the Labor government lost office and was replaced by a Liberal government under prime minister John Howard. For the 1996 Budget a published Cabinet submission shows that the Cabinet expenditure review committee had set target savings for higher education (National Archives 1996), among dozens of program cuts across the government intended to reduce the budget deficit (Treasury 1996). Given the scale of savings required, HECS increases above the otherwise expected approximately \$2,500 annual rate were an inevitable policy conclusion, but the released Cabinet documents reveal disagreement within the government over how they should be set.

Three key ideas were in play about how to set HECS charges. One was carried over from the Wran report, that the price students paid should be linked to the cost of their own course. Two more ideas, expected private benefits of the course, and high demand for the course, were introduced into the discussion. No proposal for a higher but still flat rate of HECS is in the available documents. The reasons for this are not clear. As in the first iteration of HECS, the new varying charges would offset total higher education system costs to the government; they had no effect on university resources per student and were not intended to influence student choices. An increased single HECS charge could have achieved the same outcome.

SPECIFIC COURSE COSTS

In the Cabinet documents considering how to increase HECS charges the then education minister, Amanda Vanstone, and comments from the departments of Treasury, Finance and Prime Minister and Cabinet all gave at least qualified support to the idea of linking student charges to the cost of the student's own course (National Archives 1996).

Since the Wran report the basis for saying how courses differed in costs had changed. In 1988 the higher education system was split between universities and colleges of advanced education, with the latter receiving lower funding levels. Dawkins created a 'unified national system' in which institutions would be funded more consistently (Macintyre, Brett et al. 2017, pp. 43-48). A late 1980s studies of teaching expenditure by discipline led to a 'relative funding model', which gave humanities, business and law subjects a base rate, with other subjects given a relative amount. For example, nursing subjects would get 1.6 times the base rate, and engineering subjects would get 2.2 times the base rate (Baldwin 1990, p. 13).¹

The relative funding model rates were intended to be used only once in the transition to a new funding system. The funding legislation did not include per student funding rates. Universities received block grants; they were expected to provide at least a minimum number of student places but the idea was to provide flexible total resources, not to fund detailed activities. But having been created, the relative funding model rates could be used for other purposes, including saying that certain courses had higher costs. In a Cabinet submission, the Department of Finance recommended cost-based HECS rates using the relative funding model (National Archives 1996).

As a political justification, course cost draws on the understanding that things that are more costly to produce are also more expensive to buy. This was already implicit in volume charging; the more subjects students take the greater their payment or debt. Consumers expect to pay more for goods and services with higher production costs. Linking course contributions to course costs gave politicians an easily explained justification that drew on existing intuitions about pricing. But cost-based student charges also had, in some cases, implications that complicated rather than simplified the government's political task, and this led to the private benefits rationale.

PRIVATE BENEFITS OF THE COURSE

Private benefits were already established as a general justification for student charges. The Wran committee, however, had not pursued setting course-level fees by private benefits because they thought it required an overly complex calculation of the division between public and private benefits. But the course-level proposal returned in the 1996 Budget deliberations.

This idea came back, at least in part, from realising the politically unattractive consequences of strictly following a policy of pricing based on the costs of the student's own course. In materials prepared by the Department of Finance, courses were allocated to four 'bands', with law in the cheapest band and nursing in a mid-cost band. Nurses paying more than lawyers would be a hard sell. A link to private benefits would justify charging law students more than nursing students. This was the private benefits of a course compared to the private benefits of other courses, rather than a discipline-level version of the Wran report's private benefits as

¹ Strictly speaking the funding system is based on subjects aggregated to annual full-time equivalent student places, not a course, which is a series of subjects leading to a qualification. When student charges and tuition subsidies differ by discipline the total course cost can vary according to the subjects taken. For example, an engineering student taking a humanities subject is charged the humanities rate for that subject.

a proportion of total benefits. The relative private benefits argument did not require an empirically difficult analysis of public and private benefits. It just needed earnings data linked to occupations or qualifications.

Bureaucratic advice recorded in the Cabinet submission opposed the relative private benefits approach. The Department of Finance advanced the economics-inspired idea that the rationale for subsidising education was to promote 'positive external benefits for which the student will not be rewarded'. In other words, the government should offer higher subsidies to courses thought to produce public benefits. Finance gave skills shortages as an indicator of which courses might need subsidies to attract students (although they did not see any at the time). By contrast, a relative private benefits student contribution policy meant paying higher subsidies to courses leading to occupations with low market rewards. Just because private returns are low does not mean that public benefits are high, with Finance giving under-employment of performing arts graduates as an example.

Finance also objected to the relative private benefits policy on methodological grounds, stating that an analysis based on 1991 Census results was not a reliable guide to future income and did not take proper account of other qualifications workers might hold or of part-time work.

Treasury did not like the relative private benefits approach either, deeming it 'inequitable' that some students would pay a higher share of their individual course costs than others. They also made an economist's argument that the relative private benefits approach could lead to 'allocative inefficiencies', by which they presumably meant low fees attracting students into courses with a high cost to the Commonwealth but limited public benefits.

But these arguments from the bureaucracy would not solve the government's nurses and lawyers political problem, and relative private benefits became a rationale for varying student charges between fields (Vanstone 1996a).

HIGH DEMAND

The 1996 Cabinet submission contains a suggestion that 'high demand' courses be charged more. The examples given are medicine, dentistry and veterinary science, so this refers to high demand relative to supply rather than a high number of applications compared to other courses. Treasury objected for this reason. With the number of student places 'bureaucratically determined' the imbalance between supply and demand was a product of prior policy decisions more than the market.

Whatever the origins of high unmet demand for some courses, it did mean that high HECS charges would have no effect on enrolments. Any prospective student put off by an increased price could just be replaced by someone who would otherwise miss out.

DIFFERENTIAL HECS AS IMPLEMENTED

The government's decision on HECS was announced in the August 1996 Budget. The four price bands of the June 1996 Cabinet decision were reduced to three (Table 1). The most significant change was the deletion of a high course cost top band of nearly \$7,700 a year, which would have included the final band 3 (\$5,500) courses except law. The new system became known as 'differential HECS'.

To assess the links between student contribution rationales and the allocation of disciplines to HECS bands, Table 1 reports contemporary information on earnings, costs and demand, the three concepts considered in the 1996 HECS decision. Earnings data comes from the 1991 Census and needs caveats. The Australian Bureau of Statistics has only released a 1 per cent sample of 1991 census records. With higher education attainment then much lower than now, several smaller fields have fewer than 200 graduates in the analysis, increasing the risk of inaccurate results. The notes to Table 1 provide the methodology and other details.

In the distribution of disciplines between HECS bands, the idea of a high demand course proved to be redundant, as the courses mentioned go into the top band on a costs or relative private benefits basis as well. Demand is mentioned in the official funding report for that year (Vanstone 1996b, p. 10) but missing from the budget media release (Vanstone 1996a) and subsequent discussions of charging principles.

Table 1: Differential HECS 1997, compared to relative costs, earnings and unmet demand

Course	Cost relativity 1990	Earnings relativity 1991	Unmet demand 1997
Band 1 – \$3,300			
Arts	1	1.43	21%
Education	1.3	1.3	18%
Performing arts	1.6	1	n/a
Nursing	1.6	1.07	7%
Band 2 – \$4,700			
Science	2.2	1.72	6%
Engineering	2.2	1.96	11%
Other health	1.6	1.48	39%
Business	1	1.82	22%
Architecture	1.6	1.63	34%
Agriculture	2.7	1.48	3%
Band 3 – \$5,500			
Law	1	2.24	39%
Medicine	2.7	2.46	68%
Dentistry	2.7	2.23	51%
Veterinary science	2.7	1.75	80%

Notes and sources: Cost is based on the 1990 relative funding model (Williams 2013). Humanities, law and business are the base. Earnings is average annual income based on a 1% sample file of the 1991 Census, including all Australian citizens with a bachelor degree or undergraduate diploma who were in the workforce, including the unemployed: (ABS 1994). At the time, a diploma was a common qualification for some occupations that now require bachelor degrees. The base is performing arts, which had the lowest average income. The census reports income in ranges; a mid-point was taken except for the highest category, where only the lowest figure is available. In law, dentistry and medicine more than a quarter of the sample is in the top category, so their true relative earnings are likely to be significantly higher than reported above. The limited sample, lack of adjustment for age or experience, and the recession at the time may affect the results. Unmet demand is the proportion of eligible applicants, defined by prior academic results, who applied but did not receive an offer. 1997 figures are used because in the available data source not all sub-fields were identified in preceding years. Overall unmet demand was lower in 1997 than 1996: (AVCC 2003).

FROM PRIVATE TO PUBLIC BENEFIT:

THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

The links between HECS rates and the cost of the student's course as measured by the relative funding model were mixed. Courses in the lowest HECS band are in the cheapest three teaching cost categories, and three of the four most expensive to teach courses are in the highest HECS band. But the middle HECS band is varied, containing courses from the lowest and highest cost categories.

Private benefit relativities are based on 1991 Census average earnings, with the least well-paid field, performing arts, given the index level of one. For example, on average in 1991 a law graduate earned 2.24 times as much as a performing arts graduate. The HECS bands generally align with 1991 income relativities. The only clear exception is veterinary science, with income below engineering and business in band 2. In 1991 arts, agriculture and 'other health' graduates had similar average incomes, but arts was put in a cheaper HECS band.

The Cabinet documents, however, lack information on graduate income. The closest content is repayment time estimates for six occupations, without it being clear whether this is based on qualification or profession data (not all law graduates are lawyers, for example). From the available documents the private benefits rationale was primarily political, rather than a central concept backed by detailed empirical work. Compared to a purely cost-based system, it justified putting nursing and performing arts in the \$3,300 student contribution band rather than \$4,700, business in the \$4,700 band rather than \$3,300, agriculture in \$4,700 rather than \$5,500, and law in \$5,500 rather than \$3,300. But because of coincidental overlap between the allocative categories, courses that would fall into the low, medium and high categories whether cost or relative private benefits indicators were used, private benefits look like the more consistent principle, with cost factors pushing the borderline private benefits cases of other health, agriculture and veterinary science fields up a student contribution band.

While not the only rationale for setting prices under differential HECS the relative private benefits idea fitted with the overall system of taxation and social service provision of which higher education was a part. It was a progressive charging schedule; those with better earnings prospects more would also repay more. On a flat HECS rate, or with course cost based HECS rates in fields like nursing, graduates in courses with typically lower earnings would repay a larger percentage of their future earnings/private benefits than graduates of law or medicine.

PUBLIC BENEFITS

In arguing for their changes, the government returned to the Wran report idea that there is a relevant sum of public and private benefits, and that pricing should recognise a 'proper balance between the public and private benefits of higher education'. Because benefits are shared costs should be as well, 'it's a two way street' (Vanstone 1996a).

The balance metaphor had not, however, influenced the policy detail. It used private benefits compared to other courses, not the total of public and private benefits. Neither overall public benefits from higher education nor the public benefits of different courses were calculated. As the legislation did not set per student funding rates, only a notional course-level public/private funding divide could be estimated, using the relative funding model. The notional public subsidy was whatever was left after deducting the HECS charge

from the implied funding rate. A low cost/high HECS course like law ended up with a small public subsidy, while a high cost/middle HECS course like agriculture ended up with a large public subsidy.

UNIVERSITIES SETTING THEIR OWN CHARGES

In the first two iterations of HECS, commencing in 1989 and 1997, the student charge was set by the government and went to the government, with university operating grants set separately. But on the Liberal side of politics the idea that universities should set and receive student fees had persisted, although as government policy from 1975 until the late 1990s it appeared only as an add-on to the free or HECS systems, of certain categories of students who could be charged market fees in student places not subsidised by the government. The Howard government let universities that met their target number of HECS students take a capped number of additional domestic undergraduates in places with market-set fees, adding to the deregulation of fees and student numbers for domestic postgraduates and international students introduced by the previous Labor government (Norton 2013).

THE WEST REVIEW

As part of the 1996 Budget the government announced an independent review of higher education policy, which was chaired by Roderick West and reported in 1998 (West, Banks et al. 1998). A more diverse higher education system was a policy goal. Government funding for each university would follow student choices, rather than being set bureaucratically. After a transition period of capped student contributions universities would set their own fees. Income-contingent loans would continue to finance these fees. The West report recommended public subsidies based on teaching costs, suggesting basic, laboratory, and clinical categories. The rationale was to avoid fees for high cost courses being set at levels that would 'distort' student choices (West, Banks et al. 1998, pp. 122-128). Although this would not be a flat price system, as in 1988 there was policy interest in avoiding fee differences that changed student preferences.

If the West report had been implemented other aspects of pre-1998 thinking would have been hard to carry forward. Policies with university-set fees did not fit easily into the existing HECS conceptual framework. Two key variables, the level of private payment and the total funding rate, would be set by universities and students in the market rather than by government. The public subsidy rate would not be a residual item (implied total funding rate minus HECS), but would instead be set independently with the aim of reducing costs to students.

With a likely election later in 1998 the government did not want to deal with these issues. A cautious response from education minister David Kemp stated that it had 'no intention' of deregulating fees (Kemp 1998).

After being returned to office at the 1998 election, the government resumed policy work along the lines of the West recommendations, reaching Cabinet in October 1999 (Kemp 2001). In its policy recommendations the Kemp submission was a departure from the past. It was not principally concerned with the government's own financial position. It recommended increased public spending to finance additional students after controls on funded student places were lifted. The submission's focus was on the microeconomics of a more market-driven higher education system: how the nature of the education offered would change, and how student places would be distributed between regions, universities and courses.

Despite the policy shift some political justifications were the same. The Cabinet submission refers to a ‘fair’ sharing of costs reflecting benefits to the individual and the community. In ‘selling fee deregulation’ the private benefits in employment and salary from having a degree were to be emphasised. But the Kemp submission’s ideas were too radical. A public servant leaked it to the Labor Party, and the ensuing controversy made the submission a political liability. Its proposals went no further.

THE NELSON REFORMS

Brendan Nelson took over as education minister in late 2001, and in 2002 initiated a series of ministerial discussion papers. The paper on financing returned to the idea of a ‘balance’ between public and private funding, and quoted material from stakeholder submissions on the topic. But the paper’s authors leaned against the view that this was a useful way of thinking about how public funding or student charges should be set. Like the Wran report, they noted that calculating public benefits was difficult. They observed that public benefits do not necessarily justify public subsidies. The level of government funding was a ‘matter of judgment’ based on the ‘merits of competing demands on the public purse’ (DEST 2002, pp. 27-31). Fee deregulation was discussed, with variation in the private benefits students receive said to support ‘some flexibility in pricing’. University pricing flexibility within a cap was mentioned, while stating that this may be little different from the government determining an increase in HECS and passing it on to higher education institutions (DEST 2002, pp. 33-35).

The policy announced in May 2003, to commence in 2005, involved important changes. While previously only the HECS rates were explicitly set by discipline, under the new policy a per student Commonwealth subsidy, called the Commonwealth contribution, would also have a specific amount. The relative funding model, experiencing a long policy life for an early 1990s transitional measure, was brought back to set the Commonwealth contribution. Its formula was the total funding rate, as determined by the relative funding model, minus the HECS rate expected in 2005. Universities that met requirements for governance and workplace reforms would get increments of 2.5 per cent on the Commonwealth contributions in each of 2005, 2006 and 2007 (Nelson 2003b, pp. 14-15).

The HECS rates, formally relabelled as student contributions, would become a university rather than a government charge, up to a legislated maximum. For most disciplines, with the exceptions of nursing and teaching discussed below, the maximum would be 25 per cent higher than previous differential HECS rates (it was announced at 30 per cent, but later reduced). Combined with the increase in Commonwealth contributions this would help meet the policy goal of giving Australian universities ‘longer term access to more resources’ (Nelson 2003c). Perhaps optimistically, as the legislation did not specify how either Commonwealth or student contribution revenue was to be used, the minister claimed that ‘every last dollar will be spent on improving the quality of the education that will be received by the current and the next generation of Australian students’ (Nelson 2003a). Universities could choose to make courses free or charge some other price below the maximum. According to the minister, this would ‘allow institutions greater flexibility and promote a more diverse higher education system’ (Nelson 2003b, p. 22). Politically, some responsibility for justifying student contributions was moved from the government to the universities.

The government could have just let universities set student contributions up to the old differential HECS rate, but the increase in maximum student contributions envisaged that more expenditure was required. More

FROM PRIVATE TO PUBLIC BENEFIT:

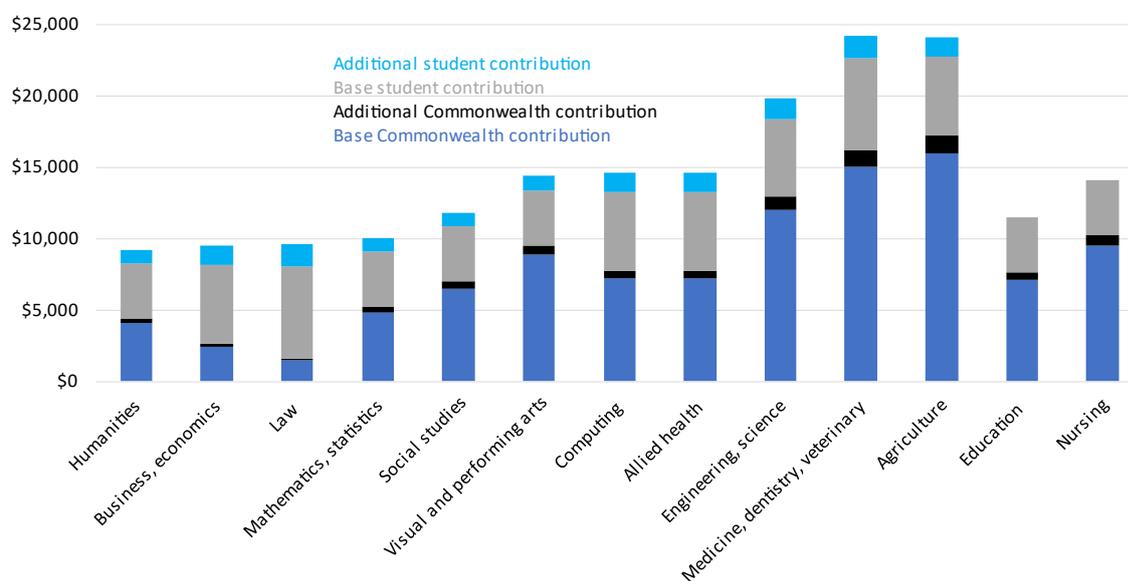
THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

resources and better education were added to the list of student contribution rationales. Unlike the earlier rationales, which were normative arguments justifying lower per student Commonwealth spending, this student contribution rationale was based on the benefits it could bring students and universities, albeit at a price for the students.

Figure 1 shows the discipline funding rates and how Nelson’s changes would affect them.

Although the 1996 private benefits classifications of student contributions to disciplines were carried forward into the new pricing system when it began in 2005, the private benefits argument faded into the background. Nelson’s policy document made no reference to public or private benefits. These concepts weren’t relevant to the policy goal, which was about the type of education to be provided, and not about who should pay what proportion of a fixed funding rate. Nor was there any political need to justify lower government funding. With some conditions attached, Commonwealth as well as student contributions were increased.

Figure 1: Phased-in Nelson reform funding rates



Source: Own calculations based on rates derived from (Nelson 2003b). The Commonwealth contribution increment for 2005 was removed to create the base rate and a 25 per cent student increase was put in place of the announced 30 per cent. The Commonwealth contribution increases were phased in over three years 2005-2007, the student contribution increases were charged to commencing students from 2005.

INFLUENCING COURSE CHOICES

Two exceptions were made to the increase in student charges, in the ‘national priority’ disciplines of teaching and nursing. These were maintained at the old HECS rates to attract students (Nelson 2003b, p. 23). Through the history of setting student charges there is a persistent intuition that they may affect student choices. Up until 2003 this was usually seen as a negative, as potentially deterring students from taking expensive courses. For the Nelson reforms, however, lower charges were seen as a positive in encouraging students to enrol in

courses the government thought that they should take. While the politics of pricing nursing had influenced the allocation of disciplines to HECS bands in 1996, this was the first time that student charges were used as a deliberate policy tool to steer student choices.

Although this policy was in tension with the increasing resources and institutional diversity objectives of the overall Nelson reform package (did these apply to nursing and teaching?), both policies set out to use the price mechanism to achieve specific micro-level educational goals. Any practical consequences for student or university decision making from student contribution levels moved from side-effects to policy aims.

A FAILED RATIONALE: THE PUBLIC-PRIVATE BALANCE

One constant through the free higher education era and the first two iterations of student contributions was that public funding to each university was capped. The Rudd-Gillard Labor government of 2007–13 replaced this capped system with a ‘demand driven’ system, funding universities for all domestic bachelor degree students they enrolled. Due mainly to a surge in enrolments, university revenue boomed from both Commonwealth and student contributions (Norton, Cherastidham et al. 2018). The Rudd-Gillard era, however, saw few major changes to student contribution levels. They set up a review of student funding arrangements but then rejected its recommendations, for reasons discussed below.

INFLUENCING COURSE CHOICES, CONTINUED

Initially, Labor continued the Nelson-era policy of using financial incentives to influence student choices. Student contributions for science and maths subjects were halved from 2009 and new HELP repayment concessions for graduates pursuing related occupations were introduced, further reducing the cost of these degrees relative to other courses. Universities were compensated for the lost student contribution revenue.

Despite the science discount, which had been a 2007 election promise, a policy document expressed doubt that the student contribution policy for nursing and teaching had worked, noting an ‘inconsistent trend’ in demand (DEEWR 2009, p. 19). From 2010 maximum student contributions for teaching and nursing students were increased by 25 per cent to provide universities with more resources, extending the Nelson policy to all disciplines, with a parallel scheme to science and maths reducing HELP repayments if nursing and teaching graduates worked in course-relevant occupations.

Despite doubts about the effectiveness of nursing and teaching student contribution discounts, science applications had increased in the years following the price reduction. But applications continued growing after science student contributions were restored to their previous level in 2013, a decision made for budgetary reasons (Norton, 2020b), again raising questions about whether this expensive way of attracting students was necessary.

THE BASE FUNDING REVIEW

The 2008 review of higher education, chaired by Denise Bradley, which had led to the introduction of demand driven funding, was critical of the Nelson system of Commonwealth and student contributions. The review’s report observed that there was little relationship between the Commonwealth contribution and the ‘notional public benefit’. It expressed concern that student contributions varied as a percentage of the total funding

rate – a figure now easily calculated as the Nelson reforms put Commonwealth and maximum student contributions in the funding legislation. But with ‘no easy basis’ to ‘determine the “right” mix of public and private contributions’ the report made no recommendations on altering student pricing (Bradley, Noonan et al. 2008, p. 161).

In part to solve this problem, in late 2010 the minister, Chris Evans, announced a review of university funding known as the ‘base funding review’, to be chaired by Jane Lomax-Smith. Its terms of reference included several recurring ideas – a ‘fair contribution to the cost of delivering high quality courses’, students making a contribution that ‘bears some relation to the private return for their education’ and an ‘appropriate balance between public and private contributions’ (Evans 2010).

With some justification, the Lomax-Smith review’s final report observed that the ‘current pattern of student contributions appears to have developed incrementally without a consistent underlying rationale’ (Lomax-Smith, Watson et al. 2011, p. xiii). The report went so far as to describe the then student contributions – the Nelson pricing system with a few amendments – as ‘inequitable’. The reason given was that student contributions as a proportion of total funding rates by discipline ranged from 19 to 84 per cent.

While the history of student contribution setting was untidy, ‘inequitable’ was a harsh criticism. Saying that these proportions signal a problem implicitly accepted a version of the course-specific cost-based student contribution rationale, which had previously been suggested by the Wran committee and was partially implemented by Amanda Vanstone. In the Lomax-Smith version, the implied ideal is that all students pay the same proportion of an overall cost-driven funding rate that varies by discipline, so that inevitably students in high-cost disciplines pay more.

Previous policymakers had seen merit in cost-based pricing of student contributions. But more often they saw the decisions around how much universities should receive per student place in total, and how much students should pay, as separate. A flat student charge for simplicity and to avoid distorting choices, a varied charge to guide choices, a relative private benefits-based charge so that high-earning graduates paid more, or a discretionary top-up charge to increase resources were all debatable, but not patently unreasonable or unfair, policy decisions. Yet each of them produced student contributions that, when calculated as a percentage of separately set total funding rates, would result in a variety of figures.

To decide on appropriate shares of public and private contributions to per student funding rates the Lomax-Smith committee commissioned research on public and private benefits. Public and private benefits as understood in the Lomax-Smith analysis are distinct. The private benefits to the student or graduate in income are separate to public benefits such as (to use Lomax-Smith examples) reduced crime, improved health, better political debate, enhanced civil society and more rapid technological change (Lomax-Smith, Watson et al. 2011, pp. 102-103).

To get to their desired student and Commonwealth contributions as flat percentages of teaching costs, the Lomax-Smith committee had to ignore discipline differences in benefits. They did not use private benefits other than as a high-level justification for student contributions. Their calculation of the flat percentage that students had to pay was based on public benefits and costs, and involved several complicated steps. The first was to identify the value of public benefits, defined as non-pecuniary benefits and increased tax revenue from

higher productivity. Two economists commissioned by the review produced a heavily-caveated estimate of the public benefits over a graduate's working life, expressed as between a lower and upper end of a range in net present value terms (Chapman & Lounkaew 2011). In the second step, the upper and lower ends of the net present value range were divided by four to approximate the number of years in a degree. In the third step, each end of the net present value public benefits range was calculated as a percentage of the then average annual total funding rate per student. Using this methodology, the per study year net present value of public benefits was estimated at between 40 and 60 per cent of the average funding rate.

From these findings the Lomax-Smith committee concluded, after taking into account OECD comparisons and non-teaching expenditure included in the total funding rate, that the government should pay at the upper end of the range, 60 per cent of the funding rate for each discipline, and students the remaining 40 per cent (Lomax-Smith, Watson et al. 2011, pp. 108-109).

The policy implications of the Lomax-Smith proposal were not far from earlier student contribution ideas in the original Wran proposal or the 1996 Budget deliberations. Students who took courses with higher teaching costs would pay more. The conceptual differences, however, were large. It was not based on the intuition that people should contribute to costs of their choices, with justification focused on the student contribution. It was instead based on the idea that the government should pay for the benefits accruing to it and the community in general, a justification focused on the Commonwealth contribution.

While the notion that the government should pay for public benefits was there from the start in the metaphor of a balance between public and private, it had never been used to set prices. In previous policies, the public subsidy amount was just a residual amount, the funding rate which was linked to teaching costs minus the HECS or student contribution rate. On the Lomax-Smith recommendation, the student contribution would be the residual, having no basis other than what was remaining after payment for assumed public benefits was deducted from the funding rate.

The government did not accept the Lomax-Smith recommendations on setting student contributions. A complex argument about public benefits did not help the government explain student contributions, which it must do during any change in policy. Fixed ratios of public and private payment create political problems. As the Howard government realised in 1996, a funding-rate linked pricing policy means that nurses pay more than lawyers. It would have been hard then to explain why that was a good idea, and harder still in 2011 to challenge the expectations, established since the mid-1990s by the differential HECS policy, that lawyers should pay more than nurses. The Nelson-era student contribution system, with a little tinkering, was still in place when Labor left office in 2013.

THE PYNE INTERLUDE

As they had in 1996, the Liberal Party returned to government in 2013 and set about trying to reduce a budget deficit. With Christopher Pyne as education minister, in 2014 they released a policy that mixed the 1996 (a cut in Commonwealth contributions), 1999 (deregulated fees for domestic undergraduates) and 2003 (helping universities change what they do) policy proposals (Pyne 2014). Income contingent loans would be available for students to defer paying the new fees.

In a policy statement the benefits students received for their education were mentioned several times, along with the need to 'share costs fairly' with taxpayers (Pyne 2014, p. 2). But the government was not going to set student contributions, and so there could be no predetermined balance between public and private funding, and no fixed link between financial benefits received and fees paid. At least impliedly, students' own judgments about the likely private benefits of different courses would influence how much they were willing to pay, which would in turn place limits on what universities could charge.

But with so many controversial elements in one policy, which had been announced with little political preparation, the necessary legislation failed in the Senate.

THE BIRMINGHAM ATTEMPT AT BALANCE

In 2016 a new Liberal minister, Simon Birmingham, announced that public spending still needed to be reduced and set up a process to determine how that should be done. A discussion document focused on considerations that by 2016 had a long history: the need to find the 'right balance between public and private contributions', and the 'need to ensure the differing private benefits of different courses are reflected in final contributions' (DET 2016, pp. 10, 18).

To inform its decisions on these points the government commissioned research on the public and private benefits of higher education (Deloitte Access Economics 2016). Compared to the work done for the base funding review, Deloitte's analysis focused on economically quantifiable benefits and simultaneously measured public and private benefits by discipline to enable a 'balance' to be calculated. It defined total benefits as increases in gross national product associated with degrees, including broader economic effects such as increased productivity for non-graduate workers. Private benefits were increases in post-tax earnings compared to those with no post-school education, after adjusting for differences in cognitive ability and other personal characteristics known to affect market income. Public benefits were total benefits minus private benefits.

For a bachelor degree, the average 'balance' was 45 per cent of benefits going 'private' to the people who had attended university and 55 per cent going to the 'public' through productivity increases and additional taxation revenue. At a discipline level, private benefits ranged from 39 per cent of the total for engineering to 51 per cent for education (Deloitte Access Economics 2016, p. 47).

Empirically, Deloitte's benefits work avoided problems with the base funding review. It did not assign monetary values to non-financial benefits that are, as the economists advising the Lomax-Smith committee had stressed, inherently hard to price (Chapman & Lounkaew 2011). Deloitte rejected the assumption that public benefits are the same across disciplines and put numbers on the differences. In calculating discipline balances, it used numerators and denominators from the same rather than different categories; public benefits as a percentage of all benefits rather than average public benefits as a share of average teaching costs. But converting its findings into policy hit similar problems.

When the minister said that student contributions should reflect differing private benefits he probably had in mind something like the Vanstone differential HECS policy, that graduates headed to well-paid careers should be charged more than those in modestly remunerated fields. But the idea of a public-private balance steers pricing policy away from comparing private benefits between fields towards comparing private and public

FROM PRIVATE TO PUBLIC BENEFIT:

THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

benefits in each field, with their relative shares used to divide course costs between student and Commonwealth contributions. The two private benefits ideas can easily lead to contrary student contribution pricing conclusions.

In the Deloitte calculations, science courses have a lower private share of total benefits (41 per cent) than business (44 per cent). This sounds like science should be cheaper, but the use of benefit shares to apportion different underlying course costs means that this is not the case. On the funding rates at the time, on this basis a science student contribution would be \$10,900 a year, nearly double business on \$5,500. Despite the initial intuitive appeal of cost-linked pricing, large differences in funding rates across disciplines inevitably take such a policy to politically difficult conclusions.

Deloitte also analysed relative private benefits based on course-associated future earnings compared to other fields (Deloitte Access Economics 2016, pp. 33-45). On a private benefits compared to other fields approach science and business could share a student contribution band, with the Deloitte analysis finding similar premiums compared to someone with no post-school education, with science at \$350,000 and business at \$370,000.

THE BIRMINGHAM DECISION

Through a politically happy coincidence, the overall Deloitte public/private balance of benefits was not too far from the empirically unrelated existing public/private distribution of funding for Commonwealth supported places and varied from it in the direction the government wanted to go – more private and less public funding. The Deloitte work could therefore safely be cited in the government’s response to the 2016-17 period of consultation and review (Australian Government 2017, p. 10).

But like his Labor predecessor on receiving the base funding review, Senator Birmingham decided not to implement benefit distribution as the basis for sharing total funding rates between the government and students. Instead, in its May 2017 Budget the government proposed a phased-in over four years 7.5 per cent increase in existing student contributions, which would partly offset two years of ‘efficiency dividend’ reductions in Commonwealth contributions (Australian Government 2017, pp. 9-12). This would have slightly altered the public-private funding balance between disciplines, given their existing varying splits between Commonwealth and student contributions. But these changed balances would have been the by-products of other decisions, not implementation of a benefits-based distribution of costs between students and government. The Vanstone distribution of disciplines to student contribution levels, allocated for a mix of course cost and private benefits reasons, would have remained the underlying conceptual framework determining which students paid higher or lower charges.

In the end, however, the Senate declined to pass Senator Birmingham’s proposed changes. The government instead secured its desired cost cutting by capping total funding of domestic bachelor degree students, ending the demand driven system. The old student contribution levels remained in place for several more years.

JOB-READY GRADUATES

In June 2020, then education minister Dan Tehan announced his ‘Job-ready Graduates’ policy. After passing the Senate in October that year, and starting in 2021, Job-ready Graduates finally ended – after two never-implemented reports on a public-private balance, and two failed attempts to remove upper limits on student contributions – the 24-year run of Amanda Vanstone’s course cost/private benefit rationales, and switched the funding system to one based on promoting public benefits.

PUBLIC BENEFITS

A discussion paper issued with the Job-ready Graduates policy states that it increases the share of costs paid by the government for courses that ‘produce higher public returns or which contribute to identified national priorities’ (DESE 2020b, p. 24). While in all previous enacted policies the level of public funding was a residual amount, what was left after deducting the student contribution from the overall funding rates, in Job-ready Graduates the Commonwealth contribution has its own rationale. Priority or high public returns courses get high Commonwealth contributions, other courses get low Commonwealth contributions.

While Job-ready Graduates has practical policy objectives in changing enrolment patterns, discussed in the following pages, its public subsidy rationale has echoes of the principally normative public-private balance idea. It is the second half of the argument that if students should pay for their private benefits the government, on behalf of the community, should pay for public benefits. This is a principle for deciding how to share costs more than an empirical claim that government payments produce public benefits. In Job-ready Graduates it helps explain why students who would take the government’s preferred courses under any funding system should get windfall gains from increased Commonwealth contributions and consequent lower student contributions.

While a public benefit basis for Commonwealth contributions had been suggested previously, Job-ready Graduates defined ‘public benefit’ differently. The base funding review idea of general public benefits flowing from all degrees was not part of Job-ready Graduates. There was no modelling of broader economic benefits, such as through productivity, as Deloitte had done for the minister’s predecessor. Instead, three examples were given of what signals a field with higher relative public benefits: better employment outcomes, more graduates employed as professionals or managers, and high completion rates, which represent ‘better value’ (DESE 2020b, p. 20).

These public benefits are hard to distinguish from private benefits – most students would prefer to complete their courses and to get good jobs. This has implications for what incentives might be needed to promote additional public benefit production, but conceptually public and private benefits are not necessarily distinct. There are benefits from higher education, with how these are distributed between potential beneficiaries depending not just on the inherent nature of the benefit but also on a wide range of industry, occupational and policy factors, especially taxation. In the Job-ready Graduates framework, because of costs to government when graduate incomes are below the HELP repayment threshold, lost economic opportunities when skilled job vacancies cannot be filled, and high progressive taxation revenue from graduates in well-paid jobs, public and private financial benefits are aligned.

Job-ready Graduates is conceptually most novel, compared to previously implemented higher education finance policies, in using a public benefits justification of funding policy. In practical terms, however its most important feature is its wide-ranging attempt to use Commonwealth and student contributions to drive a practical higher education policy objective, in this case to encourage ‘study in fields most necessary for the jobs of the future’ (DESE 2020b, p. 24), as determined by the government.

A government using funding incentives to change behaviour is not in itself unusual. This policy objective has parallels with the argument by economists, such as those in the departments of Finance and Treasury in 1996, that at least in theory higher education can suffer a ‘market failure’ in which public benefits are under-produced because of an insufficient incentive to do things from which others benefit (see also Chapman & Lounkaew 2011; Deloitte Access Economics 2016, p. 10). But in most previous student contribution policies, with a few exceptions in the Nelson and Rudd-Gillard periods, changing student behaviour was not an objective. Any student contribution influence on course choices was a side-effect rather than a goal.

MAPPING FUNDING TO COURSES

As with the Vanstone-era differential HECS policy, the available Job-ready Graduates documents do not explain in any detail how courses were allocated to student contribution bands. The discussion paper included a ‘composite index’ ranking of courses according to the three public benefit criteria (completion, employment, occupation) and private income. But neither the exact metrics nor the method of calculating the index were reported. The resulting chart giving each discipline a total score out of four is therefore hard to interpret (DESE 2020b, p. 21).

Table 2 below shows data relevant to the chosen public benefits to help understand how they influenced the allocation of disciplines to student contribution bands and Commonwealth contribution clusters.

The disciplines differ most significantly in graduate employment levels in a survey conducted about four months after course completion, with degrees closely linked to vocations generally doing best (Social Research Centre 2020). These differences are much less marked three years out or in longer term ABS Census results (ABS 2017; Social Research Centre 2021). The composite index chart mentions the 2016 Census as a source.

Table 2 uses 2016 Census figures on the proportion of all employed Australian citizen bachelor-degree graduates aged 20 to 64 years.

These Census employment numbers do not consistently explain the Job-ready Graduates allocations of Commonwealth and student contributions. Most disciplines across the contribution bands have graduate employment rates exceeding 85 per cent, well above the 73 per cent employment rate of people who finished their formal education at Year 12. Two fields penalised by Job-ready Graduates, humanities and psychology,

fall below this typical range, but by less than favoured fields in languages.² Most graduates without jobs are not in the labour force. In 2016 no discipline had an unemployment rate exceeding 5 per cent.

As a degree is not needed for all jobs held by graduates, a stronger outcomes indicator is employment that uses university-levels knowledge and skills. Job-ready Graduates uses professional and managerial employment as a proxy for a high-skill job. This is a reasonable rough guide, but with significant exceptions. One problem is that the 2016 Census used occupational categories that largely dated from 2006, which misclassified people in new occupations or occupations where educational expectations and job requirements had changed.³ Another issue is that graduates can use the knowledge acquired in their degree even if not in professional or managerial employment. Detailed occupational data from the 2016 Census shows that 70 per cent of the science bachelor-degree graduates classified into the ABS ‘technician and trades workers’ category were in scientific, medical, agricultural, engineering or ICT occupations that plausibly use their degree (ABS 2017). Two-thirds of bachelor degree graduates in occupations other than managerial or professional report that their degree is in the same field as or otherwise relevant to their job (ABS 2020).

Table 2 shows proportions of workers in professional or managerial occupations by field of education, with ‘technician and trades workers’ added in separate totals for fields where this is significant and likely to signal matched education and employment. All the health fields and to a slightly lesser extent engineering and IT fit the Job-ready Graduates public benefits framework, with high levels of professional and managerial employment and matching mid-to-high Commonwealth contributions; all are shielded from the highest-possible annual student contributions. Except for law, all fields in the lowest \$1,100 Commonwealth contribution category, and consequent highest \$14,500 student contribution category, have relatively low professional and managerial employment levels.

But other poor performers are in the \$13,250 or \$16,250 Commonwealth contribution clusters, with the low \$3,950 student contribution band. Graduates who majored in English or a foreign language have slightly lower rates of professional and managerial employment than other humanities graduates. Even with ‘technicians and trades workers’ occupations added, agriculture, science and creative arts have only mid-range high-skill employment but are nevertheless rewarded with higher-end Commonwealth contributions and lower-end student contributions.

² Some psychology subjects, those that are compulsory parts of course leading to professional registration as a clinical psychologist, are in the \$7,950 rather than \$14,500 student contribution band.

³ A partial revision of ABS occupational classifications released in late 2021, as part of ongoing incremental updating, will alleviate this problem for the 2021 Census. A full review of occupations was funded in the March 2022 Budget.

Table 2: Job-ready Graduates student contribution bands by completion and employment results (bachelor degree graduates)

Course	9-year completion	Overall employment rate	Professional & managerial/technical & trades occupation share, 2016
Student contribution band 1 – \$3,950			
\$13,250 Commonwealth contribution			
Teaching	69%	86%	85%
English	n/a	74%	53%
\$16,250 Commonwealth contribution			
Non-English languages	n/a	73%	46%
Nursing	72%	88%	88%
\$27,000 Commonwealth contribution			
Agriculture	67%	87%	60%/71%
Student contribution band 2 – \$7,950			
\$13,250 Commonwealth contribution			
Allied health	High	90%	90%
IT	63%	88%	75%/83%
Creative arts	73%	82%	60%/67%
Architecture	75%	89%	70%/81%
\$16,250 Commonwealth contribution			
Engineering	76%	88%	75%/84%
Science	78%	80%	60%/69%
Student contribution band 3 – \$11,300			
\$27,000 Commonwealth contribution			
Medicine	93%	93%	96%
Dentistry	95%	90%	85%
Veterinary science	92%	89%	88%
Student contribution band 4 – \$14,500			
\$1,100 Commonwealth contribution			
Law	76%	88%	82%
Business	74%	88%	65%
Humanities	71%	78%	54%
Psychology	70%	80%	56%
Communications	75%	86%	62%

Notes & sources: Completions are the proportion of students who completed a bachelor-degree course nine years after commencing: (DESE 2020a). ‘Allied health’ deemed ‘high’ completion based on the allied health occupations reported in the completion statistics. Employment is calculated from the Census 2016, Australian citizen bachelor degree holders only: (ABS 2017). For employment, the analysis is restricted to those aged 20-64 years to minimise the effects of retirement. For occupation, the analysis is not restricted by age but only those with a job are included. ‘Humanities’

includes social sciences but excludes languages shown separately. Where two numbers are given for occupation the second adds the ‘technicians and trades workers’ category to the total, as in some fields jobs relevant to the qualification are classified this way by the ABS.

Another Job-ready Graduates public benefit is a high completion rate.

Table 2 reports the proportions of students who have completed a degree nine years after commencing. Four per cent of the original students were still enrolled, so final completions should be a little higher than stated (DESE 2020a). Completion rates in the lowest Commonwealth contribution band of \$1,100, with correspondingly high student contributions of \$14,500 are consistently mid-range, 70–76 per cent. But this result is similar to the 72–78 per cent range for the \$16,250 Commonwealth contribution category. The \$13,250 and \$27,000 Commonwealth contribution clusters each have wider completion rate ranges, 63–75 per cent and 67–95 per cent respectively. It is hard to see a case where completion rates influenced either Commonwealth or student contribution allocations, rather like the redundant ‘market demand’ criterion of differential HECS.

Patterns are made harder to spot by the government deeming courses it favours but which fail its empirical tests as ‘national priorities’ or ‘important to Australia’s future economy’ (DESE 2020b, p. 23). On these grounds agriculture, despite doing badly on completions and high-skill employment, wins the highest Commonwealth contribution and the lowest student contribution. The regional preference in other aspects of Job-ready Graduates may also help explain agriculture’s funding bands (DESE 2020b, pp. 29-35). National priority status saves language subjects and science courses from a Commonwealth contribution penalty for poor employment results. Creative arts is an anomaly, not mentioned as a priority or important for the future, but also escaping a pricing penalty for lower-range employment outcomes.

CHANGING ENROLMENTS

Although the conceptual framework of Job-ready Graduates is that Commonwealth contributions are set according to public benefits, on their own Commonwealth contributions do not alter enrolment patterns, which is necessary to produce more graduates matched with the ‘jobs of the future’. Maximum Commonwealth contribution revenue is fixed for each university, giving universities no reason to prefer fields with high Commonwealth contributions unless they might otherwise miss out on their full funding entitlements. This happens occasionally, but more usually universities are ‘over-enrolled’, meaning that the nominal Commonwealth contribution value of their delivered student places exceeds their funding cap. Paradoxically, increased Commonwealth contributions in priority courses means that each enrolled student consumes a larger proportion of a fixed funding pool, making it harder to expand student numbers (Norton 2020d, pp. 10-11).

This is not the only way in which Job-ready Graduates made it harder rather than easier for universities to move enrolments into its target courses. It reduced the total funding rate, Commonwealth plus student contributions, in some of its target courses. This was due to a separate study of teaching and scholarship costs, but weakened the financial incentive for universities to enrol additional students in these courses (Norton 2020d, pp. 8-10). Job-ready Graduates also diluted an earlier mechanism for steering the system through allocating student places to specific fields, courses or funding clusters (groups of disciplines with the same Commonwealth contribution). The funding rules no longer permit this except in medicine, and while the

FROM PRIVATE TO PUBLIC BENEFIT:

THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

government has found a legal workaround for new student places this does not affect existing places (Norton 2021c).

Job-ready Graduates therefore relies heavily on student contributions to steer student choices. The Commonwealth contribution influences this by reducing or increasing how much of the overall funding rate that students pay. In theory these changed prices will influence student applications, with the expectation that this will change the student places universities offer, which in turn will alter the course mix of graduates reaching the labour market.

Whether student contribution levels affect prospective student decision making under an income contingent loan system has been a question on policymakers' minds since 1988, first hoping that they did not and then hoping that they did, at least in choosing between courses. Prior to 2020, policymakers apparently concluded that any effects on demand from varying student contributions were small. Special incentives for teaching, nursing, science and maths had all ended. In all but one of these fields applications continued to increase despite higher student contributions. The exception was teaching, with the confounding influences of worsening graduate outcomes and new admission requirements excluding some potential applicants (Norton 2020a).

Job-ready Graduates returns to policies previously thought to have modest effects, but with potentially important differences. Under previous student contribution systems the gap between the most and least expensive course was never more than \$5,000 a year. Under Job-ready Graduates, that gap is more than twice as high, at \$10,550, so the cost difference between three-year degrees could exceed \$30,000. A large price gap might influence student choices in ways a small price gap did not.

Job-ready Graduates also changes student contribution messaging. In earlier incentive schemes the framing was positive, to encourage teaching, nursing or science enrolments without specifying which alternatives prospective students were being dissuaded from. Job-ready Graduates is much blunter, suggesting that current funding incentives 'could encourage sub-optimal choices for students and institutions, leading to poorer labour market outcomes and returns on investment in higher education' (DESE 2020b, p. 11).

Under Job-ready Graduates students are discouraged from 'sub-optimal' choices such as humanities, by cutting Commonwealth contributions and more than doubling student contributions for this course to the highest band, \$14,500 a year. Business and law are also in this band, although with a smaller increase of about \$3,000 a year. This is a deterrence use of the student contribution system.

Deterrence pricing could tackle a distinct issue in student choices. For courses with tight links to occupations, applications typically move up and down with the relevant labour market without any changes to student contributions (Kemp & Norton 2014, pp. 21-25; Norton 2020a). The economic benefits of good job prospects, or the economic risks of graduating into a weak labour market, already provide larger financial incentives to change course choices than student contribution levels.

By contrast, courses with looser links to occupations are not always sensitive to labour market feedback. In the 2010s demand for science courses, for example, continued to grow despite deteriorating employment outcomes (Norton & Cakitaki 2016, pp. 84-91). Prospective students are less likely to hear about relevant labour market information if graduates are dispersed across many occupations. Potentially, a higher student

contribution could highlight economic consequences and prompt second thoughts about course choices. In science, the \$3,500 annual increase in science student contributions from 2013 did not alter the trend in applications, and science graduates, especially in the biological sciences, continued to experience difficult transitions into employment (Social Research Centre 2020). But perhaps the disincentive was too low.

Applications data for the first year of Job-ready Graduates showed that less-expensive health-related courses, especially nursing, showed strong increases in demand, while fewer people applied for more-expensive business or creative arts courses (DESE 2021c). Factors other than Job-ready Graduate, however, may explain these trends. Health courses have been increasing their share of all university applications since the early 1990s (Norton 2020b), reflecting structural change in the Australian labour force. COVID-19 made health occupations more prominent than usual, which could also explain a spike in demand. Business and creative arts applications have been declining for years, so the latest figures continue a trend (Norton 2021a).

The most surprising aspect of student applications for the first year of Job-ready Graduates was that demand increased for 'society and culture' courses (Norton 2021a). Most fields in the ABS 'society and culture' category, including humanities, social sciences and law, have higher student contributions than previously. More detail is needed on course-level applications trends before drawing any strong conclusions. But combined with the 2013 science experience, this may show that deterrence pricing, like incentive pricing before it, has no reliable effect on student demand.

COMPARING STUDENT CONTRIBUTION RATIONALES

Since student tuition charges were reintroduced in 1989 no government has seriously considered returning to a free education system, despite some nostalgia for the Whitlam period on the Labor side. Although year-on-year reductions in total tuition subsidies are unusual, happening six times in the 33 years since HECS was introduced, all the key student contribution changes have increased the student share of total funding. In the early years of HECS students were charged around 20 per cent of total funding for their student places, while in recent years it has been a little over 40 per cent.

These overall funding proportions look like a straightforward public-private swap, but since 1997 when differential HECS was introduced the shifting rationales for student contributions have had significant implications for individual students. After adjusting for inflation, nursing and teaching students pay essentially the same student contributions in 2022 as their predecessors in 1989. But arts, business or law students in 2022 are charged more than three times as much as students taking those courses in 1989.

Table 3 shows the five principles and policy objectives that since 1989 have justified the student contribution system.

Table 3: Student contribution rationales, 1989-2022

Policy phase	Private benefits	Public benefits	Teaching costs	Increase funding per place	Incentivise course choice
Dawkins 1989-1996	Yes, general	No	Yes, system level	No	No
Vanstone 1997-2004	Yes, course specific	No	Yes, course specific	No	No
Nelson 2005-2020	Implied, course specific	No	Implied, course specific	Yes	Yes for nursing, teaching & science.
Tehan 2021-	No	Yes, course specific	No	No	Yes

Note: Nelson classed as ‘implied’ for private benefit and teaching costs because the concepts were embedded in the student contribution rates inherited from the Vanstone differential HECS policy. They were not explicit rationales. In the Vanstone period, the teaching cost was the cost to the government under relative funding model rates. In the Nelson period, it was the university’s funding rate after it set student contributions. In the Tehan period some disciplines had increased total funding rates, but on average funding rates were reduced.

DAWKINS AND VANSTONE: MOVING COSTS TO STUDENTS

The reasons given for student contributions in the Dawkins and Vanstone periods were largely normative, aimed at justifying a reduced Commonwealth share of total expenditure on government-supported students. Especially in 1988, when students paid only a small ‘administration charge’, the political arguments for HECS had to challenge the idea that university should be free. Students should pay because they received private benefits that would leave them relatively privileged in Australian society, or because their choices generated costs, which non-graduate taxpayers should not be expected to fully finance.

Although private benefit and course cost student contribution rationales were used by both Dawkins and Vanstone as political arguments for moving costs to students, the Vanstone changes took the arguments to the discipline level. Why the government decided on a differential HECS system in 1996, instead of a still flat but higher rate, remains unclear. But that decision set a pricing precedent that has been followed since and created a need for specific rationales for matching courses and disciplines with student contribution levels. This led to the five implemented course-specific rationales in Table 3, along with the never-implemented market-set fees variant on increasing funding per student place and sharing costs according to the distribution of public and private benefits.

Dawkins used HECS revenue to finance additional student places, giving it a link to higher education policy. The main goal of the Vanstone changes was overall budget repair; it is the only one of the four student contribution systems with no major higher education policy objectives on introduction.

NELSON AND TEHAN: STUDENT CONTRIBUTIONS STEERING STUDENT AND UNIVERSITY BEHAVIOUR

The Nelson student contribution rates introduced in 2005 built on Vanstone's differential HECS by using them as a base level, so that students in the courses that already paid the most faced the largest dollar increases in their student contributions. For students, it looked more like inflation than a new system. But the Nelson reforms were a significant change in policy. They let universities set student contributions within a cap, created a direct financial link between students and universities, and brought new student contribution rationales into play, increasing per student revenue for universities and guiding student choices.

Nelson's rationales were not primarily normative about who should pay for separately determined system costs; they had practical objectives around university and student behaviour. Perhaps fifteen years after HECS was introduced, with the policy generally seen as having succeeded in its goal of expanding access to higher education, there was less need for the old justifications. Importantly, Nelson was not cutting per student public funding, removing one need for 1980s and 1990s political arguments.

One of Nelson's goals, lifting per student resources for universities, which in his case involved increases in both public and private funding, has not been repeated at a system level since. The 2014 attempt to deregulate fees failed. Job-ready Graduates, which used new teaching cost data to finally replace the late 1980s study used in the relative funding model, increased total funding for some disciplines so that it matched their average teaching and scholarship costs. In arts, business and law this increase was student contribution funded, but increased resources was not given as a rationale for higher student contributions in these courses. Overall, Job-ready Graduates reduced average total funding per student.

By contrast Nelson's policy goal of influencing student choices, towards teaching and nursing courses in his case, has been copied. The policy was repeated for science and maths between 2009 and 2013, and then in a more wide-ranging way under Job-ready Graduates from 2021. Previously, influencing course choices was seen as something to avoid, with the flat rates of the original HECS system, or as an unintended side-effect, for the Vanstone-era differential HECS.

These hopes and fears about student choices were largely misplaced. Interests in particular subjects and activities shape and constrain student course preferences. While prospective students can have multiple interests these tend to be stable and have a strong influence on course and career choices (Harvey-Beavis & Elsworth 1998; Norton 2020b; Rounds & Su 2014). Government careers websites, such as myfuture, offer users interest tests because these reliably identify occupations and courses relevant to the test-taker.

Financial incentives rarely change interests but can alter choices within a person's range of potential courses and careers. This is where student contribution levels could change behaviour, but in practice even the course charges varying by \$30-\$40,000 introduced by Job-ready Graduates are unlikely to be decisive. For a student taking out an income contingent loan, which includes more than 90 per cent of those in student contribution-liaible places, the costs or savings from student contribution changes are felt years in the future, through longer or shorter HELP repayment times. As a financial consideration, student contribution levels are less significant than course differences in job prospects and salary potential, which are felt more quickly, in early

career employment, and can last longer, potentially adding up to hundreds of thousands of dollars over a career (Norton, Cherastidtham et al. 2018, chapter 10; Social Research Centre 2020).

The stability of interests and consideration of the overall financial consequences of course choices, of which course costs are just one factor, explain why empirical analysis of university applications fails to find strong and consistent student contribution influences.

COMPARING EFFECTS OF THE STUDENT CONTRIBUTION RATIONALES

Although student contribution differences are not major influences on course choices, this does not mean that they are without practical consequences. This section outlines how they can affect students, through HELP repayment times; governments, through the cost of the HELP loan scheme; and universities, through the economics of taking additional students.

HELP REPAYMENT TIMES

Unless a HELP debtor consistently earns less than the annual HELP initial repayment threshold, \$48,361 in 2022-23, eventually all that they borrowed is likely to be repaid if they completed their education as a young adult. With varying student contribution levels, however, two graduates with the same income could spend significantly different numbers of years repaying their HELP debt.

A student contribution rationale based on encouraging students to take courses that are in demand by employers widens HELP debt clearance times between courses. Lower student contributions and higher employment rates and salaries both shorten repayment times; higher student contributions and lower employment rates and salaries both increase repayment times. Job-ready Graduates does not consistently apply a 'job-ready' logic, but putting some low-earning courses in the most expensive student contribution band, along with doubling the former largest gap between the cheapest and most expensive courses, will create wider variations in repayment times than previously.

An increasing per student resources rationale would also extend repayment times. As introduced in 2005, the flat percentage maximum increase on private benefit influenced rates muted the effects compared to, for example, a flat dollar maximum increase applied across all disciplines. Especially in its deregulated fees variant, this rationale has the potential to create long repayment times.

A flat student contribution rate would also lengthen repayment times for courses linked to lower average earnings, but without the exacerbating features of the Job-ready Graduates approach. A course cost-based approach would have more varied effects on repayment times, although in practice the overlap between high and low financial benefits and teaching costs would narrow average repayment time differences between fields.

The course-level private benefits rationale for setting student contributions tends to even out repayment times. Medical and law courses, for example, have since 1997 always been in the more expensive student contribution bands, but the above-average incomes of graduates in these fields trigger high annual HELP repayments that speed up clearing their debt. In principle, a private benefits-based student contribution

FROM PRIVATE TO PUBLIC BENEFIT:

THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

system could be engineered so that the median graduate from each field spent similar numbers of full-time equivalent working years repaying their HELP debt, despite potentially substantial differences in total dollar amounts paid.

Very large differences in accumulated HELP debt between degrees, or very long average periods of debt repayment, place significant burdens on some HELP debtors. These may be acceptable if the student contribution system drives other policy benefits, but the likely effects of the current course choice incentive rationale are too small to justify its pattern of graduate winners and losers.

At the very least, the implications of student contributions for HELP debtors should be included in the decision-making process. The 1996 Cabinet documents contain estimated HECS repayment times for some occupations and noted the scope for these to vary significantly on different fee-setting scenarios. This line of analysis of student contribution levels is, however, absent from later publicly available policy documents. This omission should be corrected in future student contribution policy development.

COSTS TO GOVERNMENT OF THE HELP LOAN SCHEME

Student debt levels and repayment prospects also affect how much it costs the government to run the HELP loan scheme. On recent estimates about 15 per cent of annual HELP lending will not be repaid (DESE 2021a, p. 49). Repayment risk analysis focuses on the characteristics of debtors who consistently make no or low annual repayments. Many risk factors are unrelated to the course studied, such as health, age, care responsibilities, and financial support from other family members removing the need for paid work. But at least in early career some fields have higher rates than others of debtors who are not students but are yet to make a repayment (DESE 2021b). Relatively high proportions of creative arts and humanities debtors have yet to repay any HELP debt, reflecting their lower overall employment rates and levels of professional employment (Table 2).

A private benefits approach to setting student contributions minimises non-repayment risks, as students with the most capacity to repay would incur the greatest debt. A course costs approach would less reliably produce this outcome, with potential bad debt limited by overlaps between costs and financial benefits – high-cost engineering and health-related courses have high private returns, while low-cost arts courses have low private returns. A flat pricing system would allocate more debt to students in courses with lower repayment rates than these approaches. The two most risky student contribution rationales for HELP repayment are increasing per student resources and public benefits defined by employment outcomes, as used in Job-ready Graduates.

In the Dawkins and Vanstone phases of student contributions, when the issue was how to move a proportion of fixed total funding from the government to students, any of the rationales except increased funding per place would improve the government's overall financial position. A private benefits approach would yield the highest fiscal gains, but so long as some students repaid the government had a saving. When universities increase student contributions above previous levels, as they did in 2005, government cash outlays increase via HECS-HELP. If any of this money is not repaid, the government's overall financial situation deteriorates.

If Job-ready Graduates price signals worked as planned fewer students would take courses such as arts and the number of high-risk debtors would decline. For HELP, however, only a significant fall in enrolments would offset the costs of the extra debt held by the remaining students. Job-ready Graduates more than doubles the cost of most humanities subjects, so graduates will start their careers with much larger HELP debts. For those

who do not fully repay the eventually written-off balances will be higher than they were for previous student contribution systems. In heavily discounting courses such as nursing and teaching, which have above-average proportions of debtors who are repaying, the government forgoes a reliable stream of HELP repayments.

STUDENT CONTRIBUTIONS AND THE ECONOMICS OF ‘OVER-ENROLMENT’

In the current funding system, each university’s Commonwealth contribution revenue is capped but its student contribution revenue is not. Universities receive student contributions, directly or through the HECS-HELP loan scheme, up to the full-time equivalent value of their enrolments. Students enrolled above the university’s Commonwealth contribution cap are known as ‘over-enrolments’.

The student contribution rationales affect the economics of over-enrolment. On a total revenue basis, over-enrolments in courses with high student contributions obviously generate more revenue than those with lower student contributions. But the financial consequences of over-enrolments also depend on student contributions compared to per student costs. Average per student teaching costs may be flatter than suggested by the Commonwealth plus student contribution funding rates shown in Table 2 (Croucher, Patterson et al. 2021), but courses with laboratory or clinical components cost more to teach than classroom based courses.

The economics of over-enrolment, however, are more sensitive to marginal costs than average costs. The marginal cost is the expense of adding another student to existing classes. It is usually below the average cost, if the extra student sits in classes and use university infrastructure and services that will be provided anyway (a large expansion requiring new courses or infrastructure may, at least temporarily, push marginal costs above average costs). This subject is not well-explored in Australian higher education research, but courses or subjects that are more labour intensive, using small group or one-on-one teaching, or requiring the use of external services such as clinical training, are expected to have higher marginal costs. Where the student contribution covers less than the university’s marginal teaching costs over-enrolments are a financial liability.

By creating strong links between teaching revenue and expenditure the course cost rationale for student contributions does most to reduce financial risk for universities. Up to 2020, the historical legacy of the 1996 Budget decisions combined with the 2005 increases in per student resources gave universities financial protection in the event of over-enrolment, although this was not an intended outcome of policymakers at the time.⁴ Other student contribution rationales have more random effects on the economics of over-enrolment, as there is no inherent relationship between course costs and private benefits, or between course costs and public benefits, whether defined broadly or more narrowly by employment outcomes.

⁴ Another 1996 Budget decision was to pay, from 1998, 75 per cent of the value of the lowest student contribution band for each full-time equivalent over-enrolled student place. This was neutral in dollar terms between disciplines, although it varied significantly as a proportion of costs. Prior to this, there was no payment for over-enrolments. Although the student contribution rate applied to over-enrolments from 2005, total funded over-enrolments were initially capped.

Job-ready Graduates, with its setting of student contributions according to government definitions of public benefits, disconnects costs and student contributions. One high-cost discipline, agriculture, is in the cheapest student contribution band, which it shares with moderate cost education and nursing. These courses all have practical components that increase costs, lifting the chance universities will lose money if they over-enrol.

By contrast courses in the low teaching cost category, including law, business and most arts courses, have high student contributions (Table 2). With classroom or online teaching, each of these courses has the potential for low marginal costs. As the maximum student contribution is more than 90 per cent of the total funding rate over-enrolments could be profitable. In 2021 university offers in the ‘society and culture’ category, which includes law and arts, increased by more than any other broad field of education (Norton 2021b). After the surprising spike in demand for these courses, at least some universities seem satisfied with the economics of meeting it.

As policymakers have regularly realised since 1996, the politics of strictly course-cost based student contributions are difficult. Full course cost is an improbable sole basis of any future student contribution system. Marginal course cost, however, is worth considering in student contribution design.

Student contributions at marginal cost or above levels give universities flexibility in meeting demand, as may have happened in 2021. More routinely, some over-enrolment is a by-product of the inherent difficulties in managing full-time equivalent student numbers. Although history is a guide, universities never know exactly how many of their offers to potential new students will be accepted, their proportions of full and part-time students, or their attrition rates. Marginal cost student contributions minimise the financial burden of over-enrolments.

Job-ready Graduates is effective for encouraging and supporting over-enrolments in most low-cost disciplines, but weaker than preceding student contribution systems for managing unintended over-enrolment or encouraging additional enrolments in high-cost disciplines.

CONCLUSION

No single student contribution rationale is likely to satisfy all the competing policy and political considerations. Some compromise and conceptual untidiness should not necessarily be seen as a fault. But the history of student contributions since 1989 offers lessons in what works and what does not.

The Vanstone student contributions, based on course cost and private benefit, proved to be enduring despite their rushed and budget-driven policy development. As the foundation on which the Nelson reforms were built, a version of the 1996 charging system survived a change of government and lasted for nearly a quarter of a century.

The Vanstone framework’s survival was partly luck, as the main alternatives proposed between 1997 and 2020 were, whatever the faults of the course cost and private benefit rationales, less politically acceptable.

Fee deregulation, proposed in 1999 and 2014, could most plausibly have been legislated when the Liberal-National Coalition parties had a Senate majority. But in that 2004-2007 period the government was content with the Nelson reforms. At no point was Labor in office likely to have tolerated a fully fee deregulated system. In 2008 they abolished the Liberal program, in place since 1998, that let universities take a capped number of

FROM PRIVATE TO PUBLIC BENEFIT:

THE SHIFTING RATIONALES FOR SETTING STUDENT CONTRIBUTIONS

domestic undergraduate students in fee deregulated places, in addition to their allocation of government-supported students. With Commonwealth elections regularly competitive between the major political parties, any student charging system one of these parties cannot support will be unstable. Both fee deregulation and free higher education suffer from this problem, being unacceptable to the Labor and Liberal parties respectively.

During its 2007-2013 period in office, Labor was interested in student contribution reform, and set up a formal inquiry, the base funding review. But mentioning a public-private balance in the review's terms of reference, with its implication in the history of student contributions that benefits should relate to costs, may have helped send the review towards politically unacceptable recommendations. Any public-private split of funding rates based on benefits, regardless of how well benefits have been quantified, locks the government into fixed shares of public and private expenditure. Fixed shares risk increasing public expenditure when the government want to decrease it, or increasing student contributions, with associated political costs, when there is otherwise no need to do so.

Whatever the general normative appeal of the public-private balance, in its acknowledgement that both the government and students should contribute to the cost of higher education, it is unworkable as a policy. No government is ever likely to charge nursing students more than law students. No government wants to base public expenditure on a metric that is so weakly related to practical policy goals around the number of student places, resources per student, or university performance. After receiving detailed reports on the subject two ministers, Chris Evans from Labor and Simon Birmingham from the Liberals, both walked away.

While luck helped the Vanstone framework survive, her system as amended by Nelson worked passably well. It supported a major surge in over-enrolments in the lead up to the demand driven system's full introduction in 2012, possibly helped by the link to course costs, and the private benefits element compressed repayment times and limited HELP doubtful debt.

When the Vanstone framework was finally replaced this was not due to any clear policy failure or public pressure. Job-ready Graduates came from nowhere in 2020. For the first time, public benefit became a price-setting concept in the funding system rather than a general reason why the government funded higher education.

It is too early to say conclusively whether the Job-ready Graduates goal of steering enrolments will fail, but the early results are consistent with theory and history – money is not the right instrument for changing course interests and the policy's student contribution incentives and disincentives are not large enough to alter the career economics of course choices. In the areas where student contribution levels do make a difference – repayment times, HELP costs, and financing over-enrolment – Job-ready Graduates introduces new problems. The public benefit and incentivise course choice rationales of Job-ready Graduates are unlikely to achieve the longevity of the course cost and private benefit rationales of earlier student contribution systems.

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THE UNIVERSITY OF
MELBOURNE

Melbourne Centre for the Study of Higher Education

Level 1, Elisabeth Murdoch Building, Spencer Road

The University of Melbourne

Victoria 3010 Australia

melbourne-cshe@unimelb.edu.au

 melbourne-cshe.unimelb.edu.au