

Articles

The rationale for the Higher Education Contribution Scheme

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Introduction

In 1989, on the recommendation of the Wran Committee Report¹, the Australian Government introduced the first substantial university tuition charge since fees were abolished in 1974. It came about in response to two forces. One was the judgement that fiscal constraints meant that it was not possible to continue to finance a burgeoning higher education system almost solely from general taxation revenue. Second was the view that not having charges was regressive in a lifetime sense, given that students typically came from positions of socio-economic advantage and receive considerable economic benefits from being graduates.

As justifications for charging for the use of university services, the above factors have a familiar ring to them. But the new Australian Higher Education Contribution Scheme (HECS) had a twist which made it unique internationally: the charge was only compulsory when a student or former student's annual income was equal to or greater than the average income of working Australians.

This article describes the basic features of HECS as a system of tertiary financing, and explains the superiority of HECS relative to a system of up-front fees, or a mixed HECS/fees system.

The Higher Education Contribution Scheme described

The HECS parameters

HECS in 1996 sees all undergraduate students charge \$2442** for a full-time year of tertiary study. On paper this is about 20 per cent of the public sector direct costs for an average full-time student, although the costs differ

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** At the current exchange rate this is equivalent to about \$US1830.

considerably between courses. The charge does not reflect course costs, but is on a pro-rata basis in that part-time students pay according to the proportion of a full-time load undertaken.

HECS can be paid on enrolment with a discount of 25 per cent (implying a full-time up-front charge of \$1832), or deferred until students are earning at least the current average taxable income of working Australians of \$27,675 per annum. The majority of students (75 per cent) choose to postpone payment and, for them, the charge is repaid at the following rates depending on income.

| Taxable Income | Annual Repayment Rate (per cent) |
|-------------------|----------------------------------|
| \$27,675 - 31,449 | 3 |
| \$31,450 - 44,029 | 4 |
| \$44,030 or more | 5 |

Source: HECS *Your Questions Answered*, Australian Tax Office, 1996.

Thus if a student chooses to defer payment, the charge becomes a debt owed to the Australian government. This debt is indexed to the inflation rate, meaning that it does not have a real rate of interest. Similarly, the income thresholds are adjusted annually in line with changes to price inflation.

The "income-contingent" nature of the scheme is its most important defining characteristic. While many other countries charge for tuition, loans to assist students are typically repaid to banks over set periods of time and do not take into account the contemporary circumstances of the former student. That "mortgage-type" loans are less desirable from a policy perspective than income-contingent loans is a point addressed in the conceptual discussion following.

The lack of a real rate of interest on the debt is also worth highlighting. It means that those former students who earn relatively low incomes over their lifetimes are given greater subsidies in the form of implicit access to an interest free loan. The orders of magnitude of this subsidy can be quite large. For example, Chapman and Chia (1993)² have demonstrated that male lawyers, because they earn high incomes relatively quickly after graduating, in effect pay up to 30 to 50 per cent more (in present value terms) than do public sector teachers who spend five years out of the labour force after graduating.

HECS revenue

In terms of annual revenue, the government now receives more than \$400 million from HECS (about 8 per cent of the higher education budget), a figure which has grown rapidly as more former students cross the first income threshold. In recent years around 20-25 per cent of total enrolments have taken the up-front option, and in the 1992-1994 period this method of payment delivered over \$400 million in total to the government.

When the repayments become relatively stable it is expected that annual receipts will be of the order of \$700 million, or about 15 per cent of total government outlays. Currently outstanding liabilities owed to the government are about \$4 billion.

As far as former students' repayment experience is concerned, it is too early to know precisely what will happen over their life cycle. Even so, several approaches to the question have thrown light on this issue. The most useful is the work of Ann Harding³ who employed micro-simulation techniques in an analysis of the scheme using the 1993 repayment parameters (when annual rates were slightly lower than for 1996).

Harding found that on the basis of current expected future graduate incomes the average male enrolling at age 18 repays the debt in full from a four year degree by the age of 34. For females the average age of full repayment is 40, which means that women on average would have had the benefit of about six years of a real interest rate subsidy.

A further point from these exercises is that a greater proportion of the women are not expected to pay back HECS over their lifetimes. The data are as follows: men are expected to pay back 93 per cent of HECS by the age of 65, but the figure is 77 per cent for women. That is, overall the government will not collect about 15 per cent of the "on-paper" debt, and to this needs to be added the subsidy implicit in a real interest rate of zero. That some of the HECS charge is not repaid is a consequence of having debt collection depend on private incomes.

The legislation which introduced HECS contained a safeguard for those who were concerned that funds raised from students would be diverted to consolidated revenue. It is that revenue equal to the amount incurred as HECS debts that must be transferred from consolidat-

ed revenue each year to a dedicated Higher Education Trust Fund, the proceeds of which can only be spent on higher education purposes.

The conceptual basis of HECS

The justification for charging students in the context of government subsidies for higher education

The benefits of higher education are thought to accrue to both individuals and to society as a whole. For individuals they take the form of personal, cultural and economic rewards, with there being little doubt that graduates enjoy substantial advantages over non-graduates in the labour market. Lifetime incomes are typically much higher, unemployment rates lower and the expected duration of unemployment is relatively short for those with higher education qualifications⁴.

The most obvious method of measuring the private benefits of higher education is to treat the process as an investment and calculate the returns, a technique which has been applied in a plethora of studies both in Australia and overseas. In this context the major cost of full-time study is the income foregone by students, that is, what would have been earned in the absence of studying. The benefit is seen to come later and takes the form of the receipt of relatively high incomes.

All Australian (and other) studies show that on average investment in higher education is associated with high private economic returns⁵. Moreover, it doesn't seem to be the case that this is just because individuals experiencing higher education would be those who would have done well in the labour market anyway. Recent research on identical twins suggests that given control for genetic and other background characteristics there is still a favourable impact from higher education graduation.

The fact that there are private net benefits from higher education implies a case for charging individuals for the service, with the next question being, how much? To put this differently, if there are also social benefits from the process, beyond the returns to graduates, isn't there a case for subsidising the process?

The "spillover" benefits are usually argued to include:

- more informed public debate and voting behaviour, less crime, and more tolerance;
- the community benefits from research not completely captured by the individual, in part because of an (highly) imperfect patents system for knowledge;
- the benefits accruing to workers and others from the imitation of the skills of the highly educated, not reflected in graduates' wages;
- higher tax revenue resulting from the higher productivity and wages of the more highly educated; and

- improved prospects for increased competitiveness and economic growth through more highly educated people being able to adapt and adopt new technological processes, with returns not accruing just to graduates.

It is not currently possible to accurately quantify the extent of spillover benefits from higher education, but it can at least be accepted that their existence provides a rationale for some form of government intervention and subsidy to ensure that society receives the appropriate level of higher education investment.

That is, from the above, the right charge is less than 100 per cent of the cost, but given the private benefits involved it is unconvincing to argue that it should be zero. HECS was set at about 20 per cent of average course costs, but the government receives less than this because of some non-repayment and as a result of the real interest rate subsidy.

As noted earlier, at the time of the introduction of HECS there was also a commonly expressed equity argument for charging for higher education. This was that there was overwhelming evidence that those who gained access to the system came from advantaged socio-economic backgrounds, and certainly as graduates ended up in the upper echelons of the income distribution⁶. For example, in the 1980s, students whose father was in a professional or managerial occupation had four times the chances of experiencing higher education than others.

Further, higher education in a no-charge system is paid for by all taxpayers, including the 85 per cent or so who haven't had access to the private benefits of the service. In short, before HECS the Australian higher education financing arrangements were regressive and seen to be so, perhaps the most regressive of all public sector expenditure. In a world of perceived tight fiscal constraints expanding higher education in a manner paid for in part by the direct beneficiaries had, then, several obvious attractions for policy makers.

Barriers to entry in higher education

While the presence of both private benefits and spillovers to society from higher education implies a rationale for a charge which is less than 100 per cent of costs, a crucial aspect of the debate concerns the manner in which it is to be paid. It seems clearly to be the case that a significant part of the population faces barriers to participating in higher education, and that these barriers are at least in part economic. Charging an up-front fee, however justified this would be on income distribution, user pays and other economic grounds, would seem only to diminish what was already only limited access to the system by the poor.

The economic problem associated with charging up-front fees for higher education is that for those who can't

afford to pay there is only an ineffective capital market available for borrowing.

The basic concern for a bank lending for human capital investments is that unlike many other investments there is no saleable collateral in the event of default, such as would be the case for the housing capital market. This arises in part because slavery is against the law, and banks are thus unable to possess and sell the human capital development being undertaken. The other possible concern for commercial banks lending to students relates to collection costs in the event of default, an issue which assumes greater importance given the absence of collateral.

Because of the fact that such investments by definition have no collateral, banks and other sources of finance are traditionally very reluctant to invest. Such investments are only likely to be made on the basis of perceived ability to repay - which implies success in the labour market. In the absence of clear evidence of who is likely to succeed in the labour market, lenders turn to easily observable characteristics of borrowers that can be used as proxies - race, gender, and age being obvious examples in the Australian context⁷. Given the close correlation of such characteristics with low socio-economic status, it follows that the capital market serves to erect financial barriers to poor or otherwise disadvantaged students.

Governments typically address the above problems by acting, in the limit, as a guarantor for student loans, and by paying the interest for the period before graduation. However, because of the expense involved, loans are usually only made available to young people with poor parents or those who can establish independence through satisfying a complex set of conditions related to age and/or work experience. This suggests that some prospective students who need financial assistance because their families do not provide help will be unable to access the system.

This financial barrier, then, is not completely removed through means testing, because means testing done on the basis of family income presupposes that parents or partners are willing and able to share resources. However, if that assumption does not hold, then the use of family income to determine support is a flawed criterion. In essence, the idea of means-tested scholarships to circumvent up-front fees for "deserving" students relies on the assumption of willingness to help within the family, and can thus fail because of it.

The central point about barriers to entry in higher education is this: it is the high cost of participating in higher education (both through direct living costs and foregone income), combined with a lack of family and capital market sources of finance, that creates a significant barrier for many students. HECS avoids these

problems because the nexus between current economic circumstances and access to the system is severed.

The above point is critical. Because no fee is required up-front in income-contingent charging systems, students are not forced to seek resources to pay before they recoup returns to their educational investment. Because in effect funds are lent by the government to all students, there are no problems arising from the imperfect market for human capital investments. And because former students repay their debts on the basis of their future income only, there is no need for means testing on contemporary circumstances; the economic situation of the prospective student's family become irrelevant.

The nature of HECS debts

As noted, the key to understanding HECS is acknowledging the difference between normal "mortgage"-style loans, and the nature of the loan implicit in the HECS deferred fee. Normal loan arrangements involve the borrower's repayments being made over a specified period of time - the term of the mortgage. Usually no account is taken of changes in the borrower's circumstances over that period, either for better or for worse. Most notably, a borrower is afforded no protection against significant loss of income - repayments are still due within the given period of time.

But with HECS-style loans, on the other hand, repayment depends upon the borrower's income. If a given income threshold is not reached, the borrower is not obliged to make repayments. And if higher income thresholds are exceeded, the borrower is expected to repay at a higher rate.

The essential difference between the two types of loans, then, is that the income-contingent variety serves to protect low-income earners and those who generally do not benefit financially from the investment undertaken. Further, as noted, the debt incurred is free of a real interest rate*, meaning that there is an implicit subsidy to those who take the longest to repay. The combination of an income threshold for repayment and the absence of a real interest rate means that low income earners receive a strong level of protection against adverse circumstances.

In a sense, what HECS offers is a form of "default insurance", such that former students do not have to bear the costs of defaulting on their debt. This is diametrically opposite to a mortgage-style loan, in which the costs of defaulting on the loan are very high indeed - in terms of being locked out of other capital markets, most notably housing.

Default protection sorts out the fundamental problem for prospective borrowers inherent in mortgage-style

loans. That is, an exaggerated concern with the possibility of not being able to repay a loan, or only being able to repay it with hardship, will mean that there are less borrowings for education purposes than is desirable. But when there is no chance of default, as is the case under HECS, the issue disappears.

How has HECS affected access to higher education?

Apart from the additional resources it has raised for the higher education sector, the most important question about the scheme remains: has it in any way diminished access to higher education for disadvantaged groups? After all, the Australian system was formerly without fees, and basic economics tells us that when the price of a service increases, so too will the demand for it fall. Related to this truism is the all-important question of whether those from relatively poor backgrounds have been affected, as predicted by a host of HECS opponents at the time of its institution.

There are several levels of analysis on which the question of access to higher education can be examined. Superficially, enrolment data reflect whether, in the aggregate, demand for higher education has been affected during the years in which HECS has been in operation. Obviously, establishing that higher education enrolments changed during a given period says nothing about the causes of those shifts.

Even so, enrolment data do give some pointers as to the aggregate level of demand for higher education, and all point to a considerable expansion of higher education since the introduction of HECS. That is, in the first five years after the introduction of HECS the number of higher education students rose in each successive year with an average percentage increase of 4.95.

Of more use are a number of studies commissioned by the government, now considered.

Surveys

The EIP studies

In 1989, the Department of Employment, Education and Training commissioned Dr Neil Bardsley of Curtin University, and Drs Frances Robertson and Judith Sloan of the National Institute of Labour Studies at Flinders University, to study the aggregate effects of the introduction of HECS.

These two studies were combined to form a report under the Department's Evaluations and Investigations Program (EIP). The basic approach was to examine a control group (for example, those who applied for higher education) with a group of interest - for example, those who did not. Sub-populations at several different "decision-points" were examined, specifically:

* HECS debts are indexed in line with the Consumer Price Index, thus maintaining their real value.

- 1.The decision to apply to enter a higher education institution.
- 2.The decision to accept an offer of a place at a higher education institution.
- 3.The decision to re-enrol in an undergraduate course.
- 4.The decision to undertake an honours degree.
- 5.The decision to undertake a postgraduate course.
- 6.The decision to re-enrol in a postgraduate course.

The methodology employed was to use a control group approach to allow a comparison of those choosing to participate and those choosing not to do so, in order to determine whether or not HECS was a factor contributing to the decision. In general, HECS did not appear to be a very important factor in limiting access, with the possible exception of postgraduates who had intended to re-enrol. Even for this group, about 70 per cent gave other factors a greater weight than HECS as an influence on their decision.

To illustrate the extent to which HECS was seen by respondents as an influence on their participation decision, the following data are useful from Sloan and Robertson. HECS was the "most important" or a "very important" factor in the decision not to take up an offer, not to re-enrol for undergraduates, and not to re-enrol for postgraduates for less than 2, 5 and 10 per cent respectively.

The authors conclude that:
...if HECS has made any impact on decision-making in relation to participation, it is largely at the postgraduate level, less so at the undergraduate level and hardly at all at the entry level... (page 72).

The Ernst and Young Study

The consulting firm of Ernst and Young was commissioned in 1991 by the Higher Education Council to survey individuals from sub-groups of the population thought to be traditionally disadvantaged in terms of access to higher education. The study drew its sample from Year 12 school-leavers in 1991, and adults who were thought

to be potential entrants to higher education. Sample sub-groups based on aspects of perceived disadvantage (such as low socio-economic background, living in a rural area, non-English speaking background, and Aboriginal or Torres Strait Islander background) were constructed and surveyed.

The results have been used in a National Board of Employment, Education and Training (NBEET) report. Two questions were of particular significance for that report:

- 1.How important was HECS as a reason for not participating for those who decided not to participate in higher education?
- 2.How important was HECS as a perceived factor that might frustrate intention to undertake higher education?

Table 2 summarises the findings of the study with respect to these questions. Importantly, it examines the relationship between various factors which might influ-

Table 2
Relationship between Socio-Economic Background (SEB) and Factors Affecting Year 12 Respondents' Decision Not to Participate in Higher Education

| Factor (in order of importance) | Percentage of respondents "strongly agreeing" | SEB* |
|--|---|-------|
| 1. I want to earn money | 26.7 | ** |
| 2. The job I want needs a TAFE qualification | 19.4 | ** |
| 3. I prefer to go to TAFE | 16.7 | ** |
| 4. My Year 12 score | 15.6 | ** |
| 5. I don't have the money to support myself while studying | 15.1 | ** |
| 6. I won't qualify for a student grant | 10.7 | <0.01 |
| 7. I don't need to study any more to get the job I want | 10.4 | ** |
| 8. Cost of living away from home | 10.3 | ** |
| 9. Other course costs | 10.2 | ** |
| 10. I don't think I would pass | 10.2 | ** |
| 11. I don't see any benefits in higher education | 9.5 | ** |
| 12. I won't get any financial support from parents/friends | 9.4 | ** |
| 13. HECS | 7.4 | ** |
| 14. I don't want to move away from home | 5.4 | ** |
| 15. May not be able to get suitable accommodation | 4.8 | <0.05 |
| 16. Cost of living at home | 3.7 | ** |
| 17. My parents don't want me to go on to higher education | 2.4 | ** |

* Whether or not the response was related to the individual's socio-economic background.

** Means no statistical relationship, and 0.01 and 0.05 mean significant at the 1 and 5 per cent levels respectively.

Source: National Board of Employment, Education and Training, *Assessment of the Impact of the Higher Education Contribution Scheme on the Potentially Disadvantaged*, Australian Government Publishing Service p.17.

ence a decision not to participate in higher education and the socio-economic status of the person in question.*

The data from the table should be interpreted as follows. Of 17 factors which might contribute to a Year 12 student deciding not to participate in higher education, HECS was not frequently cited, and rated 13th overall in order of importance. Moreover, and of most interest for our original question, is that there isn't any significant relationship between the fact of it being cited and the socio-economic status of the student in question. That is, HECS doesn't seem to matter overall, and even for particularly disadvantaged groups, HECS is not of greater concern.

The Table suggests strongly that HECS was of minor importance for those not enrolling, and that even for the people identifying HECS as a possible issue for enrolment, there was no statistical association with socio-economic background. The bottom line is that there is no evidence from these data of HECS diminishing access to higher education of the disadvantaged.

The conclusions drawn by NBEET from this study are unambiguous:

It seems unlikely that there are identifiable groups for whom HECS is the critically important influence on decisions about participating in higher education ... It is therefore likely that most qualified applicants from across all sub-populations in the study would not be significantly deterred by HECS. (page xii).

The report does note that students from single parent families, or those who were single parents themselves, were more likely to see HECS as a factor frustrating their intentions to proceed to higher education, as were Year 12 students of low SES from rural areas. However, it is suggested that even in these groups, only around 20 per cent at most thought HECS "likely to frustrate their intention to participate". (p. xii)

The Ernst and Young findings are particularly important in relation to the question of the effect of HECS on the traditionally disadvantaged. Because the survey only looked at disadvantaged sub-populations, the results cannot be extrapolated to the population as a whole. They are, however, far more reliable as a predictor of the response of the disadvantaged to HECS than a general random sample of all potential students, regardless of background.

Changes in the composition of the student body after HECS

Evidence from the Victorian Post-Secondary Education Commission's statistical collections

The Victorian Post-Secondary Education Commission (VPSEC), the co-ordinating authority for higher education in that state, conducted extensive second order

analysis of statistical collections from higher education institutions in Victoria. These data, collected over the years 1988, 1989 and 1990, enable some examination of participation in higher education by age, sex, discipline and region, before and after the implementation of HECS.

Significant increases in participation were recorded in regional areas which had the lowest participation index (total enrolments as a percentage of population aged 17-24). For example, enrolments amongst students from the Western region of metropolitan Melbourne (traditionally regarded as a very low socio-economic status region) increased by 17.4 per cent from 1988 to 1990.

The VPSEC data do not support the contention that the presence of HECS had any effects of the fields of study undertaken by students. There were increases in the enrolments for all disciplines except Agriculture and Veterinary Science and, although Arts and Education grew more slowly than did some of the other fields of study, enrolments in the Sciences grew extremely quickly as well.

VPSEC also stated that there were no visible effects on completion rates of higher education over this time, with retention amongst the lowest socio-economic quartile of students actually increasing.

Youth in Transition Data from the Australian Council of Educational Research (ACER)

The ACER has available one of the most interesting data sets for analysing changes over time in the composition of the higher education student body, at least for young people. The data are annual surveys of persons born in 1961, 1965, 1970 and 1975, and include a host of information on family background characteristics as well as on the educational experience of young people. For our purposes the most straightforward way of using the information with respect to the effect of HECS was to compare the composition of higher education of 18 year olds in 1988 (before HECS) and 18 year olds in 1993, who are obviously the 1970 and 1975 cohorts respectively.

There are many ways of investigating the potential differential impact of HECS on enrolment by background. An indirect measure of family wealth in these data was constructed by the ACER using responses to questions concerning the presence in the home of material possessions, such as telephones, dishwashers, bedrooms and bathrooms. For our analysis the distribution of the index was grouped in the three categories, high, low and medium, representing respectively the upper and lower quartiles and the middle fifty per cent. Figure 1 presents the information for the pre- and post-HECS periods.

* A measure for socio-economic status for Year 12 students was created using as its first principal component the combination of mother's and father's education level and mother's and father's occupational level.

The data should be interpreted as follows. Each bar represents the proportion of the two different 18 year old cohorts enrolled in higher education in 1988 and 1993. As examples: around 25 per cent of the high wealth quartile were enrolled in 1988, and this number increased to about 33 per cent in 1993 (an increase of around a third); of the low wealth cohort around 13 per cent were enrolled in 1988 and about 17 per cent in 1993 (an increase of about 31 per cent).

Two points are worth noting. The first is that in both time periods there was a greater likelihood of those from wealthy backgrounds being enrolled, data which vindicate the position held by those at the time of the initial HECS debate that higher education expenditure without a charge seems to be regressive.

Figure 1
Family Wealth and High Education Enrolment,
1988 and 1993
(proportion of 18 year old cohort enrolled)

Source: Australian Council of Educational Research

The second conclusion is that the introduction of HECS does not seem to have had any discernible effects on the composition of the student body. This point is entirely consistent with all the other evidence presented above and is critical to on-going debate on the consequences of income-contingent charge mechanisms.

Up-front fees and HECS

Some are now calling for up-front university fees, scholarships and perhaps annual student loans as a response to the alleged Budget problem facing the government. In general, this is being done without clear understanding of the basic economic issues involved.

Most graduates do extremely well in terms of lifetime income increases from attending university, a point that is certainly true on average. Even so, and unlike the purchase of a house, there are considerable uncertainties involved in buying university services. For example, many students don't finish their degrees, and will be unable to access the sort of employment available to graduates. Even for the majority, there is no reason to

believe that they will always be in propitious economic circumstances in the future. After all, unemployment exists, and graduates frequently move between low and high paying jobs (for a lawyer, for example, between a private firm and working in the office of Legal Aid).

This problem means that some students will naturally be reluctant to borrow to pay fees even if the finance is available. This reluctance is more likely to be the case for students from poorer backgrounds without assets to sell or parents/spouses able to help out when the bank requires payment. There is rationality in this reluctance on the part of the poor to borrow for university. Defaulting on an education loan will mean a damaged credit rating, with the former student then facing the prospect of being denied the most significant loan in one's lifetime, that for a house.

This means with up-front fees those without finance will not be inclined to access the system. This wastes talent through the erection of barriers to entry, and it strengthens the socially undesirable nexus between students' inherited backgrounds and their life opportunities.

Some suggest offering scholarships to those from poor families will address this problem. But suggesting scholarships excusing fees for those from poor families implicitly assumes that all family members have equal access to finance, and/or that those in charge of the distribution of income within the family place the same value on higher education as does the prospective student. There is no reason to presuppose that families share equitably, and some evidence to suggest that for some it is not the case.

Any suggestion of up-front fees needs to recognise that a loans mechanism will be necessary, or it is inevitable that some talented and motivated prospective students will be denied access. Further, the loans mechanism has to offer default insurance, so that prospective students can be confident that they won't have problems repaying the obligation. For example, paying back on the basis of future income.

HECS currently addresses the above problems. It is essentially a deferred charge with an insurance against default, because the debt is only required to be repaid when and if former students are in a position to do so. It avoids the issue of what happens with family finances because charging depends only on future personal income.

Conclusion

HECS, introduced in 1989, was the world's first national income-contingent charging mechanism for higher education. It is now generally accepted in Australia as a reasonable and fair way to charge for university tuition, and is currently delivering about 10 per cent of the direct

public sector costs of universities. This figure will rise in the next few years, even without the likely increase in the charge being considered by the new government.

It has been argued that from the conceptual basis of the economics of education that there are sound reasons for favouring income-contingent approaches in the financing of higher education. So long as a charge is justified, mechanisms of this sort go a long way towards not erecting barriers to the participation of the disadvantaged in the system.

The evidence concerning the effects of HECS on the access of the poor to higher education seems fairly clear. A case cannot be made that the scheme has diminished the access of those coming from disadvantaged backgrounds. Indeed, the evidence suggests that HECS has had a negligible impact overall, and not one that is related to poverty.

The participation of all groups in higher education has increased since 1988. This reflects the very significant growth in places which has resulted in part from the promise of future financial resources guaranteed by the introduction of the charging mechanism.

None of this is to say that HECS is necessarily the right or only way to charge for university tuition. Some critics point to the lack of pricing signals in this form of income-contingent repayment, while others argue that a zero real rate of interest and the level and uniformity of the charge are inappropriate. Certainly there is considerable room for debate concerning the correct size of the various parameters of the scheme, and there is similarly a broad scope for adapting income-contingent charging to the institutional exigencies of other countries.

As a basis for discussion of what are feasible policy options for the financing of higher education, however, it is worth noting Kenneth Boulding's famous observation that "if something exists, then it is possible". HECS exists and works in Australia. Recent policy variations towards income-contingent repayment schemes in the United States, Canada, New Zealand, the Czech Republic, Botswana, Malaysia and other countries should be noted with interest.

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