# Prices and Values

## A Perspective on Adult and Community Education

## ACE Conference
## Launceston, 15 November 2006

**Graeme Wells**
School of Economics and Finance
University of Tasmania
graeme.wells@utas.edu.au

**Abstract**

Government-provided services are caught in a vice. The long-term trend of rising relative costs 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 focused on quantification of its economic benefits. It is a more difficult task to quantify the unpriced social value of adult and community education. However, given the cost-tax 'vice', it may be wise to direct attention to new ways of financing educational services.

*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'[1].

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 (WEA) and later to become a professor of economics at the University), and J. B. Brigden (West Coast lecturer to tutorial classes and also later to become professor of economics at the University)[2].

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 The Tutorial Class program, run in conjunction with the WEA, superseded government-subsidised vocational training offered through Mechanics Institutes[3], and its objective was to offer courses running over three years which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...' (p.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

[1] University of Tasmania (1921), p.3.

[2] Giblin, Copland and Brigden, together with another Tasmanian, Roland Wilson, made up what Coleman et. al. (2006) decribe as 'Giblin's Platoon'. These four economists dominated Australian policy debates from the 1920s to the 1950s.

[3] The first Mechanics' Institute to be established in Australia was in Hobart in 1827. Thousands of these Institutes were established throughout Australia, largely financed by local subscription but with some government support. In larger urban areas vocational training was offered but many were based on a self-help philosophy with a library being central to their functions. Some continue in that role, and, given the current pressures for privatisation of education, it would be interesting to know more about the conditions under which these locally-based institutions flourished as they did.

general argument for state provision of education. In addition to a public-sector role in setting educational standards, he argued that

> 'Public 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 market place 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.' (pp7-8)

Problems identified by Karmel are still with us. Private and social returns to education are uncertain and, for many consumers, participation takes place well before benefits become apparent or, alternatively, before monetary returns from education are realised. Income distribution, family circumstances, and ability to borrow still have a significant impact on access to education.

Karmel did not, however, propose explicit cost-benefit evaluation of expenditure on education. It is 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 Cost-Tax Vice*

It is also interesting to ask why this change has taken place, and why the change in emphasis (described variously as 'neo-liberalism' or 'economic rationalism') has attracted so much controversy[4]. Two long-run trends are fundamental. The first is the increasing cost, and hence expenditure share, of services (including health and education). The service sector comprised around 20% of GDP in 1900; over the twentieth century it expanded steadily, to be over 70% of GDP now. The second important long run trend is the rising tax share of GDP and, given the structure of the Australian tax system, rising effective marginal tax rates.

Take the rising expenditure share of services first. An important reason for this change 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

[4] As originally used by economists, 'economic rationalism' 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'. (Higgins (1989), ppxi-xii). At the time, Chris Higgins was the Secretary of the Commonwealth Treasury. He referred to the 1980s (in which there were significant reforms in banking, removal of foreign exchange controls, as well as the Accord between the unions and the Labor government) as 'the decade of economic rationalism'.

slowly while still offering high wages. In the long run, labour is attracted to these high productivity, capital-intensive, sectors of the economy.

Things are different in the rest of the economy, which comprise 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, an effect that is reinforced as the population ages. The result is a higher expenditure share of services in GDP.

To give some examples of Balassa-Samuelson effects, 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[5]; medical practitioners must spend a certain minimum time in face to face contact with patients, so the relative cost of GP services rises over time, and so on.

Now turn to the other jaw of the vice – taxes. At the time of Federation customs duties were the main source of tax revenues 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 5%. For Australia as a whole, total tax revenue was around 5% of GDP. At present tax collections in Australia has risen to around 32% of GDP.

Although this share is not particularly high by OECD standards, 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 high welfare cost. This flows from the fact that 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.

Australia's tax system is inefficient because, at the Commonwealth level, tax revenue is heavily reliant on personal income taxes[6], 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%[7].

---

[5] My point is not to argue that class size is an adequate measure of teachers' performance – it is to argue why the share of expenditures on classroom teaching must, if teachers' real wages maintain parity with the rest of the community, inevitably increase. This is not the only reason for rising expenditures on public education. In Tasmania as elsewhere central administrative functions absorb an increasing share of resources. In 1935, for instance, Head Office expenditure accounted for around 2% of the total education budget; in 2004-5 the share (as proxied by numbers of employees in the 'Schools' division) had risen to over 30% (see Education Department *Annual Reports*, 1935 and 2004-05).

[6] Company taxes are put to one side here because dividend imputation means that dividends are taxed at the marginal personal income tax rate – efficiency costs of income taxation are largely determined by the interaction of the personal income tax system and the income-tested welfare system.

[7] See AMP/NATSEM (2006).

At the margin, the States also rely on inefficient taxes. The bulk of their revenues are derived from Commonwealth grants, including GST 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.

As a consequence of these two long term trends, State and Commonwealth governments find themselves caught in the jaws of a vice, and they face increasingly difficult choices. Rising income and an ageing population implies a growing demand for government services and, implicitly, a greater degree of income redistribution between the employed and the elderly. At the same time, rising costs imply that public provision of the same quantum of services will require further increases 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 while 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 intervention. 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, and it is possible to exclude other people from enjoying the benefits. A ticket to the AFL Grand Final is a private good, as is attendance at an Adult Education class for which a limited number of places is available. Consumption of public goods, on the other hand, is non-rival or non-excludable. 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 gets entry to the MCG on Grand Final day; 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 is 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 additional tax revenues that are required 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. Some economic benefits are also captured by their employers. There may also be significant unpriced public benefits or spillovers, variously identified as '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 public benefits are significant, they are notoriously difficult to measure. In a recent evaluation the NSW TAFE system, for instance, Allen Consulting (2006) recognises the difficulty and simply assume that unpriced public benefits of the NSW TAFE system are 15% of the private benefits accruing to students and employers from higher productivity[8]. To give another recent example, in their analysis of the social and economic impacts of adult and community education, Birch et. al (2003) ignore public benefits altogether and only measure private 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 Allen Consulting (2006), which is a good example of current best-practice work in this field. This study provides 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 are assumed to be the same in terms of quality and location, but fees would be 50% higher than for TAFE. Tax savings are assumed to be returned to the government and spent on other activities (such as health) in the same ratio as existing expenditure patterns[9].

Given the present state of knowledge, these two assumptions may be reasonable. Some such assumptions 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 more detailed analysis. With regard to taxes, the Allen Consulting assumption does not consider the benefits of lower taxes consequent on avoiding efficiency costs of tax collections. This, too, could be considered in more detail because, as argued earlier, this is an ongoing issue in the public provision of public services.

[8] Allen Consulting (2006), p.44.
[9] Allen Consulting (2006), p.51-52.

*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 'cost-tax vice' by changing modes of operation, for example by privatising services, often with the implication that users pay for services provided[10]. 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 hospital system, private provision is encouraged by subsidies to medical insurance together with tax penalties for those who do fail to purchase it.

As Cardak and Hone (2003) argue, the private-subsidy policy has succeeded in lowering public expenditure on education because cost savings in the public sector are greater than the capitation grants to private schools. But while these policies may well reduce the claims of education and hospital care on the public purse it is not at all clear, as Cardak and Hone argue, that they would pass a full-blown cost-benefit test. To take another example, McAuley (2005) makes the contrary case with regard to hospitals – he argues, in terms of a low-cost mechanism for promoting private provision of hospital services, that 'As a means of sharing expenses private health insurance is inferior, on all plausible policy criteria, to tax-funded single payer systems' (p.159).

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) identified the first two problems as being significant, noting that without structural change, 'The present programme will continue to attract those people it has always attracted – the middle class with previous satisfying educational experiences' (p.50). I suspect this problem is still with us.

At present there is a mixture of private and public provision, and 'user pays' is applied to varying degrees. In larger urban areas, public ACE providers compete, at least potentially, with the private sector. Some courses lead to an accredited

[10] Where state-owned business enterprises, producing private goods, are concerned, 'paying off the debt' is almost always a spurious rationale for privatisation because government assets and liabilities are reduced by an equal amount – there is no effect on the government balance sheet. The important issue is whether the assets are used more productively in private rather than public hands.

qualification, but most 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[11]. But in Australia, proposals to introduce vouchers in secondary and tertiary education have generally met with resistance[12]. This reflects 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 ACE sector? The sector is already demand-driven to a greater degree than schools, the TAFE system or 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.

Many problems would need to be addressed before vouchers were introduced, including the expected annual value of the vouchers, total expenditures, the range of courses for which vouchers could be used, accreditation of standards, and so on. Minimising administration costs is also important.

*Looking Ahead*

There has recently been a spate of studies assessing the economic value of post-compulsory education. 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 ACE sector.

For once, small is beautiful. The ACE sector is in the fortunate position that it is largely under the control of the State government. Experimentation is possible.

[11] Jongbloed and Koelman (2000) provide a useful summary of alternative voucher models.

[12] While the 1998 West Report's proposed vouchers for university students were not implemented, the Commonwealth government recently announced a system of Work Skills Vouchers and Business Skills Vouchers. The former are to be used for accredited training by people 25 or over who do not have year 12 or equivalent qualifications.

## References

Access Economics (2005), *The Economic Benefit of Increased Participation in Education and Training (A report to the Dusseldorp Skills Forum and the Business Council of Australia),* Canberra, May.

Allen Consulting Group (2006), *The Complete Package: The Value of TAFE NSW*, May.

Birch, Elisa-Rose, Peter Kenyon, Paul Koshy and Nick Wills-Johnson (2003) *Exploring the Social and Economic Impacts of Adult and Community Education*, Australian National Training Authority (Canberra).

Cardak, Buly and Philip Hone (2003), 'Subsidies for Private Community Services: The Case of School Education', *Agenda* 10(2) .

Choy, Saronji, Sandra Haukka and Elizabeth Keyes (2006), *ACE's Role in Developing Australia's Human Capital: A Meta-Analysis*, Adult Learning Australia (June).

Coleman, William, Selwyn Cornish and Alf Hagger (2006). *Giblin's Platoon. The Trials and Triumph of the Economist in Australian Public Life* (Canberra: ANU Press).

Gørgens, Tue and Chris Ryan (2006) *The Impact of Additional Educational Qualifications For Early School Leavers* Department of Education, Science and Training, Canberra, April.

Hocking, H. and P. Byers (1983). 'Assessing Community Needs for Further Education: a Participative Approach', Research Study No.83, Research Branch, Education Department of Tasmania (Hobart).

Jongbloed, Ben and Jos Koelman (2000), *Vouchers for Higher Education? A Survey of the Literature Commissioned by the Hong Kong University Grants Committee*, Center for Higher Education Policy Studies, Universiteit Twente, June.

Karmel, P.H. (1962). *Some Economic Aspects of Education: An address to the Australian College of Education*, (Melbourne, Cheshire), 18 May.

Kearns, Peter (2006) *Equity in Adult Learning: Integrating Social Justice and Economic Success*, Adult Learning Australia (July).

McCauley, Ian (2005), 'Private Health Insurance: Still Muddling Through', *Agenda* 12(2).

National Centre for Social and Economic Modelling (NATSEM) (2006), *AMP/NATSEM Report: Trends in Effective Marginal Tax Rates 1996-7 to 2006-07*, Canberra.

University of Tasmania (1921), 'Tutorial Classes and the W.E.A.: Report of the Committee of the Council of the University of Tasmania', (Hobart, University of Tasmania).

Whitelock Derek (ed) (1970), *Adult Education in Australia*, (Sydney, Pergamon Press).