Government-provided services are caught in the jaws of a ‘cost-tax vice’. On the cost side, the long-term trend of rising relative prices of services, including education, seems set to continue. The other jaw of the vice is the high efficiency cost of raising additional taxes. Recent research making the case for public provision of post-compulsory education has concentrated on the difficult task of quantifying its economic and social benefits. However, given the effects of the cost-tax vice, this paper argues that it may be wise to change the focus of research and to direct more attention to new ways of financing adult and community education.

Introduction

In the latter half of 1920, the suggestion was made to the Council of the University of Tasmania by the Premier of Tasmania that as the Tutorial Class experiment had been on trial for six years at considerable expense of public money, it was now time to make an attempt at an impartial summing up and judgement of progress and results (University of Tasmania 1921:3).

So begins an early assessment of the value of adult education in Tasmania. Economists were heavily involved in this enterprise and in the evaluation of it. The committee of three included L.F. Giblin, the Government Statistician, while the small number of people giving evidence included Professor D B Copland (an economist at the University and the Director of Tutorial Classes), Mr T Hytten (General Secretary of the Workers’ Educational Association (W.E.A.) and later to become a professor of economics at the University), and J. B. Brigden (West Coast lecturer of tutorial classes and also later to become a professor of economics at the University).

That economists were heavily involved was no accident because in Tasmania, as in the rest of Australia and in England, three out of five classes were in economics. The remainder covered a range of subjects such as history, literature, philosophy, music and biology. The Tutorial Class program, run in conjunction with the W.E.A., superseded government-subsidised vocational training offered through Mechanics Institutes, and its objective was to offer courses running over three years which enabled students to reach the same standard as would have been reached by university students.

Given the representation of ‘exasperating calculators’ on the committee, the report is in some respects surprising. There was a brief nod in the direction of the complaint of ‘considerable expense of public money’ in terms of a comparison of costs with those incurred in the mainland states. But there was no hint of modern cost-benefit
analysis – almost all the evaluation was cast in terms of whether the teaching methods led to outcomes comparable with those achieved by university students (it did). In concluding, the Committee gave strong support to the Tutorial Class system, giving another nod to economic evaluation by remarking that ‘education has in view, not merely the turning out of efficient producers of wealth, but the training of people to be their true selves...’ (University of Tasmania 1921:23).

Four decades later, modern cost-benefit analysis was still only present in faint outline in the views articulated by the economist Peter Karmel who, in 1962, made the general argument for state provision of education. In addition to a public-sector role in setting educational standards, he argued that

> [p]ublic expenditure on education goes some way toward correcting the private individual’s under-estimation of the benefits of education; towards overcoming the discrepancy between private and social benefits; and towards mitigating the consequences of unequal income distribution; but the volume of such expenditure is, after all, responsive to the demands of members of society, not as individuals in the marketplace but as voters in the polling booths. However the wares of the private sector have at their disposal the whole paraphernalia of modern advertising to titillate the taste, while the products of the public sector (and indeed education in the private sector) go unsung (Karmel 1962:7–8).

It will be argued that, although there have been significant changes in government policy, the underlying problems identified by Karmel are still with us. Private and social returns to education are still uncertain and, for many consumers, participation takes place well before benefits become apparent or, alternatively, before monetary returns from education are realised. Income distribution and family circumstances still have a significant impact on access to education.

However, it is interesting to observe that Karmel did not propose explicit cost-benefit evaluation of expenditure on education. It seems to have been taken for granted that increases in public spending of the kind he envisaged would pass a cost-benefit test. It is also interesting to note that his proposed solution to the problem of under-provision – public expenditure on (and, implicitly, provision of) education – has fallen out of favour in recent times.

**The two jaws of the ‘tax-cost vice’**

It is interesting to ask why this change has taken place, and why the change in emphasis has attracted so much controversy. Many commentators ascribe recent developments to a change in political preferences summarised by the rise of ‘economic rationalism’ – a term which, as originally used by economists, referred to ‘an economic policy approach which recognises both market failure and government failure, and eschews false tradeoffs between equity and efficiency ... [which also] embraces the collectivist ethic’ (Gruen 1989: xi). As originally conceived, economic rationalism was an approach to policy formulation which, insofar as it applied to the provision of government services, recognised the pressures arising from the jaws of a ‘tax-cost vice’. In response, policy-makers sought efficiencies in the provision of government services. In some cases the preferred policy was subsidised private provision, in other cases user-pays policy was adopted, and yet other approaches involved changes to entitlements.

Two long-run trends are fundamental to understanding the ‘vice’. The first is the increasing cost, and hence expenditure share, of services (including health and education). The share of the service sector in gross domestic product (GDP) has doubled since 1950 to be almost half of the economy today (Australian Bureau of Statistics 2005). The second long-run trend is the rising tax share of GDP and, given the structure of the Australian tax system, rising effective marginal tax rates.
Taking the rising expenditure share of services first, there are two reasons for this trend. One is a secular increase in demand for services, with demand rising faster than income. The second is the so-called Balassa-Samuelson effect, which explains why the cost of services rises over time. The explanation is based on the observation that productivity growth is higher in primary and secondary industry than in services. High rates of productivity growth mean that selling prices in these industries can grow relatively slowly while still offering high wages. In the long run, labour is attracted to these high productivity, capital-intensive, sectors of the economy.

The situation is different in the rest of the economy, which comprises labour-intensive industries with low productivity growth. To maintain wage parity, these industries increase real wages at roughly the same rate as elsewhere. Hence real costs in these industries rise steadily over time. At the same time, household demand for services in household budgets rises with rising real income. The result is a higher expenditure share of services in GDP.

Some examples of Balassa-Samuelson effects are the following. The ‘productivity’ of symphony orchestras in providing live performances is limited by the size of the auditorium and the number of days in the year, and orchestras require increasing levels of public subsidy to survive; schoolteachers operate more effectively if the class size is kept below some maximum size, and expenditure on education as a share of GDP increases over time; and medical practitioners must spend a certain minimum time in face-to-face contact with patients, so the relative cost of general practice services rises over time.

Now turn to taxes. At the time of Federation, customs duties were the main source of tax revenue in all states and income tax rates were low – the income tax rate in New South Wales, for instance, was sixpence in the pound, or five percent. For Australia as a whole, total tax revenue was around five percent of GDP. At present, tax collections in Australia have risen to around 32% of GDP (Reinhart & Steel 2006:2).

Although this share is not particularly high by the standards of the Organisation for Economic Cooperation and Development, Australia’s tax system is inefficient in an economic sense. Let me explain. ‘Inefficiency’ refers to the fact that marginal increases in tax revenue impose a welfare cost. This is because taxes affect people’s decisions and, to the extent that taxes lead us to make less desirable decisions than those we would have made in the absence of taxes, ‘efficiency’ or ‘welfare’ costs arise. Economists generally reckon that welfare costs of taxation – and roughly speaking, these costs depend on the degree to which taxes lead to changes in private-sector decisions – increase with the square of the effective marginal tax rate. Hence, welfare costs increase very rapidly as effective marginal tax rates rise.

Australia’s tax system is inefficient because, at the Commonwealth level, tax revenue is heavily reliant on personal income taxes, and Australia has a targeted welfare system, with payments depending on family income. While income-testing helps control welfare spending, it means that many taxpayers face high effective marginal tax rates. Even after the recent round of tax cuts many middle income families – who are the contested ground in Australian politics – face effective marginal tax rates over 50% (NATSEM 2006).

At the margin, the States also rely on inefficient taxes. The bulk of their revenues is derived from Commonwealth grants, including Goods and Services Tax revenues. But if a State government wishes to unilaterally increase revenues, it does so by taxes which impose relatively high efficiency costs – stamp duties, gambling taxes and payroll taxes.

State and Commonwealth governments find themselves caught in the jaws of a vice, and they face increasingly difficult choices. An ageing population implies a growing demand for government services and, implicitly, a greater degree of income redistribution between the employed and the elderly. Satisfying the increasing demand for services and redistribution both require higher tax revenues.
At the same time, rising costs imply that public provision of the same quantum of services will require further increases in taxes and in the government expenditure share of GDP. These trends make themselves felt at the ballot box – because of the rising relative price of services, taxpayers correctly perceive they are getting less for their money. At the same time, high effective marginal tax rates make it difficult to raise additional taxes.

A solution, adopted by both sides of politics, has been to extend the application of cost-benefit analysis to public sector provision of services, to privatise some public services, and to make greater use of ‘user pays’ policies.

**Cost-benefit analysis**

At first sight, the application of cost-benefit analysis to services such as adult and community education seems straightforward, and there is a substantial literature in this field. If the benefits exceed the costs, there is an argument for public provision. But the situation is not that simple.

The first issue to be faced involves characterising the benefits and the people to whom they accrue. In this regard economists make a distinction between public and private goods – the latter are those for which, given an available quantity, greater consumption by one person necessarily implies less consumption by others. There is rivalry in consumption of these goods. A ticket to the Australian Football League grand final is a private good, as is attendance at an adult education class. In both cases, there is a limited number of places available so there is rivalry in consumption. Consumption of public goods, on the other hand, is non-rival. For example, listening to a broadcast of ABC radio is a public good, as is watching television on Channel 9.

It is generally easier for private goods to be supplied by private markets because property rights (and hence prices) can be established. So the holder of a valid ticket gains entry to the Melbourne Cricket Ground on grand final day, and only those who have enrolled are permitted to attend the adult education class. But even for public goods, private provision can sometimes work effectively. In free-access internet sites, for example, private markets can work because the content is bundled with advertising which provides the source of revenue.

The classic but, in practice, rare case of cost-benefit analysis concerns the provision of a public good which would not be provided by the private sector because, in the absence of property rights, the market fails to provide price signals. The analysis then involves a comparison of the social benefits and social costs of provision. In the simplest case, the former is the sum of private benefits, while the latter includes the costs of the resources used in producing the service as well as the efficiency costs of the requisite additional tax revenues. As argued earlier, these efficiency costs have been rising over time.

More usually, cost-benefit arguments for public sector provision involve goods and services which have both private and public-good attributes, and this is the case to which Karmel alludes. Although education is rivalrous, not all the benefits are captured by students as private benefits. Some economic benefits are also captured by their employers. There may also be significant unpriced public benefits or spillovers, variously identified as ‘social benefits’, ‘social capital’ or ‘network externalities’ which mean that there is a divergence between private and social benefits. If these spillovers are significant, it is likely that private-sector provision will be less than optimal in the absence of public intervention.

Unfortunately, while there is general agreement that these social benefits are significant, they are notoriously difficult to measure. In a recent evaluation of the NSW technical and further education
(TAFE) system, for instance, the Allen Consulting Group recognised the difficulty and simply assumed that unpriced social benefits of the TAFE system were 15% of the private benefits accruing to students and employers from higher productivity (Allen Consulting Group 2006:44). To take a more extreme example, the analysis of the social and economic impacts of adult and community education by Birch, Kenyon, Koshy & Wills-Johnson (2003) only measured economic benefits.

Problems also arise in the measurement of costs. For simplicity, costs are usually measured in the context of a given institutional framework, and the efficiency costs of raising taxes are ignored. Both these points can be illustrated with reference to the study by the Allen Consulting Group, which is a good example of current best-practice work in this field. This study provided a careful evaluation of the net benefit of the NSW TAFE system, comparing it to an alternative situation in which TAFE is abolished and training is offered by private-sector providers. In this comparison, services offered by the private sector were postulated to be the same in terms of quality and location, but fees would be 50% higher than for TAFE. Tax savings were assumed to be returned to the government and spent on other activities (such as health) in the same ratio as existing expenditure patterns (Allen Consulting Group 2006:51–52).

Given the present state of knowledge, these two assumptions may seem reasonable. But they are crucial to any evaluation of alternative modes of provision of TAFE-style training courses. Whether private sector training courses would be available, and on what terms, is a matter that deserves detailed analysis. With regard to taxes, the Allen Consulting Group’s assumption does not consider the benefits of lower taxes consequent on avoiding efficiency costs of tax collections. As argued earlier, this is an ongoing issue in the public provision of public services.

**Privatisation and user pays**

In practice, cost-benefit analysis of the sort described in the previous section is usually used as a tool to justify changed spending on public provision of education, rather than exploring changes to ways of doing things.

But governments have also sought to escape the jaws of the vice by changing modes of operation, for example by privatising services, often with the implication that users pay for services provided. This process has been underway for some time and in view of the long-run forces at work, it is likely to become increasingly important.

For schools and hospitals the process has been an indirect one. Funding for public provision has been squeezed while, at the same time, private provision is encouraged by a combination of subsidies and penalties. In the case of school education, the subsidy takes the form of capitation grants to private schools. In the private hospital system, private provision is encouraged by subsidies to medical insurance together with tax penalties for those who fail to purchase it.

In the context of education, Cardak and Hone (2003) argued that this private-subsidy policy succeeded in lowering direct public expenditure because cost savings in the public sector are greater than the capitation grants to private schools. But while these policies may well reduce claims of education on the public purse, it is not at all clear, as indeed Cardak and Hone argued, that they would pass a full-blown cost-benefit test. To take another example, McAuley (2005:159) made the contrary case with regard to hospitals – he argued, in terms of a low-cost mechanism for promoting private provision of hospital services, that ‘[a]s a means of sharing expenses private health insurance is inferior, on all plausible policy criteria, to tax-funded single payer systems’.
Recall Karmel’s account of the problems that public provision is intended to address – lack of information as to the benefits of education; inequities in access because of family background and income; realising unpriced social benefits; and overcoming the financial market problems inherent in students having to borrow to finance education spending.

How do these problems arise in the adult and community education sector? Twenty five years ago, Hocking and Byers (1983:50) identified the first two problems as being significant, noting that without structural change, “[t]he present programme will continue to attract those people it has always attracted – the middle class with previous satisfying educational experiences’. This writer’s suspicion is that this problem persists.

At present there is a mixture of private and public provision, and the user pays approach is applied to varying degrees. In larger urban areas, public adult and community education providers compete, at least potentially, with the private sector. For example, adult and community education providers and private-sector providers both provide training in the use of computer software. Some courses (professional writing and editing, for instance) lead to an accredited qualification, but many (such as classes in oil painting) do not. The existence of unpriced social benefits justifies public subsidy. For some potential participants, financial constraints limit access to courses.

In the secondary and tertiary systems, vouchers have often been proposed as a means of providing in-kind assistance to students who would otherwise be unlikely to participate, and to encourage the supply of education to be more responsive to demand (see Jongbloed and Koelman (2000) for a useful summary of alternative voucher models). In Australia, proposals to introduce vouchers in secondary and tertiary education have generally met with resistance, although the Commonwealth government recently announced a system of Work Skills Vouchers and Business Skills Vouchers for use in technical and further education. Opposition to vouchers has reflected fears that vouchers would be used as a way to cut overall public funding, that a demand-driven system would lead to erosion of standards, and that it would expose some institutions to an adverse selection problem with more able, or low cost, students migrating out of the public system. Whether or not those fears would be realised, it should be recognised that the present system of capitation grants described earlier, with public funds following the students, is rather like a voucher system.

Could State-based vouchers play a role in the adult and community education sector? The sector is already demand-driven to a greater degree than schools, the TAFE system and universities. Because it is largely under State control, funding decisions can reflect local preferences, rather than national priorities. In the case of adult education, at any rate, much of the present public subsidy supports a facilitation role, with the services provided by teachers on short-term contracts. So in many respects provision has already been privatised, and a voucher system may encourage the emergence of new providers. The justification for subsidy in many of the courses is that not all the benefits are captured by participants. More often than not, other forms of incentives to participate – such as tax deductibility – are infeasible because of the difficulty of associating particular courses with changes in potential or actual earnings.

**Looking ahead**

There has recently been a spate of studies assessing the economic value of post-compulsory education and although the quantitative estimates vary, there is a consensus that the adult and community education sector provides services delivering economic and social benefits. However, given the likelihood that the jaws of the ‘cost-tax vice’ will grip ever more tightly, there will be continuing political pressures to move away from the old ‘public provision’ modes
of education. Perhaps it is a good time to change the focus away from traditional cost-benefit studies and move towards analyses of alternative modes of provision, and to think about new ways of providing public subsidies to the adult and community education sector.

For once, small is beautiful. The adult and community education sector is in the fortunate position that it is largely under the control of State governments. Experimentation is possible.

References


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