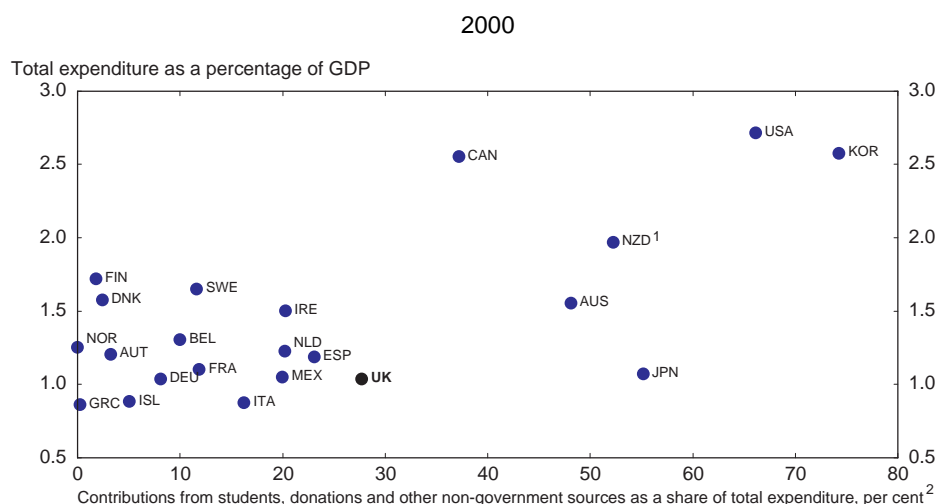


**OECD ECONOMIC SURVEY OF THE UNITED KINGDOM:
GRADUATE CONTRIBUTIONS FOR HIGHER EDUCATION**

*This is an excerpt of the OECD Economic Survey of the United Kingdom, 2004,
from the section on raising skills in chapter 4 together with annex 4.A1.*

Improving higher education is vital for economic growth, and whereas the United Kingdom and most European countries spend around 1 per cent of GDP on higher education, Canada and the United States spend around 2½ per cent of GDP. The total level of spending on tertiary education tends to be higher in countries that rely not only on government spending but also have substantial contributions from students, donations and other non-government sources (Figure 4.7). Those countries – Canada, the United States, New Zealand and Korea – that have been able to channel more than 2 per cent of GDP into tertiary education all raise a substantial share of funding from these alternative sources. For the United Kingdom, at slightly over one-quarter, this share is higher than in many other OECD countries, but is well below the share in the countries that spend the most on tertiary education.

Figure 4.7. Expenditure on tertiary education institutions



1. For New Zealand, OECD education data only has information about public spending. Other spending components are estimated based on the Statement of Financial Performance for tertiary education institutions from the cash flow from tuition fees, revenue from services provided, investment income and other sources. Using the same data source to estimate public spending produces results that are consistent with what the New Zealand authorities report to the OECD Education data.

2. Net of tuition fees paid by government.

Source: OECD, Education Database and Statement of Financial Performance for tertiary education institutions in New Zealand.

Given the growing constraints on public finances, it would be difficult to raise large amounts of extra funding for British universities via general taxation, nor would it be fair when considering that the

individuals endowed with education enjoy large gains from it. In particular for higher education, the private returns are large, and in the United Kingdom those with a university degree earn, on average, about twice as much as those without post-compulsory education. Because of this large wage differential and because, as in other European countries, most of the spending on higher education is paid out of the public purse, the average economic return to individuals taking higher education is probably the largest in the OECD (Blöndal *et al.*, 2002).

Against this background, the government's plan for a graduate contribution scheme is commendable. Since 1998, students in all universities and across different subjects have paid an annual tuition fee, which was £1 125 in the academic year 2003/04. In practice, though, many are exempt because of the income situation of their family, with 43 per cent paying nothing and 16 per cent paying only part of the tuition fee. The problem with this arrangement is that if tuition fees are raised in order to meet the funding needs of universities, having to pay more up-front can become a barrier for students. The plan for a graduate contribution scheme launched in a recent white paper on "The future of higher education" (Department for Education and Skills, 2003a) will deal with this problem by allowing all students to defer the payment of all fees until they have graduated. The scheme will have two effects: it overcomes the credit constraint that would typically prevent students from borrowing against their future income; and it provides insurance as graduates will only be required to pay instalments when their annual income exceeds £15 000. Universities will be allowed to charge up to £3 000 a year, and a number of universities have indicated that they will go to this maximum level when the scheme is implemented from 2006. The exemptions based on family background will continue to apply for the basic fee of £1 125, and a new grant to students from low-income families will supplement the existing student loan for living costs which is available at a maximum £3 905 a year to students from low-income families studying away from home.¹ This package of changes will increase the opportunities for students from both high and low-income background, and the graduate contribution scheme will generate an amount equivalent to about 0.2 per cent of GDP.²

In the current UK debate, it is sometimes argued that funding higher education by individual loans rather than taxes could discourage students from poor families, and that it is unfair that very successful graduates will end up paying a smaller share of their income than less successful graduates. These arguments miss the point that social gradients in access to higher education, and equity in educational attainment more generally, are primarily determined by cognitive developments in early childhood and the foundation laid during school (Carneiro and Heckman, 2003). Indeed, much of the rise in education spending since 1997 has gone into improvements in nursery education with the Sure Start programme and in compulsory education notably improving the achievements by relatively more in schools in disadvantaged areas. Maintaining these improvements while expanding higher education based on contributions from those who benefit from it rather than based on general tax revenues is the most direct way to ensure equity in education outcomes. Introducing the graduate contribution scheme will in a sense increase redistribution by channelling funding to students (that have low income while studying) and taking a contribution when they graduate and earn a high income (Goodman and Kaplan, 2003). Such redistribution over each person's lifetime is preferable to fee exemptions, below-market interest rates and other subsidies for students with a low-income background which have ambiguous effects on equity, as they redistribute income to individuals that may be poor today, but over their lifetime are more affluent than the average tax payer (Barr, 2003a, 2003b). Rather than such subsidies, resources are better spent on other forms of pro-access policies, for example rewarding universities for attracting students from non-traditional backgrounds, as also proposed in the government's white paper.

Concerns have been voiced that it might become more difficult to recruit certain public professions like teachers and nurses that have fairly long education relative to their pay levels, as young people would opt for careers with better earnings opportunities. However, public employers could offer to cover part of their graduate contribution.

A few other OECD countries have arrangements that are similar to the UK graduate contribution scheme (**Annex 4.A1**). In Sweden, as in the United Kingdom, student loans for living costs are repaid on an income-contingent basis, and large tuition fees are common in North America and Japan, but so far only a few countries including Australia and New Zealand fund tuition costs via income-contingent contributions from graduates. Consequently, the UK graduate contribution scheme could be a role model for other countries in Europe that may also have to reconsider the adequacy of their higher education systems in a modern knowledge-driven economy and *vis-à-vis* North America.³

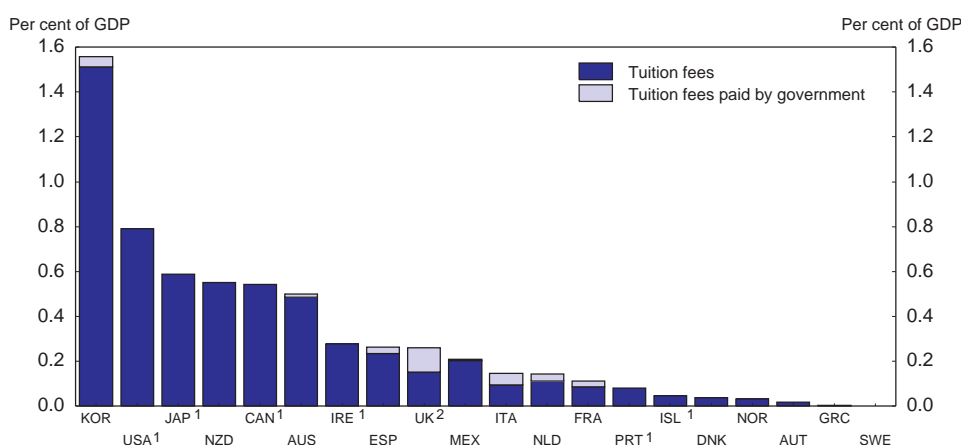
Annex 4.A1. Funding of tertiary education in OECD countries

While participation in tertiary education in nearly all OECD countries rose during the second half of the 1990s, expenditure on tertiary education as a share of GDP was, on average, little changed.⁴ This partly reflects funding mechanisms that were designed for a different era and which constrain the amount of funding coming from non-government sources, while at the same time competing demands on aggregate public expenditure may have squeezed out public finance of tertiary education. This annex reviews tuition fees and public loan schemes for tertiary education in OECD countries, in order to put the recent UK proposals for the graduate contribution scheme in international context.

Variability of tuition fees

Any increase in the total expenditure going into tertiary education is likely to involve an increase in tuition fees. The funding for UK tertiary education institutions coming from tuition fees paid by students is equal to 0.15 per cent of GDP, much smaller than in Korea, the United States, Japan, New Zealand, Canada and Australia, although quite high relative to many European countries, where tuition fees only exist for limited parts of tertiary education (**Figure 4.A1.1**). Tuition fees can vary across subjects and across universities for the same subject or degree. The United Kingdom has so far applied a common level of fees across subjects and universities,⁵ whereas most of the other OECD countries charging tuition fees (with some exceptions such as the Netherlands) allow some variation. The UK government's proposals would allow universities to charge up to £3 000 per annum per student,⁶ which could increase total tertiary education funding by up to 0.15 per cent of GDP, raising expenditure on tertiary education expenditure by around one-seventh relative to current levels.⁷

Figure 4.A1.1. Tuition fees in tertiary education
2000



1. No information on how much of tuition fees are paid by government.

2. 1999.

Source: OECD, Education Database and Statement of Financial Performance for tertiary education institutions in New Zealand (see footnote 1 of Figure 4.7).

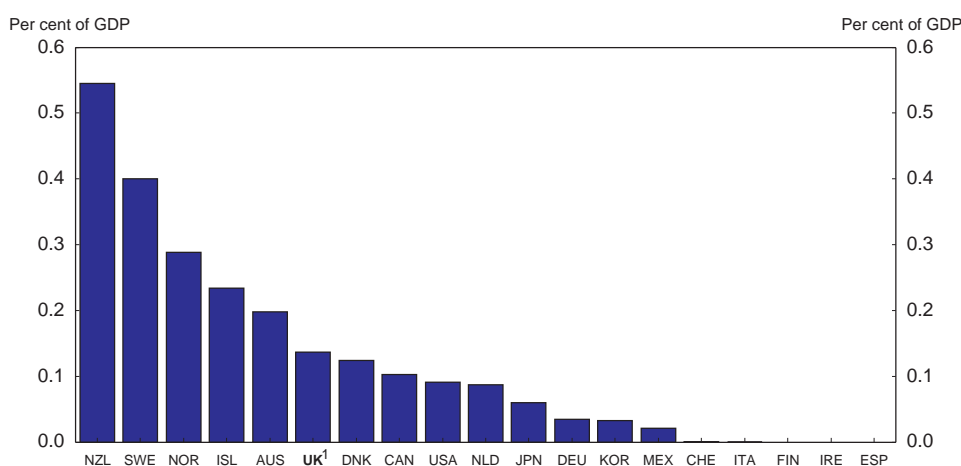
In countries where the level of tuition fees varies across *subjects*, it is typically low in arts and high in medicine with science and law courses varying between these two extremes (for example in Australia, Ireland and New Zealand). This is arguably both fair and efficient, given the higher costs of such courses and that graduates from these courses typically earn higher incomes. Nevertheless, there are difficult questions concerning whether there is a case for subsidising particular courses which might be judged as important for promoting growth. For example, the New Zealand government is considering re-orienting public funding in order to address the relative shortfall of engineering, mathematics and computer-science students compared with other OECD countries (OECD, 2002c). But even in such cases it would appear preferable if the extent of any subsidy is explicit, rather than implicit because a uniform fee is imposed across all courses.

In those countries where fees can vary across *universities* for the same subject or degree, very different outcomes can be observed. For example, in the United States fees vary substantially across universities, as notably private universities charge fees that are several times higher than the average of about USD 6 000. The level of tuition fees in the US public sector is typically decided by the university itself, but in many states there are regulations limiting the level of fees charged for students coming from within the state. Over the 1990s, the level of tuition fees rose rapidly to offset declining public funding, illustrating that variation in tuition fees can provide an important safety valve during periods of fiscal consolidation.

Availability of student loans

Many OECD countries operate some form of public student loans to finance tuition fees and/or living costs. However for only few countries including Australia, Iceland, New Zealand, Norway and Sweden do student loans amount to 0.2 per cent of GDP or more, with New Zealand having the highest level of student loans equivalent to more than ½ per cent of GDP (**Figure 4.A1.2**). Student loans are in some cases tied to the payment of tuition fees, as with the Higher Education Contribution System in Australia or the proposed Graduate Contribution Scheme in the United Kingdom. Alternatively, as in the Netherlands, New Zealand and the United States, loans schemes help students finance the tuition fees, but lending is not tied to tuition fees, and the same conditions apply whether a student borrows to finance tuition fees or living costs (**Table 4.A1.1**).

Figure 4.A1.2. Public loans to students in tertiary education
2000



1. 1999.

Source: OECD, Education Database and Statement of Financial Performance for tertiary education institutions in New Zealand (see footnote 1 of Figure 4.7).

Table 4.A1.1. Funding of tertiary education in OECD countries
Countries having fees and loans with income-contingent repayment

	Australia	Netherlands	New Zealand	United Kingdom ¹	Sweden ²	United States ²
Total public and private expenditure for educational institutions, % of GDP	1.55	1.23	1.98	1.03	1.61	2.66
Public	0.80	0.98	0.98	0.76	1.42	0.90
Direct expenditure for institutions	0.79	0.95	0.98	0.65	1.42	0.90
Grants to help students pay tuition fees	0.01	0.03	0.00	0.11	0.00	..
Private	0.75	0.25	1.00	0.27	0.19	1.76
Tuition fees paid by students (net of grants above)	0.48	0.11	0.55	0.15	0.00	0.79
Other private sources including donations	0.26	0.14	0.45	0.12	0.19	0.97
Public student loans³	0.20	0.09	0.54	0.14	0.40	0.09
Public grants to students for living costs	0.15	0.24	0.25	0.13	0.19	0.00
Tuition fees						
Can fees vary across ...						
... subjects	Yes	No	Yes	No ⁵	..	Yes
... universities	No ⁴	No	Yes	No ⁵	..	Yes
Financing/loan schemes ... tied to tuition fees	Higher Education Contribution System ⁵	None	None	Proposed: ⁵ Graduate contributions	No fees	None
Income contingency of repayments	Progressive rates on total income, if income above 55% of APW			Repayment of 9% of income over 75% of APW		
Interest rate	Zero real			Zero real		
... untied, including living costs	Financial Supplement loans ⁷			Maintenance loans		Federal ¹⁰ scheme
Income contingency of repayments	No repayments while income is below 75% of APW	Not automatic, but can request respite if low income	Repayment by 10% of income over 40% of APW	Repayment by 9% of income over 50% of APW ⁸	Can reduce repayments temporarily to 5% of income ⁹	No
Interest rate	Zero real	Approximate market rate	Zero nominal while student, thereafter 7%	Zero real	Slightly subsidised	Slightly subsidised

Note: Expenditure data refer to 2000; Qualitative information refer to academic year 2003/04 or latest available year.

1. Expenditure data refer to 1999 for the whole of the United Kingdom, as the data for 2000 on student loans are incomplete.

2. The United States and Sweden are included as a basis for comparison because of their particular experience although the United States does not have income-contingent loans and the Swedish loans fund only living costs.

3. Reflects gross lending to students. It is not possible to distinguish loans tied to payment of tuition fees from loans to finance living costs.

4. The Australian government has recently announced partial deregulation of tuition fees.

5. As part of the proposed changes, fees will be allowed to vary across subjects and universities up to a ceiling of £3 000. The details of the future Graduate Contribution Scheme which is to become operable from 2006 may still change as the proposal goes through Parliament.

6. Similar conditions apply for the Postgraduate Education Loan Scheme and the Bridging for Overseas-Trained Professionals Loan Scheme.

7. Financial Supplement Loans will not be available after 2003.

8. The threshold for repayment will increase to 75% of APW gross wage earnings from 2005.

9. Refer to loans issues since June 2001.

10. Many states have schemes that supplement and may differ from the federal scheme described here. Data in the table include both federal and state loans.

Source: OECD, Education Database, and Statement of Financial Performance for tertiary education institutions in New Zealand. Descriptions of tuition fees and loan schemes are based on official publications from member countries including the international comparisons in New Zealand Ministry of Education (2003) and on Barr (2001).

In some countries the limited use of loans should be seen in the context of significant public grants, in some cases targeted at students from low-income families. Moreover, the dividing line between loans and grants can be blurred, as in the Netherlands, where all students living away from their parents receive a basic grant of about EUR 2 600, and a supplementary grant is available for students from low-income families. Both grants are initially made as loans that are then converted to grants providing students meet minimum academic criteria, which most do.

Insurance via income contingency for repayments

A way of reducing the risk carried by individuals investing in their own education is to make student loan repayments conditional on graduate income. In Australia, New Zealand as well as in the United Kingdom with both the current maintenance loan and the proposed Graduate Contribution Scheme, the speed of repayments depends on graduate income (**Table 4.A1.1**). Hardship procedures may to some extent replicate income contingency, and exist in most countries, such as the Netherlands, where persons with low income can request temporarily reduced repayments.⁸ Income contingent repayments, however, can be thought of as a less bureaucratic alternative to hardship procedures. Moreover, in the United States where the obligation to repay loans does not depend on graduate income, the default rate is high, in particular for persons having studied at vocational institutions. In Sweden, repayments on loans to cover living costs used to be 4 per cent of a graduate's income. Now, although repayments will be initially independent of income, graduates are entitled to have repayments reduced to equal no more than 5 per cent of their income. This, however, does not reduce the period over which loans are to be repaid, and consequently the borrower will have to pay more in later years.

The income threshold at which repayment begins for the UK maintenance loans is currently £10 000, which at roughly half the gross earnings of the average production worker,⁹ is close to the thresholds applied in Australia for the Higher Education Contribution System and in New Zealand (**Table 4.A1.1**). As part of the proposed changes this threshold will rise to £15 000 and be equal to the threshold that will apply for the Graduate Contribution Scheme, making the insurance provided by income contingency greater than in other OECD countries.

Interest rate subsidies

Some student loan schemes imply a significant subsidy from low interest rates. In New Zealand, an interest rate similar to the market rate was applied to student loans until 1999, whereas today loans are interest free while the person is still a student. This implies a subsidy of a magnitude similar to one third of the 0.54 per cent of GDP lent to students, illustrating how expensive it can be to have below-market interest rates. Applying a zero real interest rate throughout the loan period as currently with the maintenance loans in the United Kingdom and suggested for the Graduate Contribution Scheme implies an even larger subsidy, equal to about half the value of lending.¹⁰ Broad interest rate subsidies, however, do not necessarily help those who need it most, and applying an approximate market rate as in the Netherlands (2 percentage points above long-term government bonds), or a slightly subsidized rate as in the United States (which has variable rates capped at 8¼ per cent) and Sweden (**Table 4.A1.1**) would therefore free substantial resources for pro-access policies that could have a much bigger impact on improving equity of access.

Effects on access equity

A central concern for the design of education funding is how it affects equity of access. As argued above, the main determinant of who will benefit from post-compulsory education is likely to be cognitive developments in early childhood and the foundation laid during compulsory education. But even focusing narrowly on the effects of letting students or graduates contribute to the cost of tertiary education, most studies find little or no sign of adverse equity effects from well designed schemes.

New Zealand is a particularly clear example. Since the introduction of student loans in 1992, participation in tertiary education has almost doubled, and the number of young people entering tertiary education is today the highest in any OECD country. Moreover, the share of students from Maori and Pacific ethnic groups increased from 9 per cent in 1990 to 24 per cent in 2001. A key reason for this expansion has been that loans were available for any approved tertiary institution and that public funding for tertiary education institutions was reformed towards an equal per-student funding for public and private institutions. That led to an explosion of small, innovative vocational education providers who better reached students from non-traditional ethnic and socio-economic backgrounds (OECD, 2002c).

On the other hand, countries trying to widen access by introducing or increasing grants to cover student living costs have had only little success. When back in the mid-1970s Australia abolished tuition fees and introduced grants, it had only little effect on the socio-economic mix of students. Nor has the socio-economic mix of students changed following the re-introduction of tuition fees in 1989 based on income-contingent loans (Blöndal *et al.*, 2002; Chapman and Ryan, 2002).

High *up-front* tuition fees, however, requires students to finance tuition by private borrowing to the extent that they cannot cover the fees via support from their family or by working while studying. In the United States, the 0.09 per cent of GDP made available via public student loans is supplemented by an estimated 0.23 per cent of GDP via loans from private entities (some of which have a government guarantee), but the sum of these lending streams is still significantly lower than the tuition fees paid by students amounting to 0.79 per cent of GDP, which could indicate that students are credit constrained. In other countries the extent of lending to students from private entities is smaller.

Studies from the UK Universities and Colleges Admissions Service indicate that while the tuition and living costs of taking tertiary education (and the associated accumulation of debt) is a source of concern for potential applicants (UCAS, 2002), the replacement of grants with loans and the introduction of tuition fees in 1998 did not affect the social-class mix of entrants to university adversely, and the proportion of ethnic minority entrants and women has grown since then (UCAS, 2000).¹¹

Overall, the experience of countries that have combined an increase in tuition fees with an increase in student loan facilities suggests that there are no significant adverse effects on participation, as concluded by Blöndal *et al.* (2002).

NOTES

1. For the student loan for living costs, introduced in 1998, repayments are already income contingent, as graduates pay 9 per cent of their income above a threshold of £10 000 a year, until the loan is fully amortised.
2. The actual level will depend a lot on the extent to which universities raise their charges from the level of the current fees.
3. In the Netherlands, individual loans fund part of tuition costs, and if the income of a graduate falls below a threshold she/he can request to pay less in the given year. This administrative procedure has to be renewed each year, although after 15 years any loan not repaid is forgiven.
4. For figures on the rise in participation in tertiary education see indicator C2 of *OECD Education at a Glance*. For figures on the share of expenditure on tertiary education in GDP see indicator B2 of *OECD Education at a Glance*. For the 25 OECD countries for which data is reported for both 1995 and 2000, the (unweighted) average of expenditure on tertiary education as a percentage of GDP is the same in both years. In the United Kingdom, enrolment in tertiary education has almost doubled since 1989, but this has not been matched by spending increases, and consequently spending per student has declined by 37 per cent in real terms between 1989 and 2002.
5. Means testing, however, makes about half of all students exempt from the current fee, in which case universities receive a fee payment from government as illustrated in **Figure 4.A4.1**.
6. For the first £1 125 the current means testing would continue to apply.
7. This estimate is based on information in a government written answer to a parliamentary question (Hansard 12 November 2003, Column 354W), indicating that if all universities go to the maximum fee level of £3 000 then the extra revenue will amount to £1.4 billion for England which is about 0.15 per cent of England's GDP. This is in addition to about £0.5 billion currently paid in up-front fees that in the future will also be paid via the Graduate Contribution Scheme. Together, this equals 0.2 per cent of England's GDP. Growing student numbers may raise this figure in the future.
8. In New Zealand, persons with high debt relative to their income get part of the interest written off which adds to the insurance from income-contingent repayments.
9. Data on the gross earnings of the average production worker for OECD countries in 2002 can be found in **Table 3.4** OECD (2003g).
10. The extent of subsidy will depend on how real interest rates evolve on capital markets in the future and can therefore only be roughly assessed now (IFS, 2003).
11. As the fees introduced in 1998 apply only to students from families with income over a certain threshold, their introduction could in principle have led to a wider social-class mix of student if persons having to pay the fee had felt discouraged. In practice, this effect has been insignificant.

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