Total versus Marginal Income Collection of HELP: The Case for Change

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A personal prelude

The preparation of this paper for the Australian Government's 2023 University Accord review is a welcome opportunity for me to contribute to the higher education financing debate in Australia, and I am very grateful for this. As background, I was involved in the design of the HECS (HELP) system, introduced in 1989, and feel partly responsible for motivating both the conceptual basis of the reform and helping to design the parameters of the original system.

The issue addressed in this paper concerns the possible need to reform the HELP system concerning the debt collection arrangements. I am convinced that the original design of HELP collection is in error, a mistake for which I am importantly responsible, and which has impacted on a prospectively large number of student loan debtors over 35 years.

Over the years several economists have pointed out the mistakes involved in collecting debt based on total rather than, correctly, with respect to marginal incomes, and I want to take this opportunity to address and acknowledge two issues. First, that they were right to both challenge the arrangements and bring the problem to my attention. And second, to apologise for my reticence in responding professionally and more quickly to their valid concerns. This is for Professors Lorraine Dearden (UCL) and Neil Warren (UNSW).

Abstract and Conclusion

The HECS (now referred to as HELP) system was introduced in 1989, with the rules chosen concerning the collection of the debt being that once the first income threshold of repayment was reached each year, a former student would repay an amount calculated as a proportion of that person's *total* annual income, a feature of HELP which could be labelled "collection on the basis of total income" (CBTI). It has become well understood over time that his creates major repayment anomalies, which take the form of very significant loan repayment cliff-faces with respect to taxable incomes. What follows explains the mistake and examines its potential for deleterious outcomes concerning both labour supply decisions and views related to the integrity of the income tax system.

It is shown that with the use of two hypothetical and illustrative examples, the current system based on total incomes can easily be replaced with a marginal collection-based arrangement that delivers unexceptional after-HELP income consequences across the whole range of debtor incomes. Consequently, such a reform will take away any potential deleterious effects concerning labour supply decisions and associated prospective negative implications that a total income collection basis has with respect to the integrity of the income tax system.

However, introducing a marginally based collection system for the recovery of HELP debt has implications for revenue streams for the government, with the financial consequences depending on various factors, some of which are raised below. This stresses the importance of the government now exploring different possible marginal collection regimes with respect to their implications for the budget with respect to HELP revenue streams. But the case for reform in terms of social justice and the efficient operation of the labour market is clear.

Recommendation

That the government examines and costs a range of marginal income-based HELP collection regimes to replace the existing total income-based collection regime and chooses the one that best satisfies both equity and budgetary goals.

1 Background and Introduction

The Australian Higher Education Contribution Scheme (HECS) was first conceived in 1987 (Chapman, 1990), implemented in 1989, and is the world's the first national income-contingent student loan (ICL) scheme.[1] HECS (referred to from now on by the generic term for Australian student loans of the Higher Education Loan Program (HELP)) meant that tuition was re-introduced in Australian higher education[2] without obligation for any student to pay for higher education at the point of enrolment. Instead, there would be a requirement to pay when and only if enrolling students received personal incomes in the future which were higher than a given threshold of annual income.

This was the first national student loan system of its type, and, because of its originality, there were no international precedents or even theoretical examples of how this should be done, nor where there any illustrations of potential pitfalls to be avoided. Essentially, having decided to embark on an adventure concerning the financing of higher education, those in charge of the Australian policy had to make design decisions for HELP concerning *inter alia*, tuition charges, interest rates, the debt collection agency, and the rules governing loan collection parameters. What follows focusses on one aspect of the last of these, the collection arrangements with respect to which measure of annual personal income[3] should be used to determine the level of a debtor's repayment obligation in any given annual period.

The rules chosen at the time included the stipulation that once the first income threshold of repayment of a debtor was reached each year, a former student would repay an amount calculated as a proportion of that person's *total* annual income, a feature of HELP which could be labelled "collection on the basis of total income" (CBTI). This creates a major repayment anomaly, which takes the form of a very significant loan repayment cliff-face; what follows explains the mistake and offers a solution to this now 35 years old HELP design imperfection.

This paper addresses the following issues related to collection being based on total rather than marginal incomes, which are:

(i) The implications of the HELP collection rules for tax bunching of reported incomes close to key income thresholds of repayment;

(ii) The consequences of the "cliff-faces" created by these HELP collection rules; and

(iii) The effects of these inappropriate arrangements for both labour supply and issues of tax integrity.

The system needs change and to this end the paper provides several illustrative examples of how HELP can be reformed through the adoption of a marginal income-based system. Comments are provided as to the issues that need to be addressed to help ensure that estimates associated with the revenue costs of reforms are properly costed.

[1] A similarly plan was put into operation in 1971 involving college students from Yale University and was known as the Yale Tuition Postponement Plan (West, 1976). The system suffered from problems of collection and moral hazard and was abandoned in the late 1970s.

[2] University fees had existed in Australia until they were abolished in 1974. However, very few students actually paid fees because most students (75-80 per cent) received scholarships that excused fee payments (Chapman, 1988; Chapman and Nicholls, 2013).

[3] See Committee for Higher Education Financing (1988).

2 Conceptual Issues from CBTI

2 (i) The cliff-face illustrated

All ICL schemes involve rules concerning the interface between the incomes of debtors and loan repayment obligations. For government there are at least three inter-related policy decisions to be made, concerning: the first income threshold of repayment; the proportion of income to be repaid at given income levels; and whether or not the financial measure used for collection should be a person's total income or instead be marginally based income (that is, as a proportion of income above the first income threshold of repayment, such as is always the case with income taxes). With respect to the first two choices, the original HELP parameters were uncontroversial.

However, in a decision that has turned out to be contentious, HELP was designed involving the use of *total* rather than *marginal* annual incomes (starting at 1% and increasing progressively with income to 8% previously, and which is now 10%). In comparison, without exception, the countries adopting their own versions of ICL - following the lead provided by HELP - chose instead to use marginal income bases for debt collection. For example, the current New Zealand and UK ICLs have marginal collection rates of 12 and 9 per cent respectively.

The reason that the use of total rather than marginal incomes is a potential problem is that the former creates major anomalies at the thresholds of repayment. For example, using the 2020/21 parameters, a debtor earning $48,361 per annum is obligated to repay none of their HELP debt in that year, but a debtor earning $48,362 per annum will instead repay 1 per cent of $48,362, which is $484. This incongruity is not just the case for the first threshold of repayment, it is apparent for each threshold with CBTI; consider, for example, and again using the 2020/21 rules, the rate of repayment doubles to 2 per cent at an annual income of $55,836, with those earning this amount repaying $1,117 a year, compared to a debtor earning $1 less who will repay only $558.

These peculiarities raise what is known as the "effective marginal tax rate" (EMTR), a concept reflecting estimates of the disposable income effects of a one dollar increase in annual incomes considering the interrelationships between tax and social security (and HELP) systems. The measurement of EMTRs with respect to government decisions concerning tax and transfer parameters is valuable for public policy because it reveals the unintended potential consequences for labour supply behaviour because of the effect on disposable incomes of the interplays of disparate aspects of government tax and transfer policy. It is important for HELP design because of the cliff-faces illustrated above.

Chapman and Leigh (2009) provide different calculations of EMTRs for the 2008 HELP arrangements, the findings of which depend on assumptions concerning whether tax deduction behaviour related to HELP results in permanent reductions in, or simply delayed repayments of, HELP. This research comes up with a range of an extraordinary 76,000% and a much lower yet still mind-stretching 550% for the extra dollar earned which pushes HELP debtors to the first income threshold of repayment[4]. Whatever the true EMTR situation is, basing HELP repayments on total compared to marginal income has potentially profound consequences for some debtors' disposable incomes and thus, through consequent labour supply behaviour, the government's ICL and income tax receipts.

These effects can take three possible forms, with respect to: debtors involved in tax deduction behaviour that leads to the bunching of taxable incomes just below the first (and subsequent) income thresholds of HELP repayment; decisions concerning labour supply, for example, related to hours or weeks worked to ensure annual incomes remain lower than the HELP threshold; and/or

[4]In the many examples of EMTR internationally it is very rare indeed for these to be even close to 100 per cent, which illustrates how large and potentially critical these illustrations of the effects of CBIT are.

the potential there is for an undermining of the integrity of the system which in turn could encourage higher levels of both tax avoidance and evasion. What does research reveal in each of these areas in terms of both incidence and the associated costs because of the HELP cliff-face?

2 (ii) Bunching of reported taxable incomes

There is by now very useful evidence concerning the bunching of reported taxable incomes for HELP debtors in the period in which annual incomes lie below the first income threshold of repayment of the loan, all involving the use of administrative data provided by the Australian Taxation Office. The first comes from Chapman and Leigh (2009), who adopt the research strategy used also in both Highfield and Warren (2015) and Johnson and Breunig (in progress). The approach involves comparisons of HELP and non-HELP debtors' annual taxable incomes.

The key point is that HELP collection is based on so-called taxable income, which can be affected through a debtor claiming deductions associated with work-related expenses (for example, for the use of a home office or a car for employment purposes). This means that HELP taxpayers, including the self-employed, have obvious financial incentives to be involved in and claim (legitimately or otherwise) such deductions to defer HELP repayments when annual incomes are just below the first threshold of repayment. In comparison, non-HELP taxpayers have no such incentive.

The three exercises noted above, using data and HELP policy parameters for different periods of time, all come to the same conclusion: there is clear and significant evidence that HELP debtors report taxable incomes that are bunched just below the first incomes of HELP repayment thresholds. Let's now ask the question, what is the size of these effects, an enquiry motivated by the possibility that Australian governments have received both lower HELP and tax revenues than would otherwise have occurred because of the CBIT.

To understand the dimensions of potential forgone tax revenues from CBIT requires information on the number of taxpayers involved and the average amount of deferred taxes. Chapman and Leigh report that the number of HELP taxpayers involved per year is quite small, about 0.3 per cent of HELP debtors, or about 1932 citizens. From these data they calculate that annual forgone tax revenue is about $1.8 million.[5]

While this is a tiny proportion of HELP debt collected annually, Highfield and Warren (2015) emphasise that there continues to be significant growth of the system[6] because of increases in university enrolments. The point is reinforced through recognition of the recent growth in the take up of FEE-HELP in the private higher education sector and with respect to the burgeoning of post-graduate FEE-HELP students in the public university system. As well, there is potential for the further expansion of HELP into Vocational Education and Training, a policy development promoted in Chapman and Higgins (2023) and Dawkins, Lilly and Pascoe (2023). In short, it is inevitable that the consequences of forgone tax revenue resulting from CBTI will continue to increase substantially.

2 (iii) Labour supply issues

By far the most important reason to be concerned with large EMTRs relates to their prospective influence on labour supply, including whether HELP debtors choose to work at all, but most obviously with respect to choices related to both hours worked per week and weeks worked per year. The issue is that work decisions are impacted through individuals considering the implications of labour supply choices with respect to disposable income, necessarily with

[5] There is a complication with calculations such as these because they need to be compared with HELP revenues that would result with a counter-factual policy, such as the use of marginal collection of HELP based on income. This remains is an issue for future research.

[6] There was close to a doubling of HELP debtors from the period Chapman and Leigh analysed to that of Highfield and Warren, and the growth has been significantly higher again since then.

consequences for: the amounts paid as income taxes; social security receipts; and HELP debt repayments.

As emphasis, putting the 2020/21 calculations most spectacularly, an increase in annual incomes of $1 at the first and second HELP repayment thresholds result in actual *decreases* in disposable annual incomes of $483 and $559 respectively. Thus, for the (admittedly very small number) of HECS-HELP debtors earning just below these thresholds, slight increases in annual hours worked will be associated with clear and tangible financial short-term penalties. The labour supply consequences for those in such, admittedly very unusual, circumstances can be substantial.

There are two analyses of the labour supply effects of CBTI, from de Silva (2023) and Johnson and Breunig (in progress) which come to very similar conclusions, while using quite different approaches to the issue, viz:

(a) using an applied general equilibrium model de Silva writes: "My estimates imply that the labor supply responses to income-contingent repayment decrease the optimal amount of insurance but are too small to justify [a different system]"[7]; and

(b) alternatively in method terms, the Johnson and Breunig (in progress) approach involves testing the possibility that there are observable kinks in measured wage and salary annual incomes for all HELP debtors at the first threshold of repayment. They find no evidence of the existence of a structural break and conclude that the CBIT does not have observable consequences for labour supply decisions.

It matters that while neither the de Silva nor the Johnson and Breunig analyses find important aggregate labour supply effects from CBTI, this is not enough to constitute a strong case for preserving the *status quo*. This is because the potential effects of the current system for some individuals are so important in principle that they are likely to have considerable influence on the welfare of a very small number of taxpayers, even if the number and behaviour of those so affected does not show up in aggregate studies.

2 (iv) Does CBTI undermine the integrity of the tax system?

Arguably the most difficult of all exercises designed to explore the effects of CBTI relate to the measurements concerning what is loosely defined as the integrity of the taxation and (in our context, HELP) systems. The issue is addressed by both Braithwaite and Ahmed (2005) and Ahmed and Braithwaite (2007) with the use of several qualitative surveys of higher education students, and in conceptual terms by Highfield and Warren (2015).

The first of these pose the question of whether schemes such as HELP affect the efficiency of the operation of the tax system because of the potential for non-compliance behaviour, with the research examining the relationship between having a HELP debt and the likelihood of engaging in tax evasion. Ahmed and Braithwaite (2007), and Braithwaite and Ahmed (2005) find that this relationship is both statistically significant and positive; HELP debtors are more likely to be non-compliant with respect to the income tax system. Even though estimates of the extent of cheating and the aggregate costs for the systems are not provided, the authors nevertheless argue for reform of the arrangements.

[7] de Silva (2023) page 37.

Highfield and Warren (2015) find similarly through exploring the relationship between having a HELP debt and the likelihood of measures of poor tax compliance. It is concluded that in response to the poor collection design of HELP "…many [HELP] taxpayers appear to be deferring, avoiding or reducing their repayments" (page 241). They offer several suggestions to improve the operation of HELP.

2 (v) Conclusion

In international comparative terms the Australian ICL collection approach has a unique and undesirable feature, which is CBTI. that the empirical There is no doubt that the potential extent of the problem is important given height of the resulting cliff-face is large. Three different areas of potential consequences are with respect to: tax bunching; labour supply; and an undermining of the integrity to the tax and HELP systems. There is useful research in all three areas, and the conclusions are clear, which are that CBTI:

(a) Does indeed induce bunching with the econometric tests revealing two things: statistical significance, yet in overall terms so far, with very small aggregate consequences;

(b) Is associated with either no, or minor changes only, in work choices; and

(c) Has statistically significant adverse effects on measures of tax compliance, but with no clear indications of the extent of this problem.

These results could be interpreted as suggesting that even with statistically significant bunching, there is no strong case for reform to CBTI, but this is not a definitive conclusion if an effective way can be found to correct the error. After all, whilst not showing up powerfully in aggregate, CBTI is likely to be impacting negatively and importantly on some individuals with potentially high adverse consequences for a tiny fraction of the population. The HELP CBTI could mean that some individuals with earnings just above the threshold could be impacted in undesirable ways that need to be avoided; for example, a HELP debtor being $483 worse off financially year through earning $1 a year more than the first threshold of HELP repayment. This is unfair, not transparent, and arguably causes unnecessary worry, financial loss, and anxiety for loan holders.

The case for reform is that with a well-designed system the impact of earning $1 more a year cannot involve any prospects of EMTRs greater than 100%, an outcome which would significantly mitigate the incentives to distort labour supply choices and reducing from this source the possibility of adverse judgements concerning the integrity of the income tax system. The issue for public policy reform away from the CBTI involves an assessment of the costs associated with finding a conceptually more appealing approach to ICL collection which is simultaneously not associated with important budgetary costs; this subject of what now follows.

3 Towards a Resolution

3 (i) The solution in principle: marginal collection instead of CBTI

There is an obvious alternative to CBTI, which is for HELP collection to be based on the same principle adopted in all other countries using ICL. This is to use what is known as a "marginal income" collection basis, meaning that the amount of a debt repaid is a proportion of income above a given threshold, the same way as income taxes are collected. This section describes and illustrates several of the financial consequences associated with two such empirical examples;

they are motivated to demonstrate that HELP collection rates can be changed from the current total income-based arrangements to a marginal basis without significantly undermining the overall relative structure of the existing system.

There are three aspects worthy of consideration with respect HELP marginal collection reforms, which are:

(a) To provide some examples of the sorts of marginal income loan collection bases that would be useful for policy reform, and these are presented in Section 3 (ii);

(b) To show empirically what the examples imply for HELP repayments for individual HELP debtors at given levels of annual incomes, compared to the *status quo*, which are presented Section 3 (iii); and

(c) To recognise that the information available from Sections 3 (ii) and (iii) are key features in an understanding of a change to a marginal collection system, what are also needed are estimates of the aggregate costs to the budget in a transition to a better system. Estimates of the effects of the loan collection reform are properly a function for the government, with Section 3 (iv) assisting in anticipation of these processes through consideration of the sorts of issues that need to be examined in the budget costing exercises required.

3 *(ii) Descriptions of two illustrative examples for reform*

What now follows describes two examples of marginal income collection reforms designed to replace the current total income HELP CBTI system. They parameters chosen are somewhat arbitrary, there being a range of possible different alternative schemes warranting future government examination and modelling. The illustrations are offered to encourage policy makers to explore a plethora of alternatives to find the best possible marginally based new HELP collection arrangements, it being clear from the preceding discussion that such a generic change to HELP is warranted and important.

While the New Zealand and the UK systems use a constant proportion of annual income (of 12 and 9%, respectively) above their thresholds (which for NZ are: $(A)21,143 and for the UK are: $(A)40,000 to $48,000 (depending on loan type)) there is no requirement or obvious benefit from a simple proportionally based system. Indeed, following the suggestion informed by economic theory (Long, 2014; 2019), in what follows the illustrative examples both have a progressive structure (just like all progressive income tax regimes), beginning with a low rate of 6% and ending with a high rate of 15%. As well, the first income threshold of repayment (as of 2020/21) is maintained to make comparisons straightforward, while the first income threshold of repayment needs to be given reconsideration with a new marginal arrangement.

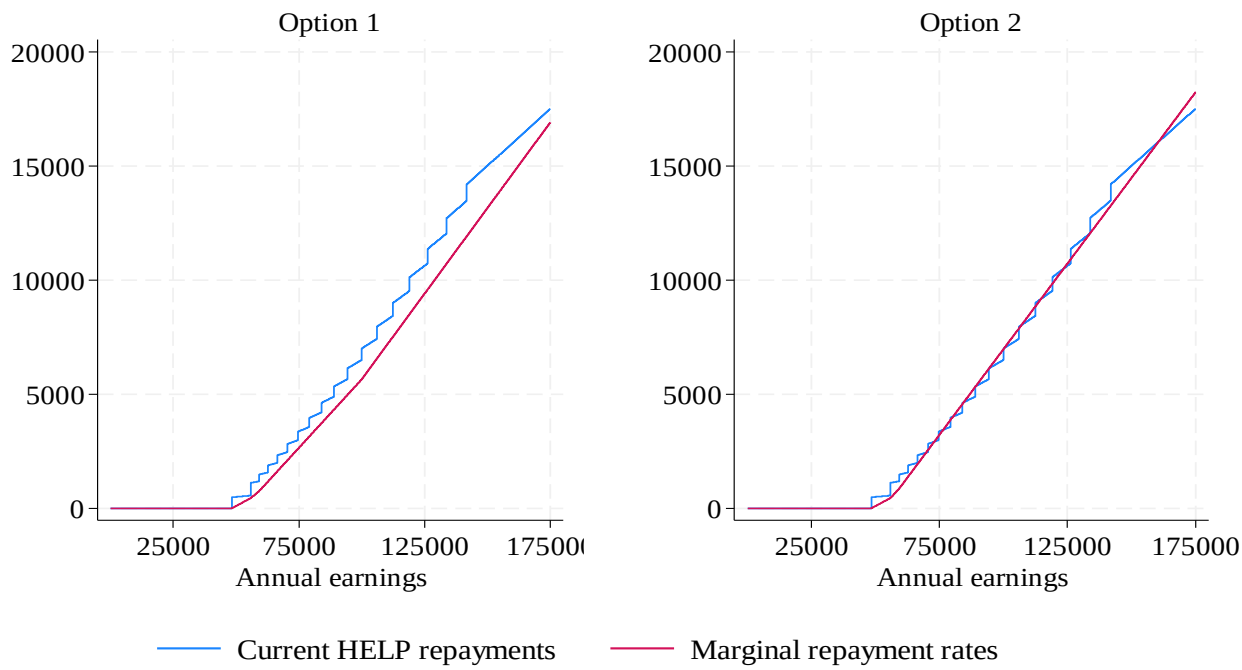
Table 1 shows the parameters for the two examples chosen, labelled Option 1 and Option 2. The comparisons are of interest because they clearly differ with respect to progressivity, with Option 1 generally being gentler for debtors (and is thus associated with lower repayments at the lower echelons of income.

Figure 1 shows comparisons between the Option 1 and Option 2 marginal collection regimes and the current (2020/21) CBTI. The data are shown in more detail in Table 2 which provides the calculations of after-HELP incomes at 8 different annual incomes, from $50-100,000.

Table 1
Marginal HELP Collection Regimes Described

Options	Thresholds of HELP repayment ($ pa)	Marginal collection rates (%)
Option 1:	Above 48,360	6
	Above 55,836	9
	Above 59,186	12
	Above 99,996	15
Option 2:	Above 48,360	6
	Above 55,836	12
	Above 59,186	15

Figure 1
Comparing Marginal Collection Options with the Current Total Collection System



The data from Figure 1 and Table 2 show that both Options 1 and 2 go close to replicating the current repayment obligations with respect to annual incomes, with both options resulting in higher after-HELP incomes compared to the current situation; this is particularly clear at the lowest income levels (for example, at a pre-HELP annual income of $50,000 the 2020/21 system reduces a debtor's income to $49,500, but the alternative options reduce annual incomes to only $49,902). These differences are reduced as incomes increase; for example, at a pre-HELP income of $100,000 per annum, the current system reduces incomes to $93,000 compared with $94,352 and $93,027 with respect to Options 1 and 2. Given its higher marginal collection rates after about an annual income of $56,000, Option 2 is more cost efficient for the budget than Option 1, but it is only at very high incomes that the options deliver proportionate reductions in after-HELP incomes quite close to the current system.

Table 2
After-HELP Repayment Annual Incomes (2020/21 Comparisons)

Gross Income	Current HELP	Option 1	Option 2
$50,000	$49,500	$49,902	$49,902
$55,000	$54,450	$54,602	$54,602
$60,000	$58,500	$59,152	$59,027
$65,000	$63,050	$63,552	$63,277
$70,000	$67,550	$67,952	$67,527
$75,000	$71,625	$72,352	$71,777
$100,000	$93,000	$94,352	$93,027
$120,000	$109,800	$111,352	$110,027

3 (iii) The effects of marginal collection on disposable incomes

The most interesting aspect of the empirical exercises relates to the possible consequences for after-HELP incomes calculated at different current (2020/21) thresholds of debt repayment. This matters particularly for what the system means for debtors with incomes around any of the 18 income levels involving increases in the percentage of total incomes determining the HELP repayment obligations. To address this empirically, the question is posed: at just below the current HELP collection income thresholds of repayment, what is the effect of a debtor experiencing a $100 increase in incomes on their after-HELP incomes? The results are shown in Table 3.

Table 3
Increase in After-HELP Annual Incomes (2020/21 Comparisons) for $100 Increases in Gross Incomes at Existing (2020/21) HELP Thresholds

Base Gross Income before $100 increase	Current HELP	Option 1	Option 2
$48,360	-$385	$94	$94
$55,836	-$460	$91	$88
$59,186	-$198	$88	$85
$62,738	-$217	$88	$85
$66,502	-$236	$88	$85
$70,492	-$256	$88	$85
$74,722	-$278	$88	$85
$79,206	-$301	$88	$85
$83,958	-$325	$88	$85
$88,996	-$351	$88	$85
$94,336	-$378	$88	$85
$99,996	-$407	$85	$85
$105,996	-$437	$85	$85
$112,355	-$470	$85	$85
$119,097	-$504	$85	$85
$126,243	-$540	$85	$85
$133,818	-$579	$85	$85
$141,847	-$619	$85	$85

As anticipated in the conceptual discussion, at every income threshold the CBTI regime has very significant and negative consequences with respect to incomes just above all thresholds. In every case an extra $100 reduces a debtor's after-HELP incomes by at least $200, and at 14 thresholds the effective income reduction is more than $300. This illustrates starkly the deleterious potential effects on welfare, and perhaps labour supply decisions, of the current system.

In contrast, with Options 1 and 2 extra incomes of $100 can never reduce disposable incomes in absolute terms, with the least effects of the extra $100 being to increase after-HELP incomes by $85. That the marginal collection basis of an ICL has significant capacity to result in unexceptional changes in after-HELP incomes now being obvious.

3 (iv) Issues for calculations of the revenue stream implications of reform

It should be stressed that the examples presented above are illustrative only; a government interested in reform would need to explore many alternatives to satisfy potentially competing aspirations concerning scheme design. In this context an issue is the need to consider the implications for HELP revenue streams because there are budget cost implications, with different HELP debt recoveries being associated with diverse aggregate interest rate subsidies. Slower aggregate loan collections, for example, implicitly cost the budget in present value terms.

It follows that while the case for move away from CBTI to a marginal income basis of collection is compelling, this needs to be done in ways that minimises the costs to taxpayers. Thus the scheme design of a replacement marginal system needs to consider those factors which impact on these implicit costs, and they are:

(a) The first income threshold of repayment (FITR). For Options 1 and 2 it is assumed that the FITR remains where it currently is, and this will result in slower recovery of HELP debt and thus some cost to the budget. However, these costs could be mitigated, even eliminated, with a lower FITR; it is relevant to keep in mind that the marginal collection arrangements of other ICL countries operate with lower FITRs than the current Australian ICL; and

(b) Option 1 could be seen to be quite gentle in repayment terms beginning at a low 6% of marginal incomes and taking another $11,000 of annual income to reach the current UK marginal rate of 12%. Option 2 is less gentle, but even with this arrangement it could be argued to result in quite generous repayment obligations up to around $56,000.

As well as costing both different FITRs and repayment rates, in deciding on the details of a different system the government needs to consider several offsets to the costs in moving away from the *status quo.* One is that there would be more income tax paid through the mitigation of the current bunching, and the other is that if the cliff-faces have labour supply effect, they would be to reduce hours of work. Eliminating both incentives must imply higher income tax revenues than currently, although it is hard to believe that this would be very significant.

The bottom line is that budget costs of the suggested reform need to be understood and modelled. But it seems to be feasible to redesign the system in a way that does not have important adverse implications for taxpayer costs.

3 (v) Summary

With the use of two hypothetical illustrative examples, the current CBTI HELP system can be replaced easily with a marginal-income collection arrangement capable of delivering unexceptional after-HELP income consequences across the whole range of debtor incomes. This reform will mitigate potential deleterious labour supply decisions and reduce the negative implications from CBTI with respect to the integrity of the income tax system.

Modelling attention needs to be given to scheme design because there are potential budget costs, none of which seem to constitute a significant barrier to making the system better in operational terms and hours worked choices. In the end this is not a complicated issue for HELP reform, particularly when the case for change in terms of social justice and somewhat improved labour market efficiency operation of the labour market are clear.

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