

Proposal for the financing of education after compulsory schooling

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ABSTRACT

In making the case for more rather than less university provision a responsible approach must recognise the force of the criticisms that are made regarding the role of Universities here and in the U.K. (where the situation is not dissimilar), must take account of the considerable degree of resentment of University privilege in the community generally and amongst some politicians in particular, and can benefit from the debate which followed the floating of similar ideas in the U.K. a few years ago.

Introduction

Speaking at Victoria University last year the Minister of Education¹ made it clear that some of the questions he raised found their origin with the Treasury. I share his view that the quarrel with the Treasury is often not with the questions they raise but with the answers they propose. These answers are often based upon a spurious so called "User Pays Principle". To the extent this "Principle" is simply a front for cutting down on university provision along with public expenditure generally, its application is wholly inimical to hopes for increased economic prosperity in a future oriented to knowledge-based growth.

In making the case for more rather than less university provision a responsible approach must recognise the force of the criticisms that are made regarding the role of Universities here and in the U.K. (where the situation is not dissimilar), must take account of the considerable degree of resentment of University privilege in the community generally and amongst some politicians in particular, and can benefit from the debate which followed the floating of similar ideas by Sir Keith Joseph in the U.K. a few years ago. That Sir Keith eventually climbed down illustrates the difficulties governments face in withdrawing any middle-class subsidy (which is what is provided, as Russell Marshall states, by even the extremely open, very low cost university system here in NZ). Here, as elsewhere, non-target beneficiaries in the middle-classes adapt preferentially to subsidies initially intended to benefit the less well off. Here, as elsewhere, the challenge is to maintain provision as a dynamic concept in which the nature of provision changes in response to such changes in society.

The University in Society

To quote an overseas authority² on the role of the university in society;

"Today, on both sides of the Atlantic, the university in the modern world is a subject of continual discussion. Never before - hyperbole may for a moment be permitted - have the hopes and fears

of civilization depended so completely on institutions of higher learning. The faith which the nineteenth-century placed in the evolution of parliamentary government has now shifted to universities. Where the nineteenth-century believed the historical aspirations of mankind would be fulfilled by the progressive development of representative institutions, the twentieth-century looks to universities to confront the profound implications of technology and population growth. The public is almost daily assured, and the academic community flattered, that without the large, modern, research oriented university, contemporary society could hardly meet the obligations before it.

The modern university is like Proteus, many things at once, and the colour or form it assumes depends on how it is viewed or grasped. The functions it must perform for industrial society are almost beyond imagination. It must provide both immediate and long-term advice to business and the governments, local and national. It must supply professions new and old with standards and leader's, devise solutions for urban congestion and environmental pollution, and outline procedures for securing the high degree of labour mobility essential to a computer world. The modern university is often an important component of economic progress in a direct way. It can be a major employer of labour and a major consumer and therefore essential to the prosperity of contiguous communities. The modern university must provide for the culture of the inner man as well as the comfort and security of the outer. In the United States it must frequently make up the cultural deficiencies of urban, suburban or rural areas in which it may be situated, providing art, music and architecture that the surrounding community has neglected and may be in danger of forfeiting. In both the United States and Britain, as computer technology alters the work ethic which has done so much service to industrialization, the university faces its greatest challenge in education for leisure. The older ideals of a liberal education and self-cultivation, as some have prophesied, may well prove even more important a function of the university than staffing the technocracy".

Evidently even in a less hopeful decade than the 1960s - when "unemployment" rather than "leisure" might end the penultimate sentence - the university delivers much to the community beyond a supply of trained minds. Some such services can command payment but the majority, including the University's role in advancing knowledge and providing constructive criticism of social trends, are public goods to which the application of the so-called "user pays" principle is wholly inappropriate.

Nevertheless, it is for the supply of trained minds that the university most readily springs to mind amongst the voting public. Apart from an economist's perspective, this paper is informed by a hunch, or maybe prejudice, that the ability of universities to fulfil that role has been vitiated by trends in the wider culture. The writer spent most of the decade 1953 to 1963 at Cambridge University which concurrently underwent the experience of the ending of conscription (National Service). There is no doubt that the quality of university life and education suffered a sharp deterioration as a consequence of the relative immaturity of students entering straight from school. Nevertheless, at that time, the entrants had moved through a grindingly demanding 6th Form approach to Scholarship and 'A' Level examinations in anticipation of a relatively relaxed university experience. Nowadays, earlier adolescence and the Americanisation of educational systems and expectations, seems to have led to High School becoming increasingly an experience in social rather than educational development, without the compensatory change in work commitment at the tertiary level which characterises the American system. In brief, many students seem to expect to date their way through from intermediate school to graduation, without ever going through a sustained and demanding learning experience. Peer group pressure discourages heavy application and the grading of degrees serves to provide a screening system (to measure relative ability) rather than the quality assurance that would enable NZ graduates to perform competitively in world markets. Without patronising, it may be unrealistic to compare the largely scholarship grade entry to Cambridge with the run-of-the-secondary-school-mill NZ university intake, but the point of this excursion is not to make pejorative comparisons. Rather is it to suggest that changes in the financing of education which encourage a more mature approach to study - and more mature students - are to be welcomed rather than resisted.

An important factor in such a trend could be the emergence in NZ of the concept of Recurrent Education embodied in the ILO Convention of 1974, already implemented in the legislation of a number of European countries.³

Problems in the market for higher education

From the perspective of an economist, university provision, like other forms of education and training, is investment. It is investment in “human capital” and just as needed for future prosperity as is expenditure on physical capital assets. Aircraft need pilots, computers need programmers, factories need engineers, etc. As Russell Marshall said “no modern society can adapt to the fast-changing world without a well developed system of continuing education and universities have a vital role to play in that”. New Zealand spends less per capita on education than other developed countries for instance around a quarter of the figure for Sweden, and around a third of the figure for such countries as Switzerland, Holland, Belgium and Germany. The economic perspective points towards the finding of financing packages that enable the targeting and delivery of educational subsidies to be improved to a point where a consensus may be reached on the need for more rather than less provision.

An appreciation of the role of current education provision as investment in future prosperity won popular and political recognition in the UK with the 1963 Robbins Report on Higher Education. A barrier to adequate private provision lies in the riskiness of such investments: we have only one life each in which to invest human capital and a mistaken investment cannot, for the individual, be offset by other such investments. Maybe the menopause, male or otherwise, provides opportunity for reappraisal and re-investment but, at any stage in life, risk aversion will lead to under-investment in human capital if all costs and benefits fall on the individual. There we have, perhaps, the classic application of the argument for the public sector to pool single risks which are too great for individual agents in the market to undertake, but by which, if they are not all undertaken, society as a whole will be the poorer.

A further barrier to the efficient working of markets, including the market for human capital formation, is lack of access to relevant information regarding quality and price of the goods traded. The market for lemons is the celebrated illustrative case: if they do not know whether they are buying a lemon or a second hand motor car, the price buyers will pay for the useful article is diminished by ignorance as to whether it is a lemon. As a consequence the prices of second hand goods are depressed by buyers’ deduction of a risk factor so that sellers, wishing to dispose of genuine second hand goods, have to accept a reduced price: maybe reduced so far as to render the seller unwilling to trade. Consequently, mutually beneficial contracts are frustrated and the market mechanism fails to deliver that best of all possible worlds of which Adam Smith sings the praises.

In the field of tertiary education, imperfections of information are pervasive. Children of school leaving age have scant information on which to base decisions about further education. It is known that the most important factor associated with the wide variations in staying on patterns in British schools is the length of educational experience of their parents (not, despite the important connection of education and income explained by human capital theory, the income of parents: the children of parents who are well off but who lack higher education are not particularly likely to go to university). Beyond parental experience, teacher influence and the general ethos of the child’s school are important factors.

We might conclude that choices regarding tertiary education made at school leaving age are not personal choices within the concept of consumer sovereignty that drives the market model, but social choices determined by accidents of parentage and cultural milieu. If the view were taken that school leaving age is the only time to go on to university - and if the lessons of human capital theory are combined with the political imperative towards a growing economy - we are driven inescapably in the direction of the Robbins Report. More school leavers must go to university not because they

want to but because the country needs them to. It is highly authoritarian, paternalistic and 'less market oriented' to assert that, if they subsequently make higher incomes, they should then be expected to pay back the cost of the university education which society pushed them into. The corporate state indeed.

If, on the other hand, the view is taken, in line with the hunch or prejudice described above, that university is best not entered⁴ until the student's wider experience and maturity motivates him to do so, then the model of personal investment in one's own human capital becomes relevant in the sense that such investment choices would be made with some knowledge of the relevant information. Not only information as to the dead-end nature of job prospects for unqualified workers but also as to life interests and vocational needs that might be met by suitable course selection.

Apart from this radical argument in favour of deferred university education, considerations of informational gaps point to under-investment in human capital by school leavers. Accordingly these proposals place the timing of a transition from free provision to loan financed provision not never - as currently - not at school leaving - as we believe the Treasury would have it (or before?) - but after the first year at university.

A caveat

As we have said, the broad argument that, since Robbins, has justified expanded university provision at the public expense has been an efficiency argument concerned to develop growth potential with injections of human capital. The risk pooling argument may have been so obvious as to have gone unstated as the basic rationale for general student subsidisation. It is an argument that should not be lost sight of out of idealistic concern for the perverse distributive effects of higher educational subsidies or out of mindless application of the so-called user pays approach. If the money is alternatively spent on improved access to universities by currently disadvantaged groups, it by no means follows that such access will be taken up. With access by the better off dependent upon risky and only partially informed individual investment in one's own human capital there would be a danger of improved access but reduced entry. Then would the baby indeed be gone out with the bath water.

Equity

Much research that followed the expansion of tertiary education focused on the equity issue. Equity issues involve comparisons between benefits provided to one individual in society and those provided to another, which cannot be considered in an absolute sense without making 'normative' value judgements regarding interpersonal comparisons of merit-worthiness. This economists avoid by relating the efficiency to different policies in the delivery of a given package of benefits to different classes. For instance, is it effective to give university education to the better schooled offspring of middle-class parents and redistribute their (eventual) high earnings to the low achievers amongst their age cohort? Or would it be better to discriminate positively in favour of children from low income families in order to get more access to university and reduce the need for subsequent redistribution?

In order to consider such questions it is necessary to set education benefits within the framework family income, and the tax and subsidy nexus which reflects social policy towards income redistribution. The methods used in the pursuit of questions of this kind are too technical to explain in this context: here we simply report a major conclusion of these studies. This is that, in order to achieve the efficiency-equity mix that appears to be the outcome of current policy, it would be very much more effective to focus the weight of educational subsidy on providing incentives to keep young people from low income homes at school until they have achieved educational

standards that fit them for university entrance. This is a conclusion that has been drawn in the UK but circumstances in New Zealand do not appear to be so very different as to provide a priori grounds for disregarding it as a working hypothesis. It is a conclusion which results in the proposals outlined in the next section covering the broad field of transition from compulsory schooling to eventual graduate entry into the workforce, rather than being focussed narrowly on the issue of grants or loans to students.

Proposals⁵ for a revised basis for university finance giving better access at lower levels of public expenditure

It is proposed that the current incentive to leave school and/or to fail to enter university be removed by substituting for Unemployment Benefit an age-related maintenance grant payable from school leaving age (15) through to the date at which the child/student would complete a first year at University (say the end of the calendar year in which they reach age 19). Such maintenance grant would rise towards the level of adult unemployment benefit, would be payable whether or not the child/student attended school/university/technical college, etc., and would be taxable income against the income of the higher income parent or guardian whether or not the child/student is living at home. People who left school early to enter the workforce would, subject to their subsequent attainment of University entrance requirements (by night school, correspondence, day release, etc.) be entitled to attend university full-time for one year whilst drawing maintenance grant or, if over 19, unemployment benefit, as would academically successful seventh formers who chose to spend a period in the workforce prior to entering university. When attending university they would additionally be entitled to an expense allowance for materials and books and to work part-time for up to eight hours per week. These arrangements, through suitable adjustment of the age-related maintenance grant, and the impact of parental tax claw-back, are intended to be less costly than current expenditures.

It is envisaged that they would result in some increase in sixth forms and substantial expansion of seventh forms, for which redundant secondary school accommodation exists in the wake of the 'bulge'. It is envisaged that the principal cost would lie in the provision of competent teaching staff for larger numbers of 6th and 7th formers, and in more use of polytechnics and other less academic training programmes. This cost as regards more academic children would be financed out of the savings from the revised grant and tax arrangements. As regards the costs related to less academic training programmes, these would fall within the ambit of the Access Scheme - or at least within the philosophy thereof, with which these suggestions are intended to be consistent.

It might well be that the innovation of sixth and seventh formers on maintenance grants would create problems for the more traditionally authoritarian type of secondary school and that sixth form colleges would develop, where students would, inter alia, acquire the rudiments of the self-disciplined learning skills which are so conspicuously absent in 1st year university students. It is also envisaged that the relatively low level of maintenance grant available at school leaving age would deter premature school leaving. Also the tax claw back on maintenance grants for students entering university below age 19 would encourage school leavers to seek a spell of employment, thus leading to increased maturity of outlook on the part of many students.

The tuition costs of first year students would, within the Access Scheme philosophy, be met through continued UGC block grant and could, on a broad brush basis, be taken to reflect the externality benefits of human capital creation through the university system. Also, a substantial proportion of existing UGC block grant support - say 25% to reflect research activity of university staff - would continue in recognition of the public good aspects of university activity. In all it might be expected that these two elements would contribute roughly two thirds of current levels of UGC block grant, leaving one third to be collected through the financial arrangements for second and third year and postgraduate students.

The proposal for second and third year students is that they incur state loans up to around \$8,000 p.a. (at 1986 prices) in each of their second and third years and that \$5,000 of this be payable as tuition fees. A broad brush approach is recommended, but maybe a costing that reflects significant disparities between subject areas would be appropriate. Care should, however, be taken to avoid generating undesirable incentives within each university's internal accounting system that could encourage academically undesirable pressures. Living costs could be met by borrowings in excess of \$5,000, by earnings (or unemployment benefit during summer vacation) and by parental support.

The proposal for honours and post-graduate students is that they incur state loans, repayable on the same basis, up to a maximum of \$4,000 (Honours Year) or \$6,000 (subsequently) none of which would be payable as tuition. This would recognise that the University's academic welfare benefits from the presence of honours and post-graduate students as do the latter from the University. It would also recognise that the private return to the student, in terms of enhanced earnings within the human capital framework, is subject to diminishing returns after achievement of the basic degree. Hopefully the bulk of students beyond their Honours Year would find some financial support from part-time working within the University system, thus avoiding the need to burden their futures with excessive loan repayments.

It is proposed that these state loans would be paid back over 15 years at the low real rate of interest of 3% with options for suspension of payments up to an aggregate of five years starting from graduation. This rate of interest reflects the social discount rate, weighted downwards on account of the risk insurance aspect of university education. Thus \$16,000 in 1987 terms owed on graduation in, say, 1990 might be paid back by 15 notional instalments of \$1,465 commencing in 1994. (1,465 being a 15 year delayed annuity at 3% on \$16,000). The method of payback would be by addition to the individual's taxable income of, say, 2½ times the inflation adjusted notional instalment. Thus, for individuals paying a marginal rate of tax of 30% the total amount of payback would, in reality, be 75% of "full" repayment; and, in effect, a ½% real return. For individuals in the 48% marginal tax bracket, payback would be 120% of "full" repayment.

This latter figure would represent a 5% real return, well in excess of what household lenders can get in the market outside of special superannuation schemes. Thus there would exist, for students from better off families, an incentive for inter-generational lending (or gifting) within their family - or extended family. In this way a suitably structured loan scheme could provide incentives that would relieve part of the public expenditure burden of university costs immediately (rather than in the longer run, as with the eventual repayment of state loans) by bringing in new resources from household savings. Appropriate adjustment of death duty liabilities could make schemes of this kind an attractive framework for intra-family income support of the aged. (Additionally, death duty liabilities could be adjusted to recover from students that have fled overseas any unrepaid state loans. However, such an adjustment would more appropriately be considered within the framework of an inheritance and gift tax to replace the unsatisfactory death duty system. But that is another story).

Comment

The suggestion for timing of the transition from grant to loan finance after first year at University is believed to be original to these proposals. However, it is believed that the most significant social innovation that would result from the implementation of these or similar proposals⁶ would be the removal of the bribe presented by unemployment benefit to young people (especially those from low income families) to leave school and waste their time.

Acknowledgements

This paper adapts material from Submissions to the Vice Chancellor's Review Committee and to the Royal Commission on Social Policy. That material, in somewhat amended form, is being reproduced in extens in MEP C8701 (forthcoming) where acknowledgement is made of my many intellectual debts. Responsibility for what is said both there and in this article, is, of course, mine alone.

Notes

1. Russell Marshall (1986), Victoria University Graduation Ceremony Address reported in Massey Focus, 3, p. 3.
2. Rothblatt, S. (1968), "The Revolution of the Dons: Cambridge and Society in Victorian England", Faber and Faber, London.
3. Some conclusions drawn in a recent UK review of Recurrent Education are annexed as Appendix 1 to the longer version of this paper (MEPC8701). This review, entitled "The role of the state in financing recurrent education: Les sons from European experience", by H. Glennerster appeared in Public Choice, 36, pp. 551-571, M. Nijhoff, The Hague, Netherlands, 1981.
4. Or, in the context of these proposals, not continued with after an initial grant-aided year.
5. Figures used in this paper are illustrative only and would need to be worked out with considerably greater access to statistical information were the proposals to be considered for implementation.
6. It is gratifying that the proposal for a maintenance grant, communicated to the Minister of Education in an earlier draft of this paper, has seen the light of day in the Minister's recently (March 1987) issued Discussion Paper. It originates in the UK and is referred to by Glennerster (op cit).