Political barriers through educational opportunity: The unexpected consequences of HECS policy

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ABSTRACT

This paper is one of a series that has empirically tested the proposition that whilst the Higher Education Contribution Scheme (HECS) was implemented with the intention of improving access to university education for all Australians, it has had unexpected and unwanted consequences for governance more generally, particularly of the tax system. We use data from the "Graduates' Hopes, Visions and Actions Survey" based on a sample of 447 Australian graduates who recently completed their tertiary education. Findings suggest that while HECS policy appears to have met its objective of enabling less privileged groups to obtain a university degree, it has also given rise to resistance to the policy, to paying back the loan and tax evasion. This research demonstrates the dangers of implementing higher education policy in a way that dissociates the economic aspects of policy from the social and community attitudes in which it is inevitably embedded.

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Introduction

Student financing has a controversial place on the political agenda in many countries in the world including Australia, New Zealand, United Kingdom, Norway, Canada, and the Netherlands (see Annual Report: Student Loan Scheme, 2003; Association of Universities and Colleges of Canada, 1999; Financial Times, 4 February 2003; Johnstone, 2003; Marginson, 1997; Vossensteyn, 1999). In an OECD comparative study, it was revealed that Australia, New Zealand and Norway are the only OECD countries with declining public investment in universities (Larkins, 2003). As a result, a larger share of the costs of higher education has been shifted to students and their families. Although the student loan system in Australia has provided considerable assistance and support to eligible students, it has also created risks for the students themselves, and for governance more generally.

The current paper has a specific focus on the Australian student loan program – that is the Higher Education Contribution Scheme (HECS). Tertiary student financing in Australia has become a particularly vigorously and passionately debated topic since the introduction of the Scheme in 1989. Sixteen years on, while some argue convincingly for its economic credentials (e.g., Chapman & Ryan, 2002), the scheme continues to be unpopular (e.g., Lawrence, 2004) and has provoked heated discussion about the notion of tertiary education as a public good (Aungles, Buchanan, Karmel, & MacLachlan, 2002; Phillips, Cooper, Eccles, Lampard, Noblette, & Wade, 2003).

In this paper, we contend that, although HECS policy may have been implemented with the genuine intention of improving access to a university education within a user-pays system, there have been unexpected consequences detrimental to our system of governance. At the micro level, the scheme is producing individuals who are less willing to engage cooperatively with government, in particular, with Australia's self-assessment tax system. The primary aim of this paper is to show that these attributes are more likely to characterize those who have taken out a HECS loan and delayed payment for their university education than those who have paid up-front. Moreover, there is no evidence that the relatively harsher attitudes to HECS and tax among the loan group are directly attributable to socio-economic background, suggesting that such negativity may be a by-product of HECS policy itself.

Background

The fundamental aim of HECS was to ensure that all Australians regardless of social background and family income had the opportunity to attend an institution of tertiary education. Under HECS, students can choose to pay their contribution upfront or defer it. The Commonwealth provides a 25% discount[1] to eligible students who pay upfront. Students who choose to defer payment take out a loan with the Commonwealth government and are required to repay that loan when their income exceeds the minimum threshold for compulsory repayment. At the time of this research, the threshold was $21,983 a year although the threshold has risen to 35,000 in 2004-05. Repayments are administered by the Australian Taxation Office (ATO) that is legally responsible for collecting the balance of the outstanding loan from graduates through the taxation system.

[1] From 2005, the discount rate for upfront payment is 20%.

Since the introduction of HECS, concern has increased as to whether the scheme fulfils the hopes and aspirations of Australian citizens. For example, HECS debt has caused students to defer other investment decisions (e.g., family commitments, house purchase, business investments) and to engage in increased paid outside work during semester (Larkins, 2003). A recent report has revealed that 20% of HECS loans (estimated to amount to A$2.8 billion in 2004) are unlikely to be repaid (*The Australian*, 13 November 2004; *The Sydney Morning Herald*, 1 April 2003) which poses a challenge for the ATO. It has been stated that the doubtful student debt has increased by over 230% from 1996 to 2003 (The *Weekend Australian,* 21-22 Feb, 2004). An even more alarming aspect of HECS is diminished morale in relation to repaying the HECS debt, which in turn, impedes tax morale (Braithwaite & Ahmed, in press). Bearing a HECS debt has also been found to be a risk factor in relation to tax compliance (e.g., Ahmed & Braithwaite, 2004, in press). These studies have demonstrated that tax evasion is greater among those graduates who carry a HECS debt for their higher education.

The studies that have linked HECS loans with tax evasion have relied on qualitative interviews and path models that have implicated attitudes to HECS, university, loan repayment, and deterrence provisions as additional causal agents (see Ahmed & Braithwaite, 2004, in press). Basic demographic variables have been controlled in these models, but nowhere has the explicit question been raised about the intersection of the demographic and the attitudinal predictors. At a time in Australia when public debate is giving credence to "the politics of envy" (Hughes, 2001), an important question to answer is do negative attitudes towards HECS and taxation reflect the social discourse of demographic groups who feel that they have had fewer opportunities than others or do

they signal unease about the direction in which the democracy is heading? If graduates who carry a HECS debt are demographically distinctive in that they come from less privileged groups than graduates who pay up-front fees, and if these demographic differences dominate the attitudinal differences that have been observed in earlier studies, some support might be claimed for "the politics of envy" argument. If, however, the attitudinal variables remain important in discriminating those with HECS loans and those who have paid upfront fees, after demographic markers of disadvantage and privilege have been considered, it is more likely that the implementation of the HECS scheme itself has been responsible for alienating a significant proportion of Australian graduates from the tax system and from meeting their civic responsibilities.

The present study

Two groups (loan group and upfront payment group) were compared in terms of (a) socio-demographic background (8 variables), (b) educational experiences (4 variables), (c) attitudes towards HECS policy (4 variables), and (d) taxpaying behaviour (1 variable). First, a comparison is made of graduates who deferred payment and those who did not on each of these variables. Subsequently, a multivariate analysis is used to find out which of these variables are most important in discriminating the two groups. Do socio-demographic variables reflecting low opportunity dominate the other variables, or does the loan group continue to manifest negative attitudes and behaviour toward government instrumentalities even after demographic differences have been controlled?

Hypothesized socio-demographic profile of those with a HECS loan

In theory, graduates who take out a HECS loan should come from socio-demographic groups which traditionally have had less opportunity to attend university or who have difficulty meeting the costs of a tertiary education. Indicators of concern about costs might include choice of university course (undertaking cheaper courses (Band 1 and Band 2) rather than the more expensive Band 3 courses) and acknowledgement that cost was a salient factor in choosing a particular course at a particular university. A number of studies have shown that university enrolment patterns are increasingly being affected by the anticipated HECS debt especially among disadvantaged students (see Aungles et al., 2002; Phillips et al., 2003).

Also relevant are likely to be age, gender and work experience, albeit in complex ways. While age is likely to mean that the opportunity to save money to meet the costs of a university education is greater, there might also be constraints on how one's savings are spent, perhaps due to meeting family responsibilities. Similarly, having spent time in the workforce provides economic opportunity to pursue tertiary education, but going to university might be a distraction from gaining advancement in one's career, which in turn, puts economic well-being at risk. With regard to gender, ambiguities also are present as to who is privileged and who is not. The pay gap between men and women might be considered a discouragement against women going to university, unless tertiary education is seen as a way in which women will gain the competitive edge in the workforce. On all three dimensions of age, work experience and gender, the hypothesized relationships are that those who are best positioned financially will be more likely to pay upfront fees, and those who are least well off financially will take out a HECS loan. In

other words, those who are young, who have little work experience and who are women will be more likely to be relatively economically disadvantaged and take out a HECS loan.

In addition to being young, female, with little work experience and with concerns about the cost of a university education, income after graduation was considered a relevant variable. Lower than expected income could explain negative attitudes among those who had taken out a HECS loan. For this reason, current income needed to be controlled as well as the socio-demographic indicators that might be expected to make it difficult for individuals to pursue tertiary studies.

Finally, controls were introduced for part-time study and for being self-employed. Part-time students are known to be more likely to pay upfront (Long & Hayden, 2001) presumably because they have disposable income as a result of holding down full-time jobs while they study. Those who are self-employed have different loan repayment arrangements from employees. The self-employed are responsible for setting money aside for their loan repayments while employees have their HECS loan repayment automatically deducted from their salary by their employer along with their income tax.

Negative attitudinal variables and tax evasion

Our own previous research suggests that graduates with a HECS debt value educational attainment differently, and demand more in terms of educational outcomes and experiences. Findings from a pilot study (Ahmed, 2000) revealed strong feelings of resentment about carrying a HECS debt when students felt they were not getting value for money from their university course. There is some evidence, however, that dissatisfaction is not confined to those who carry a HECS debt. More recent studies have demonstrated

that course dissatisfaction weakens the sense of moral obligation to pay HECS (Braithwaite & Ahmed, in press) and increases the propensity to evade tax regardless of whether or not graduates bear a HECS debt (Ahmed & Braithwaite, in press). Level of course satisfaction is critically important to the tertiary sector at a time when competition for student enrolments is rife. It should also be of enormous concern to government if willingness to be good citizen is compromised by dissatisfaction with tertiary education standards. Compounding these problems for both the university and government sectors is the possibility that HECS loans are generating dissatisfaction rather than appreciation for the opportunity to have a tertiary education. Course satisfaction in the current study is operationalized as graduates' satisfaction with the benefits they received from their courses, specifically (i) quality teaching, (ii) professional development, (iii) clear course-goals, and (iv) skill acquisition.

A second set of hypotheses tested is that graduates carrying a HECS debt are more likely to view HECS as an unfair policy and have a lower internalized obligation to repay the loan. HECS loans are designed to attract those who are having financial difficulties, but they are also likely to be associated with ideological preferences about who should support the universities. Paying upfront is consistent with a user-pays approach to the use of resources, while HECS loans are likely to prove more attractive to those who hold to the view that tertiary education is a public good which the government should provide and make available to all. Criticism of HECS and less obligation to repay the loan may be signs of political resistance that are more common among those who have a HECS debt than amongst those who have paid upfront fees.

Previous work has shown that those with a HECS debt are more likely to cheat on their tax, a finding that has remained significant even after controlling for age, income, satisfaction with tertiary studies and opposition to HECS policy (Ahmed & Braithwaite, 2004; in press). One possibility is that tax evasion is a way of recouping monetary losses as a result of HECS repayments, an argument that becomes increasingly plausible given that the agent handling HECS debts and repayments is the Australian Taxation Office (ATO). The ATO has the responsibility for collecting HECS debts from students. The ATO also has the data with which to calculate the value of the debt and to monitor the levels of compliance with debt repayment obligations. Students disclose that they are carrying a HECS debt to their employers, who are required by the ATO to deduct a specified amount of repayment at source along with personal income tax.[2] Possibly graduates who carry a debt develop an antagonistic relationship with the ATO because they view the ATO not only as the HECS debt record keeper, but also as the "oppressive" debt collector.

In the next section we outline the method used to examine the extent to which those with a HECS debt and those who have paid their fees upfront hold different attitudes to university, government policy and taxpaying, as well as the extent to which expected differences in attitudes and actions can be discounted because they are attributable to socio-demographic background variables, in particular, economic well-being.

[2] Self-employed graduates communicate directly with the ATO.

Method

Participants

The data used in this paper were collected from 447 Australian graduates who completed the Graduates' Hopes, Visions and Actions Survey[3] (GHVA Survey). New graduates whose degree was conferred in either 1998 or 1999 were selected for this study as they were expected to have started employment by the time the survey was mailed out. The sample was stratified in terms of students graduating from each discipline in two universities in the Australian Capital Territory.

Of the 1500 questionnaires distributed, 447 were returned after several reminders, giving a response rate of 33% (after excluding undelivered questionnaires). While low in absolute terms, this response rate is comparable with rates reported for other tax-based surveys (Braithwaite, 2001; Pope, Fayle, & Chen, 1993; Kirchler, 1999; Wallschutzky, 1996; Webley, Adams, & Elffers, 2002). Wallschutzky (1996) has argued that tax surveys of the general population cannot be expected to yield a response rate higher than 30-40%.

Procedure

The participants were initially sent an introductory letter about the survey that guaranteed strict confidentiality of responses. The letter explained that the purpose of the survey was to gain an understanding of how graduates viewed the HECS, how they felt about their tertiary education experiences, and how they would describe their taxpaying behaviour. After one week, the survey questionnaire was mailed out along with an accompanying letter and a postage-paid return envelope. The accompanying letter re-emphasized the

[3] http://ctsi.anu.edu.au/UP.Ahmed.HECSquest.pdf

research purpose, re-iterated the guarantee of respondent anonymity, and encouraged respondents to return the completed questionnaire in a sealed envelope. A two-week return date was requested. An identification number appeared in the questionnaire to allow follow-up reminders of non-respondents asking them to complete and mail the survey if they had not already done so. As recommended by Dillman (1991), a reminder postcard was sent out one week after the initial mailing. Three weeks later, an identical packet was sent out to those participants who had not returned the questionnaire.

Measures

The GHVA Survey was based largely on the Community, Hopes, Fears, and Actions Survey (Braithwaite, 2001) with some additional items included to assess perception of the desirability and practicability of HECS, and an evaluation of university courses. Details about the measures used to empirically answer the research questions posed in this paper are provided below.

Having a HECS liability: This was assessed using a single item: "Do you have a HECS debt?" (yes = 1, no = 2; reverse coded for analyses). Of the total sample, 65% had a HECS debt and 35% had paid their tuition fees upfront. This survey seems to over-represent those who had paid upfront fees when compared with the 26% who had done so in Kim's study (1997). Of those who claimed to have paid upfront, 67% made the full payment whereas 33% chose the partial upfront payment option. Of those who had paid upfront, 65% reported that they were self-funding, 25% that their parents paid for them, and 10% that employers paid for them. Readers should be cautious in interpreting these figures because the categories are not mutually exclusive. For example, in theory, a

respondent's upfront payment can be made by parents at first, then by the student, and finally by the employer.

Socio-demographic variables: Eight socio-demographic variables were used in this study which are described below.

Age and gender: Respondents' age was measured in years (Mean = 31.39 years; SD = 9.84). Gender was scored 1 for male (41%) and 2 for female (59%).

Length of working years: Respondents were asked a single question: How long have you been working? (1 = less than 1 year, 2 = 1-2 years, 3 = 2-3 years, 4 = more than 3 years) (M = 2.92; SD = 1.03).

Cost salience: To assess the salience of the cost of university courses for respondents, the following two questions were asked: Did your financial circumstances influence your (a) choice of course? And (b) choice of university? (yes = 1, no = 2). Responses to these two items were reverse scored so that a higher score indicates cost was a relevant issue influencing students' enrolment including their choice of course and university.

To form the index of cost salience, respondents were grouped as perceiving financial burden if they had answered "yes" to any one of the above questions. Thirty-four percent of the respondents reported that their financial circumstances adversely affected their choice of enrolment in some way.

Field of study: Field of study at the undergraduate level was assessed through respondents' selecting one of the following broad disciplines: 1 = Arts, education, nursing; 2 = Science, engineering, agriculture, architecture, business/economics; 3 = Law, medicine, veterinary science; 4 = Combined degree; 5 = Other. Courses described under 5 were recoded into the other categories. For analytical purposes, less expensive courses (Band 1 and Band 2) and

more expensive courses (Band 3 and combined degree) were collapsed to form a new variable with 2 categories. A less expensive course was undertaken by 76% of graduates.

Modes of study: Respondents were asked a single question: What was your type of attendance for the tertiary course? (1 = wholly or mainly full-time, 2 = wholly or mainly part-time). Most participants (71%) reported being a full-time student.

Personal income: Personal income was measured in Australian dollars per year. Respondents were asked to tick the income range to which they belonged: (a) less than $20,000 (covered 8.7% of the sample); (b) $20,001 - 30,000 (covered 9.7% of the sample); (c) $30,001 - $50,000 (covered 55.8% of the sample; (d) $50,001 - $75,000 (covered 20.3% of the sample); (e) $75,001 - $100,000 (covered 3.4% of the sample); and (f) more than $100,000 (covered 2.2% of the sample). To reduce skewness in the scale, two response categories ("$75,001 - $100,000" and "more than $100,000") were collapsed into one category for the analyses that follow.

Work sector: Work sector was measured by respondents selecting one of the following categories that best described the type of work they did: (a) government sector, (b) private sector, (c) business, (d) educational institutions, (e) self-employed, and (f) other. For the present purpose, respondents were grouped into 3 categories: first, those working in the non-profit (government sector or educational) institutions (63%); second, those working in the private sector (27%), and third, those in their own businesses or self-employed (10%).

Course satisfaction variables: The majority of items used to measure graduates' course satisfaction were adapted from the Graduate Experience Questionnaire (Long & Hillman, 2000).

Seventeen items comprising the measure covered four aspects of the university experience: (a) quality teaching (4 items; a sample item: "My lecturers were extremely good at explaining things"; M = 3.62; SD = 1.06; *alpha* = .89); (b) professional development[4] (7 items; a sample item: "The course helped me to grow professionally"; M = 4.17; SD = .92; *alpha* = .86); (c) clear course goals (2 items; a sample item: "It was often hard to discover what was expected of me in this course" (reverse coded); M = 3.73; SD = 1.09; *alpha* = .68), and (d) skill acquisition (4 items; a sample item: "The course helped me develop the ability to plan my own work"; M = 4.62; SD = .79; *alpha* = .81).

There were six response categories for all items in this measure: 1 = strongly disagree, 2 = disagree, 3 = slightly disagree, 4 = slightly agree, 5 = agree, 6 = strongly agree (see Appendix for full listing of items).

HECS related variables: Four variables were used to gather graduates' views on HECS policy and their likely reaction should they be caught for not repaying the HECS loan by the ATO.

Perception of HECS as an unfair scheme: This scale comprised three items measuring the extent to which graduates regarded HECS policy as unfair and discriminatory: (a) "Recently[5], the threshold level for compulsory payment of a HECS debt was lowered" – this is unfair; (b) "Differential rates of HECS apply to commencing students depending upon the type of course (e.g. medicine, science) undertaken" – this is unfair; and (c) "Students who pay upfront are eligible to have a 25 percent discount rate" – this is unfair. There were six response categories: 1 = strongly disagree, 2 = disagree, 3 = slightly

[4] This aspect was developed for the present study.
[5] Note that the survey was conducted in 2000.

disagree, 4 = slightly agree, 5 = agree, 6 = strongly agree (M = 3.72; SD = 1.24; *alpha* = .65).

Perceived deterrence if not repaying HECS loan: Perceived deterrence was measured by combining responses to questions about (a) the probability of being caught, (b) the probability of receiving sanctions, and (c) the probability of seriousness of the consequences (see Braithwaite & Makkai, 1991; Varma & Doob, 1998) in the following scenario:

"Imagine that you chose to defer payment of your HECS debt and you are now required to repay the debt through the taxation system. You DO NOT repay the debt"

Each respondent received a deterrence score calculated by multiplying (a), (b) and (c) (see Appendix for details). Scores across the sample produced a mean of 56.98 and SD of 26.52.

Feelings of shame in relation to not repaying HECS loan: A scenario-based self-report questionnaire, Management Of Shame State – Shame Acknowledgment and Shame Displacement (MOSS-SASD (Version II); see Ahmed, 2005), was used to measure shame acknowledgment and shame displacement. Respondents were asked to imagine that they had been caught for not repaying their HECS debt as in the scenario above. They were then asked: "Assume that you now have to pay a substantial fine or penalty. How likely is it that the following would occur?"

Respondents then rated a list of shame related reactions (see Appendix) in terms of their relevance to them using four categories: 1 = not likely, 2 = may happen, 3 = likely, 4 = almost certain.

The *shame acknowledgment* scale measured the degree to which an individual responded to conscience in the sense that the person acknowledged wrongdoing, felt guilt and wanted to make amends (11 items; a sample item: "feel ashamed of myself"; M = 2.54, SD = .89, *alpha* = .95).

The *shame displacement* scale measured the tendency to blame and hit out at others when caught for evading HECS payments and making excuses for what had gone wrong (5 items; a sample item: "feel angry with the Tax Office"; M = 1.77, SD = .71, *alpha* = .82).

Tax evasion: The *tax evasion* index measured the extent to which respondents admitted to having engaged in act(s) of tax non-compliance. This measure of tax evasion aimed to capture transgressions that had already occurred rather than proneness or openness to tax evasion.

Three measures were used to develop the behavioural index of tax evasion. To form the index of tax evasion, respondents were grouped as evaders if they had evaded tax in any one of the following ways:

(1) "How much of your income in the 1999-2000 financial year did you get paid in untaxed cash?" (i.e. notes and coins rather than cheque or directly deposited into a bank account) (less than 5% = 1, between 5 and 20% = 2, between 20 and 50% = 3, more than 50% = 4, did not get paid any untaxed cash = 5)

and

"How much of your untaxed cash income did you declare on your 1999-2000 income tax return?" (none = 1 through all = 10); or

(2) “As far as you know, did you exaggerate the amount of deductions or rebates in your 1999-2000 income tax return?” (a lot = 1, quite a lot = 2, somewhat = 3, a little = 4, not at all = 5); or

(3) “As far as you know, did you report all the money you earned in your 1999-2000 income tax return?” (yes = 1, no = 2).

Respondents who indicated that they were totally compliant on all of these 3 indicators were assigned to the non-evader group. Thus, tax evasion was scored as 1 if non-compliant on at least one indicator and 0 if compliant on all three indicators. This method was used because this is a relatively inexperienced group of taxpayers most of whom would have had limited opportunity to evade tax in a range of different ways. Thus, if they had tried just one, they were included in the evading group.

Results

Data Analyses

The data analyses were performed in two steps. First, for the loan group and upfront payment group, means were compared using independent t-tests, or where more appropriate, frequency breakdowns for the two groups were compared using chi-square tests of independence. The specific aim of these analyses was to examine the extent to which graduates with a HECS debt (loan group) differed from those who paid upfront (upfront payment group) for their tertiary education at the bivariate level of analysis. Comparisons were made in terms of the above mentioned socio-demographic indicators, university course satisfaction, HECS related variables, and tax evasion. The results are reported in Table 1.

The second step involved a multivariate procedure – hierarchical logistic regression analysis. This analysis was used to examine whether attitudinal and behavioural variables can distinguish the loan group from the upfront payment group above and beyond the socio-demographic variables and university course satisfaction variables. Results are reported in Table 2.

Findings in relation to socio-demographic variables: Graduates deferring payments (in the loan group) tended to be younger, were more likely to be women, and reported being constrained by financial considerations when they chose their course and university. The loan group had had less work experience than the upfront payment group and they were more likely to be full-time students. These findings support the central hypothesis that HECS loans are more likely to be taken out by students whose capacity to pay upfront fees is relatively low. These are the students for whom HECS was designed. These data suggest that the HECS program is effective in so far as it supports those who might be excluded from full-time university study because of their financial circumstances.

In addition, loans were more common among those students who enrolled in a less expensive course (e.g., Band 1 and Band 2). Interestingly, students who took out a HECS loan were earning less after graduation than the upfront payment group. The explanation for this difference, however, is likely to be complicated by the fact that women earn less than men on graduation and more women took out a HECS loan than men (Ahmed, 2004; Reiman, 2001). Furthermore, the upfront payment group had more work experience, and therefore, are likely to be further advanced in their careers than the loan group.

No significant differences between groups were found in terms of being self-employed, or working for an employer in the private, non-profit or public sector.

TAKE IN TABLE 1

Findings in relation to course satisfaction variables: As can be seen from Table 1, graduates who had taken out a HECS loan were less satisfied with the quality of teaching in terms of the staff's ability to explain the subject, to motivate students, and to provide helpful feedback on progress. They also were more critical of the clarity of course goals and standards, and expressed more dissatisfaction with the professional development that they accomplished through their studies. Interestingly, the loan group was no different from the upfront payment group in terms of the skills they acquired through their tertiary education.

Findings in relation to HECS related variables: Respondents' attitudes towards HECS as a social policy were different for the loan and upfront payment group. Graduates who carried a HECS debt were more likely to perceive HECS as an unfair policy than those who did not. When presented with a scenario of not repaying a HECS loan and being caught by the authorities, the loan group expressed less remorse as well as less acknowledgment of shame and responsibility. No significant differences were found on the tendency to blame others, however, in the scenario situation.

The question about deterrence produced an interesting finding. Graduates with a HECS debt were more likely to fear deterrence should they be caught. They did not regard the Tax Office as complacent in chasing up HECS debts.

Findings in relation to tax evasion: From Table 1, the loan group, compared to the upfront payment group, was more likely to engage in tax evasion in terms of exaggerating deductions and/or under-reporting cash earnings.

Hierarchical logistic regression analysis

In the previous section, 14 variables appear to significantly distinguish graduates who are carrying a HECS debt from those who are not. The purpose of the hierarchical logistic regression analysis is to examine the contribution of attitudinal and behavioural variables (e.g., perception of HECS as an unfair policy, tax evasion) above and beyond the effects of socio-demographic variables (e.g., gender, age, income) and course satisfaction variables. It should be noted that this analysis uses only the variables which appeared to highlight important differences between the two groups of graduates in t-tests and cross-tabulations.

TAKE IN TABLE 2

The variables were entered in three steps.

First, socio-demographic variables were included in the equation. Four out of seven of these variables (age, personal income, length of work, and mode of study) were significantly and negatively related to paying upfront fees or taking out a HECS loan. In the multivariate analysis, graduates were far more likely to belong to the HECS loan group if they were younger, had spent less time in the workforce, had studied full-time, and had lower incomes (after graduation). The perception of cost being a factor in choice of university course was not significant once the other demographic variables were included. The demographic indicators seemed to be more important than perceptual cost variables in differentiating those who took out a HECS loan and those who paid their fees upfront. Altogether, this set of variables accounted for 37% of the variance in the outcome variable.

In the second step, the course satisfaction variables were entered. This time we combined the three significant components of course satisfaction (quality teaching, professional

development and clear course goals) into a single composite measure. The justification for developing such a measure was to avoid the risk of one variable 'competing' to account for the same variance as other related variables in the multivariate analysis. The course satisfaction variables tended to be moderately to substantially intercorrelated (between .28 and .49, $p < .001$). In spite of taking this precautionary step, course satisfaction was no more likely to occur in the upfront fee-paying group than the loan group. The outcome at the multivariate level was different from the outcome at the bivariate level. The non-significance of course satisfaction at this point in the logistic regression suggests that sentiments of dissatisfaction may be bound up with those who have been more economically disadvantaged in their pursuit of a university education. Further analyses suggested a more modest interpretation. Dissatisfaction correlated most highly with age ($r = .22$, $p < .001$), suggesting that younger graduates were more critical than older graduates. The correlations between dissatisfaction and other demographic indicators were not notable.

In the third step, three attitudinal variables along with tax evasion were added, all of which made a significant contribution to explaining an additional 12% of the variance in the groups. As seen in Table 2, HECS loan graduates were more likely to evade tax, to perceive HECS as an unfair policy and to fear penalties should they not repay their loan (deterrence). Consistent with the unfairness they perceived in HECS was their lower likelihood of feeling shame and remorse if caught for not repaying the loan.

The final model accounted for a total of 49% of the variance in whether graduates had paid upfront fees or had delayed payment by taking out a HECS loan (Nagelkerke R Square = .49; Chi Square = 191.81, $p < .001$). A total of 83% of the loan group and 80%

of the upfront fee-paying group were correctly classified by the variables. The overall correct classification rate was 81%.

These results are important, in two respects. First, it was possible to find a range of socio-demographic indicators reflecting relative economic disadvantage that significantly differentiated those who took out a loan and those who paid fees upfront. The differences were as they should be if HECS is targeting the intended population. The HECS loan group was the less economically advantaged – they were younger, with less work experience, had studied full-time, and were earning less upon graduation. Second, and importantly, a number of attitudinal factors differentiated these groups after controlling for demographic and social indicators of economic advantage. Notably absent was course dissatisfaction. In contrast, a number of attitudes and behaviours were notably significant. These were attitudes relating to HECS - its fairness and the obligation to repay the debt. What is more, not only did the HECS group feel less obligation to pay HECS, they were more likely to evade tax. Interestingly, these attitudes were more common among the HECS loan group, in spite of the fact that the HECS loan group took the deterrence threat associated with non-repayment seriously. Deterrence was doing nothing to diminish resistance to HECS and sat along side open admission to evading tax.

Discussion and conclusion

The significance of this study lies in its exposure of a paradox. A tertiary education loan scheme, designed to enable less economically advantaged students to attend university, is being used by its target group. Yet the scheme has not produced positive displays of citizenship. On the contrary, HECS appears to be cultivating resistance. Furthermore, the resistance is not localized to higher education. It extends to tax paying. This paper shows

that the failure of the loan group to endorse citizenship norms associated with "doing the right thing" cannot be explained by a politics of envy argument. Resistance and non-compliance endure after controls have been introduced for background variables that are related to opportunity and economic advantage. A substantial proportion of the problems created by HECS appear to be social and political, arising from dashed hopes and expectations for the democracy rather than economic disadvantage.

HECS adopts a user-pays approach to tertiary education using the tax system as the regulator. If financial barriers are a deterrent to tertiary education, policymakers may like to consider the alternative of increasing funding to universities by raising taxes and avoiding the complex administrative costs and inter-generational inequities of HECS. Critics would respond by arguing that higher tax rates are also likely to increase tax evasion. Or what is more likely these days, higher tax rates will increase avoidance. Tax evasion has been found consistently higher among younger people (e.g., Ahmed & Braithwaite, 2004), and 43% of investors in aggressive tax-planning schemes are graduates (Murphy & Byng, 2002). It may be that the 'HECS generation' is lost to the voluntary taxpaying culture anyway and that HECS is irrelevant. If this is the case, the key policy question is an economic one – whether the sum of HECS debt that the ATO fails to recover, the costs of HECS administration, and the costs of a 14.89% general increase in tax evasion by those with HECS debt (Ahmed & Braithwaite, 2004) is greater or smaller than the cost of increased tax evasion induced by simply increasing tax rates to fund higher education. If the amount is greater, HECS may not have been a constructive policy after all.

However the economic analysis unfolds, there is a disturbing political implication of

these findings that controversial policies such as HECS undermine the social fabric of the democratic system of governance. While ever democracies rely on citizens wanting to do the right thing, alarm bells should ring when government policy weakens citizen obligation and commitment to comply with the country's laws. The costs of regulating a population that lacks obligation seem inevitably high, and the likely effectiveness of using coercion and surveillance seems low, particularly when the targeted group is a well-educated and articulate population who are better able than most to defend their rights and find loopholes in a system that tries to contain them. To lose cooperation of such a significant group seems to be costly in the short term and the long term.

In introducing any controversial policy like HECS, policy makers should consider not only the monetary costs and benefits involved but also the feelings and emotions of the targeted population surrounding the justice of the scheme. Our research (Ahmed & Braithwaite, 2004, in press; Braithwaite & Ahmed, in press) has shown that citizens' perceptions and emotions are highly relevant to the efficient functioning of HECS and the tax system. Perceptions of the legitimacy of different branches of government are interconnected. If one branch fails to promote fair and legitimate policy, the other branches are adversely affected. Selznick (1992) has recognized these dangers and has called on government agencies to place importance on winning the hearts and minds of citizens: "The challenge is to maintain institutional integrity while taking into account new problems, new forces in the environment, new demands and expectations" (p. 336). Hence, government agencies need to be dynamic and flexible in responding to the social and emotional demands of the citizenry. They should have the capacity to reconcile constructive feedback and the concerns of citizens with sound economic policy (see

Gibbs, 2001). Notwithstanding the Australian Government's intention to design HECS in a manner that would bring benefits and avoid adverse economic consequences, issues surrounding the fairness of HECS have festered in the community and jeopardized the integrity of the tax system. To restore the system's integrity, government must take a broader view. The social fabric will not be right just because the economic fabric is right. The social fabric comprises the hopes of the kind of society citizens want for themselves and their children. Opportunities for higher education are part of these hopes, and government is expected to deliver. When it does not, the social fabric is weakened, cooperation with government fails, and dominance and coercion become the government's residual tools for managing the democracy.

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Table 1. Mean comparison (standard deviation in parenthesis) with independent t-test values of all variables between loan group (n = 289) and upfront payment group (n = 157)

VARIABLES		Loan group	Upfront payment group	t-value
Socio-demographic variables				
Age		28.61 (7.96)	36.45 (10.88)	8.55***
Personal income		2.81 (.87)	3.46 (.91)	7.17***
Length of working years		2.60 (.96)	3.47 (.91)	8.99***
Course satisfaction variables				
Quality teaching		3.51 (1.06)	3.82 (1.03)	3.02**
Professional development		4.10 (.97)	4.30 (.80)	2.20**
Clear course-goals		3.63 (1.12)	3.91 (1.01)	2.60**
Skill acquisition		4.85 (.81)	4.75 (.83)	-1.17 (ns)
HECS related variables				
Perception of HECS as an unfair policy		3.99 (1.20)	3.23 (1.18)	-6.40***
Shame acknowledgment if not repaying HECS		2.47 (.89)	2.65 (.88)	2.01*
Shame displacement if not repaying HECS		1.81 (.72)	1.70 (.69)	-1.53 (ns)
Perceived deterrence if not repaying HECS		59.52 (25.97)	52.39 (27.00)	-2.65**
Tax related variables				
Tax evasion[6]		.25 (.43)	.12 (.33)	-3.07**
Chi-square test of independence (categorical variables)		**%**	**%**	**χ^2**
Gender:	Male	25	17	4.01* (df = 1)
	Female	40	18	

[6] This is a standardized scale where scores have a mean of zero and standard deviation of one.

Field of study:	Band 1+ Band 2	47	30	5.61* (df = 1)
	Band 3 + Combined	17	06	
Mode of study:	Full-time	56	16	88.47***
	Part-time	08	20	(df = 1)
Cost salience:	Cost not relevant	61	74	7.38**
	Cost relevant	39	26	(df = 1)
Work sector:	Non-profit organization	25	39	.81 (ns)
	Private organization	09	17	
	Self-employed	04	06	

* < .05, ** < .01, *** < .001

Table 2. Unstandardized coefficients (B) (Wald statistics in parenthesis) for the hierarchical logistic regression analysis in explaining important variables in differentiating loan group from upfront group

Independent variables	First step	Second step	Final step
Gender	.29 (1.34)	.31 (1.55)	.47 (2.99)
Age	-.03 (4.71*)	-.03 (4.53*)	-.05 (7.56**)
Personal income	-.58 (15.01***)	-.57 (14.36***)	-.46 (8.21**)
Length of working years	-.48 (10.34***)	-.47 (10.13***)	-.51 (10.32***)
Cost salience	.47 (3.10)	.44 (2.70)	.35 (1.49)
Field of study	.20 (.43)	.15 (.24)	.12 (.14)
Modes of study	-1.03 (10.44***)	-1.08 (11.22***)	-1.11 (9.90**)
University course satisfaction experience	na	-.24 (2.24)	-.06 (.12)
Perception of HECS as an unfair scheme	na	na	.52 (20.03***)
Perceived deterrence	na	na	.02 (11.98***)
Shame acknowledgment	na	na	-.42 (6.71**)
Tax evasion	na	na	.97 (6.61**)
Chi-Square	191.84***		
Nagerkelke Square	.49		
Sample size	440		
Overall % of correct classification	81.6%		

* $p < .05$, ** $p < .01$, *** $p < .001$

Appendix

Course satisfaction:

The *quality teaching* scale items:

(1) My lecturers were extremely good at explaining things; (2) The teaching staff of this course motivated me to do my best work; (3) The staff put a lot of time into commenting on my work; and (4) The teaching staff normally gave me helpful feedback on how I was going.

The *professional development* scale items:

(1) The course helped me to develop a well-defined career goal; (2) The course brought a sense of achievement; (3) The skills I achieved during my course are now useless (reverse coded); (4) The course helped me to grow professionally; (5) the course helped me to get the best kind of job easily; (6) The course facilitated my employment level; and (7) The course helped me to relate knowledge with practice.

The *clear course goals* scale items:

(1) It was often hard to discover what was expected of me in this course (reverse coded); and (2) It was always easy to know the standard of work expected.

The *skill acquisition* scale items:

(1) The course developed my problem-solving skills; (2) The course sharpened my analytic skills; (3) The course improved my skills in written communication; and (4) The course developed the ability to plan my own work.

Perceived deterrence if not repaying the HECS loan:

$$\text{Deterrence} = \alpha + (C \times P_t \times S_t) + (C \times P_p \times S_p)) + \varepsilon$$

where α *= constant*

C = likelihood of being caught

P_t = likelihood of having to pay the debt with interest

S_t = severity of the problem created by having to pay the debt with interest

P_p = likelihood of having to pay the debt with interest + penalty

S_p = severity of the problem created by having to pay the debt with interest + penalty

ε = *disturbance (error term)*

Shame management:

The *shame acknowledgment* scale items:

(1) Feel that I had let down my family; (2) Feel ashamed of myself; (3) Feel angry with myself for what I did; (4) Feel concerned to put matters right and put it behind me; (5) Feel that what I had done was wrong; (6) Feel bad about the trouble I'd caused; (7) Feel humiliated; (8) Feel embarrassed; (9) Feel that I have harmed my reputation; (10) Feel guilty; and (11) Regret the mistakes I have made.

The *shame displacement* scale items:

(1) Feel angry with the Tax Office; (2) Feel bothered by thoughts that I was being unfairly treated by being given a penalty; (3) Feel that I wanted to get even with the Tax Office; (4) Feel like blaming the Tax Office as it failed to make me aware of my responsibilities; and (5) Feel like I am the victim here as I was not made aware of my responsibilities.

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