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STUDENT LOANS: TOWARDS A NEW PUBLIC/PRIVATE MIX

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STUDENT LOANS: TOWARDS A NEW PUBLIC/PRIVATE MIX¹

Nicholas Barr²

This paper discusses how to construct student loans to ensure that, for the most part, they count as private spending. Though the specifics relate to the finance of higher education, the issue has much wider ramifications for flexible combinations of public and private activity, for example in financing public transport, paying for infrastructure, and the like. The opening section explains the issue, section 2 justifies the specific loan proposal and section 3 discusses ways of ensuring that the scheme is classified as private.

1 The Issue

The central fact of British higher education is the increase in the participation rate from an élite 5 per cent in the early 1960s to a mass 30 per cent by the mid 1990s. Public funding of a mass system is not possible, either politically or fiscally. Thus public funding has to be supplemented on a significant scale by private funding.

In principle, private funds can derive from three (and only three) sources — family resources, student earnings while a student, and students' future earnings. The first two are only partial answers. Excessive reliance on family resources is inequitable (Barr and Low, 1988); and earning activities compete with study time and leisure. In a mass system, therefore, the only source of funding which is large and not grossly inequitable is a system which allows students to borrow against their future earnings.

OBJECTIVES. What is needed, therefore, is a system of loans which:

- Promotes access, both for equity reasons and for efficiency, to minimise the waste of talent in an increasingly competitive global market.
- Restores quality, which has been eroded by particularly sharp expansion (from 14 to 30 per cent participation) since 1989 with little increase in resources going to universities.
- Contains taxpayer cost. The taxpayer cannot shoulder the major burden of financing a
 mass system whichever the party in power, not least because of other educational
 demands (National Education Commission, 1993).
- *Liberates private funds immediately*. The issue is not just to bring in private funding through students' eventual repayments, but to bring it in fast by devising a loan mechanism which allows students to borrow from the private sector.

Barr and Crawford (1996b) discuss how to achieve the first three objectives; this paper discusses how to achieve the last in the light of international conventions about expenditure classifications.

THE BENCHMARK SCHEME. Two implications follow from earlier discussion. First, student loans will become larger. Thus loan repayments must be *income contingent*, e.g. 3 per cent of the borrower's subsequent earnings until the debt has been repaid. Income-contingency is critical to protect access. Second, such loans should come from *non-budgetary sources*. The way to implement these policies (henceforth referred to as the benchmark scheme — see Barr and Crawford, 1996 a, b for details) is as follows:

- Student loan repayments should take the form of an add-on (for example 3p in the pound) to the National Insurance Contributions (NICs) of borrowers.
- Student debt should be securitised, i.e. sold to the private sector.

The logic is straightforward. Repayments are secure because they are collected at source; thus they can be spread over a long period; thus weekly repayments are low; thus students can afford to pay a market interest rate. Private lenders want to make secure loans at market interest rates; the scheme gives them exactly that. As a result, loans bring *immediate* private resources into higher education; the costly untargeted interest subsidies of the current scheme are eliminated; and loan repayments are fully income-contingent, minimising deterrents to access.

Private funds would enter the system as follows. The Student Loans Company (SLC) issues loans to students. Simulation studies (Barr and Falkingham 1993, 1996) suggest that if repayments are collected alongside NICs, about 80 per cent of total student borrowing will be repaid. Thus £2 billion of student debt (roughly the present level of annual spending on student grants plus loans) could be sold for about £1.6 billion. The SLC thus raises £2 billion each year from two sources, £1.6 billion from the private sector and £400 million from the Treasury, producing *immediate*, *annual* savings in public spending of £1.6 billion.

Repayment involves the following steps:

- (a) At the time a student takes out a loan, the SLC notifies the National Insurance Contributions Agency, which adds a flag the student's National Insurance number.
- (b) For all such people, employers withhold (i) income tax and (ii) NICs as at present, plus (iii) the add-on of (say) 3p per pound of earnings.
- (c) Employers send all three payments to the Inland Revenue, who strip out the income tax payment and transmit the other two payments to the Contributions Agency.

- (d) The Contributions Agency credits the individual's National Insurance record and transmits the loan repayment to the SLC.
- (e) The SLC keeps track of the graduate's outstanding debt. When the loan is repaid, the SLC notifies the Contributions Agency which switches off the flag. Employers then stop withholding the add-on.

As discussed in section 2, these arrangements have major advantages: more and faster repayments, and lower administrative costs. These factors are critical — the better the performance of the repayment mechanism, the higher the price at which student debt can be sold.

There is no issue of principle in using NICs to collect private debt, since this happens already. Under present arrangements, people can (a) belong the state earnings-related pension scheme, paying NICs at the full rate, or (b) contract out and belong to an occupational scheme, paying NICs at the (lower) contracted out rate, or (c) contribute to a personal pension. In the case of (c), people pay NICs at the *full* rate. The personal pension component is stripped out once a year by the Contributions Agency and passed on to the individual's chosen pension scheme. Such monies do *not* count as part of public spending. This is an example of public collection on behalf of a private firm.

THE PROBLEM. According to the Office for National Statistics (ONS), when repayments are collected as above, lending to students counts as public spending because insufficient risk is transferred to the private sector, and also because the collection of repayments continues to be a public-sector activity. The private pensions analogy, it is argued, does not hold. The core business of personal pensions is to make the highest secure return for savers and then to provide pensions. Collecting contributions, though necessary, is not central. If the state assists with collecting contributions, it does not become involved in the core activity, which therefore remains private. Thus pension contributions are not counted as public spending. With loans, according to the ONS, the situation is different: collecting repayments *is* the core of the activity. If the collection mechanism is public, the activity becomes a state activity. Thus, the Treasury argues, *all* lending to students under the benchmark scheme counts as public spending. The scheme fails to bring any immediate private funding into higher education.

It is helpful to divide subsequent discussion into two questions: why should repayments be collected alongside NICs (section 2); and would the resulting scheme be private (section 3)?

2 Why Collect Repayments alongside National Insurance Contributions?

The short answer is — because NICs offer better value for money.

There is now universal agreement that loan repayments should be fully income contingent. It has been suggested that this can be achieved without NICs. This is true. Without NICs, however, the best that can be achieved are repayments based on a person's income in the preceding tax year, with two disadvantages: lower repayment flows and higher administrative costs.

Lower repayment flows arise mainly because, if income is assessed annually in arrears, the level of income at which loan repayments begin — for both political and administrative reasons — has to be higher than the lower earnings limit for NICs (£62 per week in 1997/98, or about £3225 per year). This reintroduces the costly deferment mechanism of the present system, under which a borrower can defer repayment if his or her income falls below a threshold (currently around £15,800 per year) equal to 85 per cent of national average earnings. Three illeffects follow. First, a deferment threshold higher than the threshold for NICs reduces repayment flows because more low earners make no repayment at all. Second, unless a taper is introduced (which would be administratively demanding and with potentially damaging incentive effects) a higher threshold also reduces repayment flows because all graduates, even the highest earners, pay less. Third, deferments are not only costly, but also make evasion easier, contributing to defaults. A threshold greater than the national insurance lower earnings limit, in short, reduces repayments from all graduates in a very dense part of the income distribution. One of the great advantages of NICs is that they collect on a current basis and can therefore tap into this part of the income distribution, thereby collecting at least some repayments from people earning just above £60 per week.

Higher administrative costs arise, first, because administering an income-contingent scheme is inherently costly. Since NICs are already in place, income-contingency through this route comes at zero marginal cost. Second, with repayment based on income a year in arrears, a mechanism is needed to protect people whose income fell sharply, for example someone who became unemployed or left the labour force to have a baby. This would be administratively costly. NICs, being levied on a current basis, deal with the problem automatically.

NICs thus have major advantages in value-for-money terms:

- there is less deferment, so that the *speed* of repayments is greater;
- there is no interest subsidy, so that the *volume* of repayments is greater;
- default is lower, again increasing the volume of repayments;
- administrative costs are low because the scheme piggy-backs onto an existing mechanism.

All four advantages depend critically on income-contingent repayments. Though these are possible by other methods, they are achieved most cost-effectively through NICs, which offer

the lowest politically and administratively feasible threshold for deferment, and thus make it possible to reach a part of the income distribution other methods cannot reach.

Concretely, under present arrangements deferment is around 47 per cent of current loans and the average default across all cohorts of borrowers around 8 per cent (Student Loans Company, 1996, Tables 10 and 15). Under the NIC proposals, in contrast, the combined effect of deferment and default (Barr and Falkingham 1993) is about 20 per cent. Thus the reduction for deferment and default could reach 55 per cent for the current system, i.e. the maximum price for student debt could be as low as 45 per cent of its face value, *with continuing Treasury support for the interest subsidy*; with the NIC scheme the price would be more like 80 per cent of its face value with no interest subsidy.

3 Ensuring that the Resulting Scheme Is Private

The ONS argues that if repayments are collected as in the benchmark scheme, lending to students remains a public-sector activity. There are three broad lines of counterargument:

- There is no problem (solution 1, below) because, with slight modifications to the proposed arrangements, the ONS worries can be assuaged.
- If there is a definitional problem, ignore it, either (solution 2) by accepting that net lending to students scores for public spending purposes or (solution 3) by removing net lending from the expenditure variable which is the focus of public policy.
- Alternatively (solution 4), the problem could be solved by further privatisation of the scheme's finance, its organisation or both.

Solution 1: Reject the argument

THE PUBLIC/PRIVATE MIX. In asking whether something is public or private, it is important to distinguish the *finance* of an activity from its *delivery* (for detailed discussion, see Barr 1993). A commodity like food is both financed and produced in the private sector, and is thus clearly a private activity. Health care provided by the NHS, being mainly publicly funded and mainly produced in the public sector, is clearly a public activity.

Such clear-cut cases are easy. Mixed schemes, however, are less easy to classify. An example of public funding of privately produced output is the assisted schools places scheme. Particularly relevant in the present context, British universities are to a significant extent publicly funded, though they are private institutions. It is also possible, to a greater or lesser extent, to

have private funding of a publicly produced commodity. When electricity production was still nationalised, for example, it was publicly produced, but financed, for the most part, by user charges paid by consumers out of their after-tax income. More topically, the same remains true of the London Underground.

In the benchmark scheme, the source of the greater part of student borrowing (the £1.6 billion figure) is private. The scheme, however, is publicly designed, and repayments are enforced by the Contributions Agency. Thus the scheme is largely privately *financed* but publicly *organised*. Herein lies the classification problem.

FINANCE: THE TREASURY/ONS VIEW. The ONS argues that the scheme is not private because the use of NICs reduces the risk faced by the private sector. To a significant extent this argument is based on a false analogy. If an activity is to be truly private, the private sector has to bear the risk. For the purposes of the Private Finance Initiative, the builders of a bridge like the Dartford Crossing should indeed face the risk that costs will be higher than estimated or revenues from automobile tolls lower. In the case of a bridge, the quantum of risk is fixed; the question is who should bear it. With the benchmark scheme, in sharp contrast, the use of a public-sector collection mechanism reduces the *total* amount of risk faced by *either* sector. That, indeed, is the whole purpose of using NICs to collect repayments. Each £2 billion of student debt has direct public spending costs of £400 million; financial markets bear the entire risk of repayments falling short of the £1.6 billion they paid for the debt.

In those circumstances, the SLC could sell directly to the private sector the right to the repayments of £2 billion of student debt; the private sector would pay (say) £1.6 billion and the Treasury would transfer to the SLC the remaining £400 million. Net lending by government in the year in question is thus £400 million; the remaining £1.6 billion is private lending. On the face of it, therefore, the finance of the scheme is mainly private.

The Treasury and ONS resist this approach, arguing that the £400 million public contribution top-slices the repayment risk. To spell out the ONS argument, suppose (model 1) that the government sells £2 billion worth of shares in a nationalised industry (British Telecom in the mid-1980s, for example), and suppose that the private market buys £1.6 billion worth of shares and a public agency the remaining £400 million. Under this arrangement, the basis of ownership is the same in both sectors, so both sets of owners face identical risks: if the share value rises, the private market and the public agency both make a profit; similarly both make a loss if the share value falls. In this case there is no problem in classifying the sales proceeds of BT shares as a reduction in public spending. To illustrate the analogue with student loans, suppose that (a) 20 per cent of all students study in London, (b) London students do not differ from other students (same costs of higher education, same earnings prospects, etc.), (c) non-London students borrow £1.6 billion (i.e. 80 per cent of total student borrowing) and (d) the

private market buys this debt for £1.6 billion. Thus, the market takes over 80 per cent of students, paying the full face value of their borrowing (see equation (1) in the Appendix). Such a loan scheme is unambiguously privately financed.

According to the ONS, that is not what is happening (model 2). The market is not paying the full face value of the debt of 80 per cent of students; it is covering the debts of all students, but pays only 80 per cent of the face value of their debt (equation (3) in the Appendix). The price of £1.6 billion is the expected repayment flow. The government's share of £400 million is the mirror image — it represents the expected loss on the portfolio. Thus, it is argued, the government top-slices the risk; the private sector faces only the *marginal* risk that repayments will be less than £1.6 billion.

COUNTERARGUMENTS. The main counter-argument is that there *is* a genuine transfer of risk to the private sector. In the benchmark scheme, the Treasury contribution is not a guarantee whose outcome is known only ex post; it is a *certain* item of public spending equal to the expected (i.e. ex ante) loss on the portfolio. The ex post risk falls wholly and unambiguously on the private owners of the debt. It is true that the Treasury contributes £400 million, but this does not top-slice the risk. As explained earlier (the Dartford Crossing example), the Treasury grant reduces the *mean* level of risk not the *variance* of outcomes faced by the private owners of the debt.

The £400 million Treasury payment can be thought of as a grant to cover the estimated non-repayment of a known group of people. It would be possible, for example, to pay the interest of graduates who are registered as unemployed or who work in the home bringing up young children. Under present National Insurance arrangements both groups receive a credit on their insurance record, i.e. the person is deemed to have a continuous contributions record for the period concerned. This removes defined categories of people from the risk pool. More generally, the greater part of the 20 per cent risk element could be detected *a priori* and therefore paid by the government as a subsidy. The risk of the remaining borrowers remains untouched.

The private sector faces the risk that actual repayments will be greater than or less than £1.6 billion. Barr and Falkingham (1993, 1996) estimate the risk based on 1985 data. Repayment flows in the future depend on a whole range of factors, including

- the movement of earnings relative to the lower earnings limit for NICs;
- levels of employment and unemployment, which depend *inter alia* on the economic performance of other countries in an increasingly globalised world;
- labour market participation, which will depend *inter alia* on fertility patterns, the availability, quality and price of child care, and any changes in social attitudes;
- migration; and
- mortality rates among working age people.

The private owners of student debt face the variance in repayments, which will depend on all these factors. It makes no sense to say that the private sector faces no significant risk.

A number of parallels exist. Career Development Loans allow people to invest in certain training courses. Banks give out loans, and can choose to whom they lend: banks collect repayments; government pays an interest subsidy until three months after the end of the training course; and government also guarantees defaults of up to 20 per cent of total lending. Because banks can choose to whom to lend *and* can write off losses of up to 20 per cent, they effectively face no risk. Career Development Loans thus pass the test of private-sector collection, but fail the test of genuine transfer of risk. The NIC scheme transfers much more of the risk to the private sector, since loans are larger and for a longer duration.

Another example is Housing Action Grants, under which the Treasury pays a subsidy (of the order of 50 per cent) towards the costs of new building by housing associations. The remaining costs are met from private sources and do not score as public spending.

From the Treasury/ONS perspective, a complete solution requires the public component of loan repayments to be reduced, if possible to zero. Later discussion (solution 4) suggests how this goal might be approached.

ORGANISATION. However the finance of loans is classified, the administration in the benchmark scheme is substantially public. The public sector controls the activity (a) by saying who is allowed to borrow and (b) because the collection of repayments via the Contributions Agency is a public-sector activity.

The ONS argues (separate from the risk-transfer argument) that net lending scores as public expenditure because repayment is still organised by the public sector; the scheme is unambiguously private only if the new, private owners of the debt are responsible for collecting and enforcing repayments. The Treasury/ONS position, in short, appears to be that *finance* can be private only if finance *and* delivery are private. That, however, is a very narrow definition. A counterargument is that schemes with private finance but public organisation, though not common, raise no problems of economic logic. That is precisely the argument made earlier — not that the entire loan scheme is private, but that its finance is largely private.

Opposing this view, the ONS might argue that if the private sector bought student debt for £1.6 billion and for some reason — perhaps gross maladministration — repayments fell well short of that figure, the SLC/Contributions Agency (and hence the public fisc) might be potentially financially liable. This argument, however, does not rest on economic logic but on political logic. It may be true as a matter of practical politics that the state has a potential

liability; but the same would be true, for example, if the National Westminster Bank were on the point of collapse. Yet nobody is denying that NatWest is private.

From the Treasury/ONS perspective, a complete solution requires the greater part of administration to be private. Later discussion suggests possible approaches.

One way forward is to acknowledge that mixed schemes — with finance mainly private but organisation mainly public — are a grey area so far as public expenditure classification is concerned so that, to a significant extent, the matter is a judgement call. One option, therefore, is to adjudge the benchmark scheme as private. If that solution is rejected, there are two lines of attack: to accept that the scheme is public (solutions 2 and 3), or further to privatise both the finance and the organisation of the scheme (solution 4).

Solution 2: Accept that net lending to students scores for public spending purposes

The reason we measure public spending carefully is because private activity (e.g. food, clothing, computers, haircuts) is usually more efficient than state activity. Thus the size and scope of state activity needs to be carefully monitored. Public spending on education has implications for taxation and incentives in ways that expenditure on food does not. Government therefore keeps much more careful track of education spending than of spending on food. However, if student loans are organised more efficiently via a public-sector collection mechanism than through private activity, rational policy would accept that they should remain a public activity.

There is just such an argument. As argued in section 2, NICs offer better value for money than alternative income-contingent mechanisms. Because there is less deferment, lower default and no interest subsidy, the flow of repayments is faster and larger; and because repayments piggy back onto an existing scheme, administration is cheaper. Two results follow: the price at which the Treasury can securitise the debt is higher; and in consequence, students can be offered loans on better terms. Better value for money manifests itself through both outcomes.

The argument can be strengthened by observing that, holding other factors constant, the public expenditure costs of net lending are only cash flow costs; in steady state net lending will be zero however loans are classified. If NICs are the most cost-effective way of collecting repayments, it would be inefficient to privatise collection. It makes no economic sense to buy a cash flow benefit to public spending at the expense of permanently higher resource costs.

Solution 2, in short, is not to worry if the loans count as public spending.

Solution 3: Remove net lending from the expenditure variable which is the focus of public policy

Government spending, like many economic concepts, can be measured in different ways. Net lending by government is a component of general government expenditure (GGE). However, the variable the UK government seeks to control is not GGE, but GGE(X), i.e. government spending excluding privatisation proceeds, lottery financed spending and dividend and interest receipts. It is possible (and, for the reasons given below, desirable) to exclude net lending to students from GGE. Such lending would still be part of public expenditure in national income accounting terms, but would not be part of the definition which government seeks to control.

Before discussing the advantages of this approach, a word on the government accounts (for fuller discussion, see *Financial Statement and Budget Report 1997-98*, especially Table 4.2). The public sector borrowing requirement (PSBR) is the measure of the public sector deficit used for UK government policy. An alternative measure, the general government financial deficit (GGFD), is the key target variable for measuring convergence under the Maastricht treaty. GGFD is concerned with the balance of real outlays. It differs from the PSBR in several ways: crucially, in the present context, it excludes net lending.

Why should net lending to students be excluded from the control total? The starting point is to ask why the government wants to control public spending. Two possible reasons are:

- to contain taxes; if this is the aim, government spending should be defined on a net basis, since taxes need to cover only net public spending;
- to contain the amount of the economy the government controls; if this is the aim, government spending should be defined on a gross basis.

UK government spending is generally defined on a net basis. Thus GGE should be defined in terms of the taxation necessary to finance it.

The issue, then, boils down to whether student loan repayments are a tax. A tax is a compulsory levy. Student loans, however, are voluntary: it is the student's choice to go to university; it is her choice whether to finance her education through loans or other means; and she can choose whether to take out a larger or smaller loan. In addition, loan repayments are 'switched off' once the loan is repaid; a tax goes on for life. Hence loan repayments are not a tax.

Thus there are powerful reasons for defining GGE(X) to exclude net lending to students.

- Loan repayments are not a tax; and most lending to students is from private sources. In terms of rational resource allocation as argued in solution 2 net lending to students from private sources should therefore be outside the public expenditure control total.
- Excluding such lending from GGE leads to a measure of public spending which ties in better with GGFD. Net lending to students remains part of public spending, thus conforming with international definitions, but does not contribute to the General Government deficit, thus conforming with Maastricht definitions.
- This approach answers criticisms of the current presentation of public spending, that the sale of existing student debt should be included alongside privatisation proceeds rather than as a negative component of education spending (the argument is that securitisation is a financial transaction, not an expenditure cut, and should therefore appear below the line rather than as in the *Financial Statement and Budget Report 1997-98* as a reduction in the expenditure of the Department for Education).

Finally, note that though GGE is subject to international statistical definitions, X is a Treasury definition. Thus Solution 3 could be implemented without reference to international conventions and, moreover, given the genuine case for excluding net lending from the control total, without exposing the UK to accusations of fudging the Maastricht criteria.

Solution 4: Further privatisation

If solution 1 is deemed not to meet the criteria for classification as a private-sector activity, and if solutions 2 and 3 raise no enthusiasm because of their potential vulnerability to short-term political influence, both finance and organisation can be privatised further.

REDUCED PUBLIC FUNDING. Loans pay both a risk premium and a time premium. The private sector will therefore pay more for student debt the larger the total repayment *and* the faster, correspondingly reducing the public contribution.

Mutual insurance. One way of increasing total repayments is to 'switch off' repayments with a lag of (say) three years. Since income-contingent loans have an end-loaded repayment trajectory, additional years of repayment significantly increase the total amount repaid (Barden, Barr and Higginson, 1991; Barr and Crawford, 1996b). This arrangement need not violate the integrity of the scheme as a genuine loan. A person who borrows to buy a house repays only

what she has borrowed; many lenders, however, make mortgage protection insurance obligatory. Student loans, similarly, could have a repayment component and an insurance component.

An even simpler way of covering a 20 per cent shortfall is for each student borrower to agree to repay 120 per cent of what he or she had borrowed. The cohort of students would thus mutually insure through what would, in effect, be a form of social insurance.

Targeted interest subsidies. A case can be made for using general revenues to make interest repayments (though not repayment of principal) on behalf of people caring for young children. They will disproportionately be women, whose repayment rates — not least because of time out of the labour force — are significantly less good than men's (see Barr and Falkingham, 1993, Tables 2B and 2C). The effect would be sharply to improve the performance of the loan element of the scheme. A similar policy might be adopted for people who are unemployed. Such changes imply additional public spending — from the social security budget, or through a transfer to the social security budget from the education budget, the employment budget or, perhaps, from a Learning Bank or similar institution. Whatever its source, such additional spending would be only a small fraction of the overall public expenditure savings from privatising student loans.

Speeding repayment is possible in several ways. First, as in Australia, the repayment rate could rise with earnings, e.g. an add-on of 3p at lower earnings, 4p around average earnings, and 5p at higher earnings. Second, it would be possible to charge a progressive interest rate — a subsidised rate at low earnings rising to a rate above the mortgage rate at high earnings. Repayment is faster, first, because the add-on rises with earnings to 4p and then to 5p. In addition, higher earners are typically homeowners, who therefore have collateral. By increasing their mortgage, they borrow at the mortgage rate which is below the (high income) student loan rate. Thus the arrangement allows young people to borrow when they have nowhere else to go, but gives them an incentive to switch from an unsecured to a secured loan when they are able to offer collateral, thus speeding up the repayment of student loans *qua* student loans. The result is good both in social policy terms (the added protection given to lower earners) and financial market terms (with faster repayments, private buyers will pay more for student debt).

Abolishing the upper earnings limit for NICs, at least for loan repayments, is another way of speeding repayment. It would probably also (though the matter is empirical) increase the fraction of total borrowing repaid.

A combination of such changes would increase the speed of repayment and push the volume of repayments towards 100 per cent of total lending, thus over time eliminating public involvement in the finance of the loan scheme *qua* loan scheme.

REDUCED PUBLIC ORGANISATION. It is possible to eliminate any possible ambiguity by making sure that (a) the money students borrow comes from the private sector and (b) the organisation of the scheme is private, in that the public sector is responsible for neither the collection nor the enforcement of repayments.

Privatising the SLC. The starting point is to privatise the SLC. The worry, however, is that any commercial owner would load the terms of loans in favour of the lender. There is, however, a solution which is feasible and, unusually, also optimal (Crawford and Barr, 1996). The proper owners of the SLC are the British universities. They are uniquely placed to own the SLC because they — alone — face a double market test.

- Students are their main business and therefore universities' priority is to get them the best possible deal.
- Simultaneously, universities face a financial market test, since they achieve the best deal for their students by obtaining the best possible price for student debt.

The ONS position appears to be that the SLC cannot *really* be privatised because there would be an implicit guarantee to bail it out if it went bankrupt or — if it were owned by the universities — to bail the universities out. This is, perhaps, true. However, as argued earlier, no government would stand by and let NatWest go bankrupt. If the logic of this argument is carried through, the government should include in public spending the operations of the major banks, or at least contingency amounts to bail out one (or more) major banks should they face difficulties. A similar case could be made for private pensions since, again, it would not be politically possible for government to stand by while a large pension fund failed. And if *possible* future liabilities (e.g. the possible need to bail out a private SLC) are included in public spending figures, then what about *certain* future liabilities, such as the present value of national insurance pension liabilities?

The purpose of the argument in the previous paragraph is to make the point that, at the margin, the boundary between public and private spending is a political judgement.

Collection of repayments by employers. Removing all vestiges of public involvement in collection and enforcement requires that repayments are collected by employers rather than the Contributions Agency. This involves re-casting the administration of the benchmark scheme.

(a) The government passes a law (or regulation) which imposes on employers the duty to collect student loan repayments and to pass them to the lender.

- (b) At the time a student takes out a loan, the SLC notifies the Contributions Agency, which adds a flag to his/her National Insurance number.
- (c) When the graduate takes up a job, her employer notifies the Inland Revenue and Contributions Agency in the normal way. The Contributions Agency then informs the employer that the person has an outstanding student loan, copying the notification to the SLC.
- (d) The employer, as currently, sends income tax and NICs to the Inland Revenue, which strips out the income tax payment and transmits the NIC to the Contributions Agency.
- (e) The employer *also* withholds (computer program or deduction table) the add-on of (say) 3p per pound of earnings, sending the repayment directly to the SLC.
- (f) Where employers fail to transmit repayments, the SLC (*not* the Contributions Agency) takes enforcement action (having received a copy of the Contributions Agency's notification to the graduate's employer).
- (g) The SLC keeps track of the graduate's outstanding debt. When the loan is fully paid off, the SLC notifies the Contributions Agency which removes the flag from the graduate's NIC and instructs the employer to stop withholding repayments.

The advantage of this approach is that the Contributions Agency *informs* employers and the SLC but does not *enforce* repayment. It does not become involved in the SLC's core activity but assists (a) by giving employers information which allows them to use NICs for cost-effective income-contingency on a current basis and (b) by giving the SLC information relevant to enforcement. Student loans are thus a private-sector activity under even the strictest interpretation of internationally agreed definitions.

The disadvantages are the inverse of the value-for-money arguments in section 2. First, the resource costs of administration will be significantly higher. Compliance costs to employers will be higher because they must now deal with two entities, the Contributions Agency and the SLC, rather than one. Costs for the SLC will be substantially higher because it must have direct dealings with all employers who employ one or more graduates *plus* all self-employed graduates. Thus the SLC would have to deal with (say) half a million entities, duplicating the contact those entities already have with the Contributions Agency. Under the benchmark arrangements, the SLC would deal with only one entity, the Contributions Agency.

The fact that the SLC has to deal with (say) half a million entities leads not only to higher administrative costs but also to higher noncompliance (i.e. default). When repayment is through the Contributions Agency the SLC can sell £2 billion of student debt for about £1.6 billion. With

repayment through employers the price will be less than £1.6 billion — because of the higher default rate and also (and contrasting with NICs) because the market would take a cautious view of a brand new collection mechanism. Even if the difference is only 5 per cent of the debt, the proceeds from debt sales would be reduced by £100 million (i.e. 5% x £2 billion) per year. As a parenthetical note, the market will also be unenthused about the present repayment mechanism. The 1996 budget proposed to sell the SLC's stock of loans. Under the present repayment regime, receipts will be considerably less than the 80 per cent which could be achieved if repayment were piggy-backed on NICs. To maximise receipts, the government should reform student loans, give holders of past loans a small incentive to switch to the new repayment mechanism, and *then* sell the debt.

Towards an optimal solution. A possible way out of this morass has three ingredients. Note that *all three* ingredients are essential — it is not possible to pick and choose. First, the SLC would be privatised, ideally through sale to the UK universities. Second, arrangements broadly in line with those just outlined would be enacted. Third, and crucially, the SLC would contract with the Contributions Agency to collect student loan repayments alongside NICs. Thus the procedure for (e), above, would be modified so as to tie in with (d).

The relationship between the SLC and Contributions Agency needs careful definition. The SLC would unambiguously be the responsible authority. The Contributions Agency could usefully establish a commercial arm. One part of the Agency would undertake what would, in effect, be tax gathering activities, the other would deal with such things as personal pension contributions, student loan repayments and the like. A possible analogy is Post Office Counters, which is owned by a public-sector body with the purpose of dealing with the private sector on a commercial basis. One of its tasks is to collect credit card payments and payments of gas bills on a for-profit basis (note that credit card bills and gas bills are not on that account regarded as public spending). With any such approach, the powers of the Contributions Agency's commercial arm with respect to loan repayments would need careful definition. Under one possible approach, the Agency would have the authority to *collect* repayment, but the SLC would *enforce* repayment in cases where the Contributions Agency reported delinquency.

4 Conclusion

The optimal solution. Student loans would thus be organised as follows. A private entity, the SLC, is responsible for collecting and enforcing repayments. The SLC contracts with the commercial arm of the Contributions Agency to assist with collection. The Treasury contribution would be reduced or, over time, phased out entirely, for example through mutual insurance by cohorts of students. Student debt would be sold directly to the private sector so that taxpayer involvement, if any, would concern only any subsidy element. Any subsidy would be transparent cand would not involve any guarantee.

An interim solution. If administrative impediments initially prevent the Contributions Agency from collecting repayments, the employer collection method discussed above can be used as a stepping stone. This has the key advantage of using NICs to collect repayments on the basis of current income, rather than income one year in arrears. The optimal solution would be phased in as soon as the administrative capacity of the Agency allowed. The higher sales price of debt under the optimal mechanism would make administrative upgrading immensely cost-effective.

Eventually, therefore, administration is entirely private except that the commercial arm of the Contributions Agency is involved; and Treasury money is increasingly involved marginally or not at all, so that the scheme is also almost entirely privately financed. Arranged in this way, the scheme achieves the educational benefits discussed in section 1 and the value-for-money benefits discussed in section 2 while simultaneously conforming with public expenditure classification criteria, thus ensuring that net lending to students does not score as public spending.

NOTES

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REFERENCES

Barden, Laing, Nicholas Barr and Gordon Higginson (1991), *An Analysis of Student Loan Options*, CVCP/CDP Occasional Paper, London: Committee of Vice-Chancellors and Principals and *Committee* of Directors of Polytechnics.

Barr, Nicholas (1993), The Economics of the Welfare State, 2nd edn, Oxford University Press.

Barr, Nicholas, and Iain Crawford (1996a), *Student Loans: Where Are We Now?* London School of Economics, Welfare State Programme, Discussion Paper WSP/127.

Barr, Nicholas, and Iain Crawford (1996b), 'Funding Higher Education in an Age of Expansion: Submission to the National Committee of Inquiry into Higher Education', Centre for Educational Research, London School of Economics, forthcoming, *Education Economics* 1998(1).

Barr, Nicholas and Jane Falkingham (1993), Paying for Learning, London School of Economics, Welfare State Programme, Discussion Paper WSP/94.

Barr, Nicholas, and Jane Falkingham (1996), Repayment Rates for Student Loans: Some Sensitivity Tests, London School of Economics, Welfare State Programme, Discussion Paper WSP/127.

Barr, Nicholas, and William Low (1988), *Student Grants and Student Poverty*, Welfare State Programme, Discussion Paper No. WSP/28, London: London School of Economics.

Crawford, Iain, and Nicholas Barr (1996), 'A Loan Source of University Income', *Times Higher Education Supplement*, No. 1259, 20 December, p. 11.

National Education Commission (1993), *Learning to Succeed*, Paul Hamlyn Foundation National Commission on Education, London: Heinemann.

Student Loans Company (1996), Annual Report 1996.

UK (1996), Financial Statement and Budget Report 1997-98, London: HMSO.

APPENDIX 1: PRIVATE FINANCE: WHO BEARS THE RISK?

Let:

D = total borrowing by students (£ million)

of which

F comes from private financial markets G = student borrowing financed by government

Further, let:

p = the price at which debt is securitised, as a fraction of the total debt (0 ; <math>q = the fraction of student borrowing covered $(0 < q \le 1)$.

In model 1:

$$F = pqD = (1)(0.8)(1000) = £800$$
 million (1)

G =
$$p(1-q)D = (1)(0.2)(1000) = £200 \text{ million}$$
 (2)

In equation (1) the private sector pays the full face value of the debt (p=1), but buys the debt of only 80 per cent of students (q=0.8). The government buys the debt of the remaining 20 per cent of students (equation (2)).

In model 2:

$$F = pqD = (0.8)(1)(1000) = £800 \text{ million}$$
 (3)

$$G = D - F = (1-p)qD = (0.2)(1)(1000) = £200$$
 million (4)

In equation (3) the private sector buys the debt of all students (q=1), but pays only 80 per cent of the face value of the debt (p=0.8). The government's share is the difference between total student borrowing and the amount, F, the market is prepared to pay for it.

The central difference, according to the ONS, is that in equation (1), p=1; in equation (3), in contrast, p=0.8. The government, according to this view, is subsidising the price at which the private sector can buy the debt, as shown by equation (4). Though the private sector is genuinely financing student borrowing in equation (1), it is not, according to the ONS, doing so in equation (3).