WHO SHOULD PAY?

Tuition fees and tertiary education financing in New Zealand

Norman LaRocque



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List of Acronyms

EFTS	Equivalent Full Time Student
GDP	gross domestic product
HECS	Higher Education Contribution Scheme (Australia)
IPPR	Institute for Public Policy Research (United Kingdom)
NZUSA	New Zealand University Students' Association
NZVCC	New Zealand Vice-Chancellors' Committee
OECD	Organisation for Economic Cooperation and Development
PCET	post-compulsory education and training
PTEs	private training establishments
R & D	research and development
SES	socio-economic status
SFC	Sixth Form Certificate
SLS	student loan scheme
TEAC	Tertiary Education Advisory Committee
TEI	Tertiary Education Institution
UCAS	Universities and Colleges Admissions Service (United Kingdom)
UE	University Entrance
VCs	Vice-Chancellors

If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest.

BENJAMIN FRANKLIN

ABOUT THE AUTHOR

Norman LaRocque is a policy advisor with the New Zealand Business Roundtable (NZBR) and an advisor to the Education Forum, based in Wellington, New Zealand. He has an MA (Economics) and a BA (Honors Economics) from the University of Western Ontario in London, Canada. Norman specialises in domestic and international education policy and reform issues.

Norman has previously worked as a policy manager with the New Zealand Treasury and the New Zealand Ministry of Education. Norman is also a consultant on education policy issues, with a focus on private education and education finance issues. He has carried out a number of consulting projects for the World Bank, the International Finance Corporation, the Asian Development Bank and government and private sector entities.

Norman is a member of the Advisory Council of the EG West Centre for Market Solutions in Education at the University of Newcastle in the United Kingdom. He can be reached at nlarocque@nzbr.org.nz.

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EXECUTIVE SUMMARY

Since the *Learning for Life* reforms in the late 1980s, there has been considerable discussion about, and debate over, the appropriate level and form of government support for tertiary education in New Zealand. The 1990s witnessed a number of significant shifts in tertiary education policy in New Zealand, including decreasing public per-student subsidies to tertiary education, the introduction of tuition fees and the establishment of the student loan scheme. The introduction of 'market-based' reforms has engendered considerable controversy and some of these reforms have been scaled back since late 1999.

Despite the considerable amount of angst caused by the tertiary reforms, there has been comparatively little analysis of the merits of the underlying policies. This report looks at a number of issues at the centre of the current tertiary policy debate relating to tuition fees and the financing of tertiary education in New Zealand.

Public subsidies to tertiary education are generally justified on the grounds that, left to itself, the market will result in too little tertiary education being undertaken, either because tertiary education generates externalities or because capital market imperfections may limit students' access to borrowing to finance tertiary studies. Neither of these factors provides a strong case for tertiary subsidies: there is considerable debate over the size of externalities generated by tertiary education and capital market imperfections are better overcome by a student loan scheme.

A second justification for tertiary subsidies is that they are required to ensure equity. While education can play an important role in enhancing opportunity, untargeted subsidies to tertiary education are likely to reduce the equity of government spending. This is because most of the benefits of tertiary education tend to be captured by students from relatively well-off families. A third justification is that the nature of the tertiary education market means there may be information failures. While these may exist, two issues are pertinent. First, would government provision of information be better than what is provided in the private market? Second, even if government intervention were justified, it would not be in the form of tuition subsidies.

Although the existence of externalities provides some justification for public subsidy of tertiary education, it is highly unlikely that it would justify the current government level of per-student spending on tuition subsidies, student loans and student allowances (\$10,637 per Equivalent Full Time Student (EFTS) in 2002/03). It is even less likely to justify further increases in per-student subsidies.

Prior to 1990, New Zealand tertiary students paid nominal tuition fees. In 1999, tuition fees averaged just over \$3,500, although there was considerable range around this figure given the deregulated nature of fee setting in New Zealand up until 2000. The introduction of market-based tertiary education reforms in New Zealand has mirrored the worldwide trend toward greater private financing of tertiary education in the form of tuition fees, reduced emphasis on grants in favour of student loans and an increase in private provision of education.

Tuition fees provide for greater neutrality between on-the-job and institution-based training and between the public and private sectors. Fees also provide an independent and 'distributed' source of funding for institutions, impose disciplines on institutions by creating higher student expectations and provide better incentives for institutional management.

Tuition fees are also justified on equity grounds given the significant private benefits that accrue to individuals with tertiary training. These include higher post-tax earnings, improved employment probability and stronger attachment to the labour market. There is considerable evidence that individuals with tertiary training receive a good return on their investment.

A commonly expressed concern is that tuition fees may deter people from undertaking tertiary education and training. There is reason to believe this will not be the case in New Zealand:

- the significant private benefits associated with tertiary education provide a strong incentive to undertake such training. As with any investment, there is a short-term sacrifice in return for a longer-term benefit;
- students in New Zealand are not required to meet the 'up-front' costs of tertiary education (for example, fees, living costs) because of the existence of the student loan scheme;
- the income-contingent nature of the student loan scheme provides students with an element of insurance against repayments if their income is low post-graduation; and
- the demand for tertiary education is relatively unresponsive to changes in tuition fees, at least in the presence of a student loan scheme.

The high tertiary participation rates experienced by high tuition fee countries such as Korea, Japan, the United States and others, as well as the growth in participation in New Zealand during the 1990s (when fees were increasing steadily) supports the view that fees are not the only factor that explains tertiary participation. A range of studies from around the world supports the view that tuition fees are unlikely to be deterring participation in tertiary education in New Zealand. Similarly, there is evidence suggesting that, despite increasing fee levels, students on low incomes have not been unduly deterred from undertaking a tertiary education:

- enrolments for students who are 'traditionally disadvantaged', such as Maori, grew faster than enrolments generally from 1994 to 2000; and
- the proportion of students in low decile (that is, low socio-economic) schools who went on to some form of tertiary education rose between 1997 and 2000, despite increasing tertiary tuition fee levels.

Studies from other countries such as Australia and Canada support the view that tuition fees do not necessarily have an adverse impact on traditionally disadvantaged groups. Indeed, research suggests that the factors influencing the decision to undertake tertiary training are far more complex than simply financial. Factors such as academic preparation at high school, aspirations and parents' education are equally, or more, important. Ireland's decision to abolish tuition fees in the mid 1990s has had little impact on access to tertiary education for those from low socio-economic backgrounds. The best way to widen access among groups that are disadvantaged is to focus on earlier levels of education, not to provide bigger tertiary education subsidies.

Tuition fee limits in New Zealand will do little to promote tertiary education participation. Instead, they will cost taxpayers a lot, restrict institutional self-management and reduce the scope for institutions to attract and retain good staff. The Tertiary Education Advisory Commission (TEAC) recognised this and recommended that institutions be free to set fees. International trends are toward greater flexibility in fee setting, not less. New Zealand was ahead of the game in this respect, but is now moving backwards. The fee maxima policy represents a throwback to the 1982 Muldoon policy of price controls.

It is important that the overall level of assistance to tertiary education be considered when examining policies such as student fees and student loans. Public spending on tertiary education will be around \$2.59 billion in 2002/03.

This represents around 2.1 percent of gross domestic product (GDP) and over a third of the education budget. It is also growing in nominal terms. Tertiary education is not lavishly funded in absolute value terms compared with other countries. However, spending data show that:

- the sector is relatively well funded compared with other levels of education;
- average fees are low compared with average taxpayer subsidies; and
- relative to our ability to pay, New Zealand funds tertiary education relatively generously.

This report recommends two key tertiary education financing reforms:

- a increasing the share of the costs of tertiary education borne by students/ parents; and
- b lifting the current tuition fee freeze and abandoning the fee maxima introduced in December 2002.

These reforms should be introduced along with a range of measures aimed at broadening tertiary education participation among groups that are traditionally disadvantaged, including initiatives aimed at improving educational outcomes at earlier levels of education and targeting assistance at the tertiary education level. A policy of increased fees for those who can pay and targeted assistance for those who cannot will do far more to broaden participation than the current policy of increasing subsidies for public institutions, capping fees and reducing funding to the private sector.

The increase in private responsibility for the costs of tertiary education would free up funding for higher valued uses – whether within tertiary education, earlier levels of education, other spending priority areas or tax cuts. Lifting the fee freeze would allow tertiary institutions to offset the adverse impact of a reduction in taxpayer subsidies.

These changes could be put forward as part of a comprehensive reform plan aimed at making more effective use of current tertiary education funding. This package could include:

- splitting tuition and research funding;
- funding all research through a competitive system;
- improving quality assurance in the tertiary education sector;
- requiring students to pay interest on student loans while they are studying; and examining the possibility of targeting student loan living costs entitlements;

- reforming tertiary institution governance to provide institutions with an improved framework for decision making;
- examining moves away from government ownership and control of tertiary education institutions in New Zealand; and
- improving information available to students on the labour market and on the performance of tertiary education institutions.

The government has already taken positive steps on a number of these.

A critical aspect of any strategy to improve resourcing to the tertiary education sector is to lift the growth rate of the New Zealand economy. Data from the Organisation for Economic Cooperation and Development (OECD) show that, relative to 'ability to pay' (as measured by GDP), New Zealand's spending on tertiary education is higher than most other OECD countries. Economic growth, therefore, offers the most sustainable avenue for increasing funding to the sector – both public and private. There is no rationale for increasing taxes to spend more on tertiary education.

Tertiary education can play an important role in providing New Zealanders from all backgrounds with the skills to succeed. Recent policies, which have emphasised untargeted spending on initiatives that will do little to improve opportunity generally or for disadvantaged groups, have limited tertiary education's ability to do this. That has been a policy choice that can be reversed. There is a better way.

I

INTRODUCTION

Since the *Learning for Life* reforms in the late 1980s, there has been considerable discussion about, and debate over, the appropriate level and form of government support for tertiary education in New Zealand. The decade of the 1990s witnessed a number of significant shifts in tertiary education policy in New Zealand, including:

- steadily decreasing government per-student subsidies and a consequent increase in the share of tertiary education costs borne by students and families;
- the introduction of targeting of student allowances on the basis of parental income;
- the introduction of an income-contingent student loan scheme (SLS); and
- a significant expansion in government subsidies to private training establishments (PTEs).

These policy changes were accompanied by a significant increase in tertiary education participation, with the number of subsidised Equivalent Full Time Student (EFTS) places more than doubling between 1990 and 2001 and more than tripling from 1984 (see Figure 1). This continued the trend toward increased tertiary education participation in New Zealand that began in the mid 1980s.

New Zealand has not been alone in reforming its tertiary education sector. Indeed, the direction of tertiary reform in most OECD countries, including Australia, Canada, the United States and the United Kingdom, has, to varying degrees and from different initial positions, mirrored that in New Zealand.¹

Needless to say, the reform process in New Zealand has not been without controversy, with many groups opposing the shift toward 'market-based' tertiary education policies. This has already led to a number of policy reversals, including increased subsidies under the student loan scheme, reduced funding for PTEs and the introduction of an effective limit on tuition fees. The recent

¹ Vossensteyn, Hans (2000) *Cost Sharing and Understanding Student Choice: Developments in Western Europe and Australia,* paper presented at Global Higher Education Exchange Conference, Washington, DC, December, p 4.



Figure 1: Growth in tertiary education participation in New Zealand

Note: PTE EFTS included from 1999. *Source:* Ministry of Education data.

election campaign portends further policy backsliding, with a number of parties advocating a further move away from the market-based reforms of the 1990s. At least two of the main political parties called for a full policy retreat – the abolition of tuition fees, the elimination of the student loan scheme and the introduction of a universal student allowance.

Despite the considerable amount of angst caused by the tertiary reforms of the 1990s, there has been comparatively little analysis of the merits of the underlying policies. This report looks at a number of issues at the centre of the current tertiary policy debate, including whether tertiary education should be subsidised, and if so, by how much. It also looks at the evidence on the impact of tuition fees on tertiary education participation. The report does not attempt to address the large number of other issues that must be considered in designing tertiary education funding policies (for example, research funding), although it does outline some possible changes in this area.

SHOULD TERTIARY EDUCATION BE SUBSIDISED?

Tertiary education has a number of important roles to play in New Zealand society. While the individual missions of tertiary institutions differ, they display (to varying degrees) a number of characteristics – the advancement, maintenance and dissemination of knowledge, repositories of knowledge and expertise, and role as critic and conscience of society. The ability of academia to pursue intellectual inquiry and the search for truth is critical to a well-functioning society.

At the same time – and increasingly in recent years – tertiary institutions have come to be seen as important players in the generation of economic growth and as national development tools. The government has committed itself to the goal of achieving the rates of economic growth required to lift New Zealand's real per-capita income into the top half of the OECD. The tertiary education sector is clearly seen as an important ingredient in helping to achieve that goal. Education can have an important, but by no means dominant, impact on economic growth. It can do so directly by making workers more productive, and indirectly given that higher levels of human capital are associated with significantly larger physical investments, higher rates of technology transfer and longer life expectancy.

While education can play a role in fostering economic growth, it is important to be realistic about its potential. It should not be seen as some economic salvation. The former Soviet Union was strong on education, particularly of scientists and engineers, yet it was a basket-case economy. Egypt made considerable progress on the education front between 1970 and 1998 – increasing enrolments significantly at all levels of education, yet the country fell from being the forty-seventh poorest country in 1970 to being the fortyeighth poorest country in 1998.² As Alison Wolf points out, seeing education

² Wolf, Alison (2002) 'Knowledge economy fails the test', *Financial Times*, 25–26 May. Available at www.educationforum.org.nz under *OpEds*.

only as a driver of economic prosperity can distort it by placing the focus on quantity over quality and emphasising qualifications for their own sake.³

Increased spending on tertiary education is often seen as a key to developing an 'innovative knowledge society'. However, the call for increased spending provides little guidance as to whether the responsibility for the costs of tertiary education should rest with students or the government.

This section looks briefly at the arguments that are typically advanced as justification for subsidising tertiary education. It adopts an economic approach to the analysis of this question. Such an approach is useful in that it provides a framework for assessing the effects of different policy options on social wellbeing and for thinking about the relevance of public benefits in the context of tertiary education. Examining the appropriate role of government in tertiary education is crucial to determining the appropriate public–private responsibility for the costs of tertiary education. After examining these arguments, this section outlines some policy conclusions on this issue.

2.1 EFFICIENCY ARGUMENTS

The great majority of goods and services are supplied in the private market, with prices determined through the interaction of supply and demand. However, for a variety of reasons, the competitive price system may not always result in an efficient allocation of society's resources. That is to say, there is market failure. In such cases (and subject to the caveats outlined below), government intervention may result in greater efficiency than would be delivered by the private market.

One of the most common justifications for government subsidies to tertiary education is that, left to itself, the market will result in less education being undertaken than is appropriate from the point of view of society. That is to say, the amount of education undertaken in society will be 'inefficient'. There are two reasons for this:

- a tertiary education may generate externalities benefits that extend beyond those that accrue to the individual; and
- b capital market imperfections, which may result in students and families not being able to borrow to finance their education.

Each of these is discussed in more detail below.

³ Ibid.

2.1.1 Externalities

One of the key arguments advanced by proponents of government subsidies to tertiary education is that such subsidies are justified because teaching and research generates externalities (also known as external benefits). Commonly cited external benefits include higher future tax payments, a better functioning democracy, cultural benefits, reduced crime and increased adaptability to economic shocks. Production benefits are a second possible source of externality. They arise where education increases not only one's own productivity, but also that of others. Proponents of so-called 'new-growth theories' argue that knowledge spillovers are an important determinant of economic growth. Typically, factors such as investment in physical and human capital and spending on research and development (R & D) are said to be sources of spillovers.⁴ To the extent that these externalities are significant, reliance on market incentives alone may lead to too little investment in education being undertaken and there may be justification for government intervention.

Externalities need not always be positive. Some externalities may impose costs on others, rather than generate benefits. This can occur where, for example:

- tertiary qualifications are used as a signalling device that identifies but does not develop talent;
- excessive educational requirements are used to restrict entry into some professions (for example, medicine); or
- education is used as a status symbol.

For example, if more education identifies people as having high ability and raises their wages, people without that level of education are identified as having low ability and have their wages reduced. To the extent that the signalling hypothesis is correct, then an educational expansion will merely result in credential inflation, thus decreasing the significance of educational qualifications and delivering little social benefit.⁵

While there is little doubt that tertiary education generates external benefits, there is considerable debate over the nature and magnitude of these benefits and whether they justify the current public share of tertiary education

⁴ See Industry Commission (1997) *Industry Commission Submission to the Review of Higher Education Financing and Policy*, AGPS, Canberra, July, pp 63–86.

⁵ Harrison, Mark (1997) *Review of Tertiary Funding Arrangements and Options for Change*, Report for the New Zealand Treasury, Wellington, p 16.

financing or indeed whether net externalities are positive or negative.⁶ A number of studies have examined external benefits in higher education, with little measured evidence as to their size and significance.

There is an additional problem in that many of the potential benefits of tertiary education – for example, cultural and civic benefits, impacts on economic growth, and so on – may be extremely hard to measure. While many do argue that externalities from tertiary education are large, there is little evidence to support that view. As Mark Blaug has noted:

The idea that the external or indirect benefits of education to society as a whole are enormous in magnitude and vastly exceed the direct personal benefits to the "educatees" is one of the myths of our times … because there is virtually no evidence of any kind to support it.⁷

There are a number of reasons why the impact of externalities might not be as large as first thought. These include:

- many of the so-called externalities may not, in fact, be externalities at all because the individual undertaking the education may, either directly or indirectly, benefit from the activity – for example, through a higher salary or better job security; and
- the significance of the private benefits from greater tertiary education may mean that individuals would have undertaken the right amount of education without government intervention. For example, keen gardeners may tend their gardens even if it produces externalities – simply because they derive substantial benefits from it themselves.

Furthermore, the mere existence of externalities does not, in itself, justify subsidies. It is one thing to argue that tertiary education is good. It is quite another to argue that tertiary education ought to be subsidised to the extent that it is currently. In order to justify subsidies, it must be shown that the existence of externalities results in too little education and that increased subsidies will induce people to undertake more tertiary education (that is, the benefits need to be marginal ones). Again, as Mark Blaug has noted:

⁶ See Scobie, Grant and Alex Duncan (1995) 'Financing New Zealand's Tertiary Education: How Much Subsidy?', Agenda, Vol 2, No 2, pp 211–232; Harrison, Mark (1995) Government Financing of Higher Education in Australia: Rationale and Performance, Australian National University, October; Industry Commission (1997) loc cit; Harrison, Mark (1997) loc cit.

⁷ Blaug, Mark (1972) An Introduction to the Economics of Education, Penguin Books, Middlesex, p 107.

What we have to show is not that higher education has many unintended social consequences, because so does every other human activity, but that these consequences have economic value and are functionally related to the size of the higher education system.⁸

2.1.2 Capital market imperfections

A second common justification for government subsidies to tertiary education is the fact that students and families may not be able to borrow privately to finance their studies. This can arise because investing in human capital (that is, skills and knowledge) involves risks for students such as uncertainty about their abilities and their future employment prospects. Given this uncertainty, and the fact that human capital investments are not backed by a physical asset, private banks may be reluctant to lend to students. Even if banks do lend to students, it may be at rates that deter some from borrowing, which can lead to a systematic bias against human capital investments.

The existence of capital market imperfections may justify government subsidies. However, three points should be noted:

- a capital market imperfections may in reality be evidence of labour market imperfections (that is, the fact that workers cannot pledge future labour services) and hence lenders are right to take into account the increased risk associated with such loans;
- b the fact that private capital markets are imperfect does not mean that government intervention would make things better; and
- c capital market imperfections should not be overstated given that the direct cost of tertiary education is less than the cost of most family cars and the fact that family incomes of many students are high.

In addition, the policy implications of capital market imperfections may be different from those pertaining to externalities. While government subsidies could be used to address capital market failures, they are likely to be inferior to student loans as a means of addressing the problem. This is because loans offer a more targeted, more efficient and cheaper approach to addressing capital market imperfections. Subsidy assistance should only be considered where there is evidence that some groups are averse to borrowing. It is often argued that this is true of Maori and Pacific Peoples. Yet, evidence from the SLS suggests

⁸ Blaug, Mark (1987) The Economics of Education and the Education of an Economist, Edward Elgar Publishing, Aldershot, p 229.

that this is not the case. Both Maori and Pacific students have loan draw down rates significantly in excess of Pakeha (58.2 percent and 75.8 percent respectively versus 40.3 percent in 1999).⁹ While this is not surprising given that Maori and Pacific students generally have lower incomes, the point nonetheless remains that this evidence suggests they are not averse to borrowing. From a policy point of view, even where students are averse to borrowing, this could justify only targeted, rather than general, subsidies.

2.2 EQUITY ARGUMENTS

A second line of argument in favour of government subsidies to tertiary education is that they are necessary to improve equity. According to this view, tertiary education should be publicly financed because it can help ensure equality of opportunity by adjusting for the fact that families do not all have access to the same resources – whether in the form of human capital, information or financial resources.

The problem with this justification for additional tertiary education spending is that it is not true. Rather than transferring money from rich to poor, general (as opposed to targeted) subsidies to tertiary education will do the opposite. That is to say, tertiary education is regressive. This is because students in tertiary education tend to come from families that are relatively well-off. Thus, relatively less well-off individuals – many of whom are without a tertiary qualification – end up subsidising the relatively well-off individuals who are receiving significant subsidies in tertiary education. In addition, students are likely to have much higher incomes in the future as a result of their (highly subsidised) investment in human capital. So, whether one takes a dynamic view or a static view of equity, it would seem that equity considerations provide little justification for general subsidies to tertiary education.

There is considerable evidence from around the world that subsidies for tertiary education benefit primarily those from families with above-average incomes and hence are regressive. For example:

• Guo, Steele and Glewwe (1999) show that public sector spending in developing countries does not adequately target students from low socio-

⁹ Ministry of Education (2000) New Zealand's Tertiary Education Sector: Profile and Trends 1999, Wellington, p 79.

economic backgrounds. Indeed, they show that public education subsidies are skewed toward those from higher income quintiles;¹⁰

- 1991 Census data from Australia reveal that over 60 percent of higher education students came from households with family incomes in excess of AUD\$40,000 per year and 56 percent of those had family incomes above AUD\$60,000 (the median income in that year was AUD\$32,000);¹¹
- in 1998, an 18- to 24-year-old in the United States from a family whose income was in the top income quartile was more than twice as likely to reach college than was an 18- to 24-year-old from a family whose income was in the lowest quartile;¹²
- according to the Australian Department of Education, Training and Youth Affairs (now the Department of Education, Science and Training), the share of students from low socio-economic backgrounds in tertiary education was 14.5 percent, significantly less than their 25 percent share of the population;¹³
- a study by the Sutton Trust in the United Kingdom showed that students were 25 times more likely to attend one of the top UK universities if they had attended a private school. The same study showed that children from less affluent classes represented 50 percent of school students but only 13 percent of entrants to top universities;¹⁴ and
- evidence from the Australian Council for Education Research showed that participation in higher education varies across socio-economic groups, with students from wealthy populations being much more likely to participate in higher education than those from low-income backgrounds.¹⁵

In a New Zealand context, the Ministerial Consultative Group (Todd Task Force) provided evidence of the relatively privileged position of tertiary students in

¹⁰ Guo, Li, Diane Steele and Paul Glewwe (1999) Distribution of Government Education Expenditures in Developing Countries: Preliminary Estimates (mimeo), The World Bank, Washington, DC.

¹¹ Industry Commission (1997) *op cit*, pp 82–83.

¹² Postsecondary Education Opportunity, (April 2000), No 94, www.postsecondary.org, pp 1–4.

¹³ Department of Education, Training and Youth Affairs (1999) *Equity in Higher Education*, Higher Education Division, Canberra.

¹⁴ Sutton Trust (2000) Entry to Leading Universities, Sutton Trust, London, http:// www.suttontrust.com/text/Report1.doc.

¹⁵ Williams, Trevor *et al* (1993) *Higher Education: Participation and Access in the 1980s*, Australian Council for Educational Research, Melbourne.

Percentage with parental income			
Under \$26,624	\$26,624 to \$35,567	Over \$35,568	
(%)	(%)	(%)	
26.8	8.3	64.9	
16.5	10.3	73.2	
41.0	15.0	44.0	
	Perc Under \$26,624 (%) 26.8 16.5 41.0	Percentage with parental inc Under \$26,624 \$26,624 to \$35,567 (%) (%) 26.8 8.3 16.5 10.3 41.0 15.0	

Table 1: Parental income of 18- to 19-year-olds in 1988/89

Source: Cited in Report of the Ministerial Consultative Group (1994), p 115.

New Zealand – even accounting for life-cycle effects (that is, the fact that parents with students of tertiary age are likely to be at their peak earning capacity). As shown in Table 1, students from higher-income families were disproportionately represented in tertiary education. For example, 73.2 percent of 18- to 19-year-old university students were from households with incomes above \$35,567 – versus only 44 percent of all 18- to 19-year-olds.¹⁶ It is important to highlight that this was the case before the significant tertiary education reforms – including the introduction of fees and the student loan scheme – were undertaken in New Zealand.

In a recent study, Chapman and Ryan examined the impact of the Australian Higher Education Contribution Scheme (HECS) on higher education participation in Australia. They concluded that the relatively disadvantaged in Australia were less likely to attend university even when there were no student fees. In their words, "this provides further support for the view that a no-charge public university system (that is, financed by all taxpayers) is regressive".¹⁷

A more recent study by Blondal, Field and Girouard examined equity aspects of post-compulsory education in OECD countries and concluded that, despite the expansion of enrolments in recent decades, students in higher education still tend to come from a relatively favoured background and that tertiary education financing arrangements tend to be regressive.¹⁸

¹⁶ Ministerial Consultative Group (1994), *Funding Growth in Tertiary Education and Training*, *Report of the Ministerial Consultative Group*, Wellington, p 115.

¹⁷ Chapman, Bruce and Chris Ryan (2002) Income Contingent Financing of Student Charges for Higher Education: Assessing the Australian Innovation, Discussion Paper No 449, Centre for Economic Policy Research, Australian National University, p 13.

¹⁸ Blondal, Sveinbjorn, Simon Field and Nathalie Girouard (2002) Investment in Human Capital Through Post-Compulsory Education and Training: Selected Efficiency and Equity Aspects, Economics Department Working Paper No 333, 11 July, p 7.

Peter Lampl, chairman of the UK Sutton Trust, an organisation that provides educational opportunities for students from non-privileged backgrounds, provides further support for this view. He notes that the UK government subsidises about 90 percent of the cost of university fees and argues that this has many undesirable consequences. In his view, such a system cannot and should not be sustained. Lampl notes that, under the current situation:

Lower earners are in effect subsidising the middle classes, who are often rich enough to have been able to afford private education. Their children predominate in higher education to an embarrassing degree, and will benefit the most from higher earning prospects. This seems a strange way to dispense scarce government cash ...¹⁹

On the question of equity, the evidence would appear to be incontrovertible – tertiary education spending is regressive. The Industry Commission (now the Productivity Commission) in Australia summed up the evidence as follows:

If equity is a goal of higher education policy, it is apparent that general tuition subsidies are a rather poor device for achieving this objective – the opportunity to benefit from tuition subsidies is grasped with greater frequency by the well-off than by the poor.²⁰

Taking into account who pays taxes removes some of the regressivity because the wealthy tend to pay more in taxes than do the poor. However, even after accounting for taxes, greater spending on tertiary education is at best simply a 'money-go-round' – taking from some in the middle classes and giving to others in the middle classes. Such a 'money-go-round' is not as benign as it may sound because the raising of revenues via the tax system imposes significant efficiency costs.

2.3 INFORMATION

A third possible justification for government subsidy of tertiary education has to do with information. The potential role for government arises from a combination of three factors:

a it is difficult to measure the quality of outputs objectively in the education sector;

¹⁹ Lampl, Peter 'Time to end the free ride', *The Telegraph*, 21 March 2002.

²⁰ Industry Commission (1997) *op cit*, p 83.

- b the nature of education means that institutions are likely to have more information about the quality of provision than will students; and
- c there are 'public good' aspects to information. This arises because, to some degree, information is 'non-excludable' (that is, people cannot be excluded from using it once it is in the public arena) and 'non-rivalrous' (that is, once it is produced, it can be passed on to others at little cost).

Because of the public good nature of information, the private market may provide too little information to allow students to make 'good' choices about where and what to study. Despite this, it is nonetheless true that the private market does provide a considerable amount of information to students. This information is conveyed in a variety of ways, including through the direct provision of information on course and programme offerings, reputation and prices.

If information problems did justify government intervention, tuition subsidies would not be the solution. Rather, the response might be for the government to:

- provide information that is not supplied by the private market (where the benefits of this information exceed the costs); or
- set minimum quality standards.

An overarching question is whether government intervention would improve upon what would occur in the private market. While there may well be market failure in information provision, there also may be government failure. Harrison (1997) discusses a range of issues relating to information and the potential role for government and the private sector.²¹

2.4 POLICY IMPLICATIONS

The above discussion has examined briefly the various possible justifications for government subsidy of tertiary education. Of the arguments presented, only market failure associated with the existence of externalities provides much justification for subsidies to tertiary education. Capital market failures are better addressed via loan guarantees or the provision of direct loans. Information failures are best addressed via the provision of information.

²¹ For a fuller treatment of the information failure issue, see Harrison, Mark (1997) *op cit*, pp 26–40.

While doubtless tertiary education generates externalities, there is little information on how large they are in practice or what effect they have in the real world. As Poterba notes:

Although it is relatively easy to construct a list of imperfections in the market for educational services, it is extremely difficult to quantify their importance ...²²

In addition, the benefits from any government intervention need to be weighed up against the costs of intervention, which include the costs of collecting taxes and the deadweight costs associated with taxation.²³

Although the existence of externalities provides some justification for public subsidy of tertiary education, it is highly unlikely that it would justify the current government level of per-capita spending on tuition subsidies, student loans and student allowances (\$10,637 per EFTS in 2002/03).²⁴ It is even less likely to justify further increases in per-student subsidies. The appropriate policy response should be to reduce tuition subsidies from current levels.

The current private share of direct tuition costs is estimated at around 25–30 percent, while the public share is estimated at 70–75 percent. A number of commentators have suggested a significantly higher private contribution:

- Professor Richard Blandy, in a 1988 report for the New Zealand Business Roundtable, proposed a 70:30 private/public split in the share of tertiary financing in New Zealand; ²⁵
- the Education Forum (1998) suggested a 75:25 private/public split in the share of tertiary financing in New Zealand;²⁶

Poterba, James (1996) 'Government Intervention in Markets for Education and Health Care', in Victor R Fuchs (ed), Individual and Social Responsibility: Child Care, Education, Medical Care, and Long-term Care in America, University of Chicago Press, Chicago, p 281.

²³ Harrison (1997), *op cit*, p 17.

²⁴ Mark Harrison, personal communication (2002), notes that, with an overall subsidy of just over \$11,000, a real rate of return of 5 percent and a marginal cost of taxation of 30 percent, graduates would have to produce external benefits of at least \$2,200 per year for their entire working life in order to justify current levels of spending.

²⁵ Blandy, Richard (1988) *Reforming Tertiary Education in New Zealand*, New Zealand Business Roundtable, Wellington, p 19.

²⁶ Education Forum (1998) Policy Directions for Tertiary Education: Submission on the Government Green Paper A Future Tertiary Education Policy for New Zealand: Tertiary Education Review, Wellington, p 20.

- Pincus and Miller (1997) and the Industry Commission (1997) recommended a 50:50 private/public split in the share of tertiary financing in Australia;²⁷ and
- the Ministerial Consultative Group (1994) Option B supporters recommended a 50:50 private/public split, with a reassessment in the year 2000.²⁸

²⁷ Industry Commission (1997) *op cit*, p 16.

²⁸ Ministerial Consultative Group (1994) *op cit*, p 148.

THE PRIVATE FINANCING OF TERTIARY EDUCATION

3.1 TUITION FEES IN NEW ZEALAND

Prior to 1990, tertiary students paid only nominal tuition fees in New Zealand. A centrally determined flat tuition fee of \$1,250 was introduced across all courses and institutions in 1990. This was increased to \$1,300 in 1991. For those two years, students did not have access to a student loan scheme to cover the costs of tuition. In 1992, tuition fees were deregulated and tertiary institutions were free to set fees at whatever level the market would bear. Figure 2 shows average tuition fees in New Zealand from 1990 to 1999. It shows that, over that period, average tuition fees increased steadily from \$1,250 to just over \$3,500.

Over the years, tertiary institutions have adopted a range of pricing tactics, with some institutions adopting 'flat' fees whereby all students paid the same fee irrespective of course or programme, while others have adopted



Figure 2: Estimated average annual tuition fees in New Zealand, 1990–1999

Notes: Fees are for full-time, full-year students. Fees for 1990 and 1991 were set centrally. *Source:* Ministry of Education (2000) *New Zealand's Tertiary Education Sector: Profile and Trends* 1999, p 105.

'differentiated' fee structures whereby students pay different fees depending on the course or programme. By the end of the 1990s, most institutions (including all but one university) were charging differentiated fees.

Not unexpectedly, fee differences are much greater across programmes within institutions than they are for the same programme across institutions. In 2002, annual undergraduate tuition fees at New Zealand universities varied as set out in Table 2.

 Table 2: Range of undergraduate annual full-time tuition fees, New Zealand universities,

 2002

	Lowest fee	Highest fee	
Programme	(\$)	(\$)	
Arts	2,950	3,880	
Business	3,126	3,880	
Law	3,490	3,850	
Science	3,740	3,840	
Medicine	9,180	9,646	

Note: Undergraduate full-time equivalent annual base fees.

Source: Maani, Sholeh (2002) Student Charges: The New Zealand Experience, pp 2-3.

3.2 INTERNATIONAL TRENDS IN PRIVATE FINANCING

The changing balance between public and private financing of tertiary education in New Zealand mirrors the worldwide trend toward increasing private financing of tertiary education. Vossensteyn (2000) has noted the gradual shift of the burden of higher education costs from governments to students and their parents. He notes that this increased cost-sharing has come in several forms:

- introducing or increasing tuition fees;
- a growing supply of private post-secondary education opportunities;
- an increased emphasis on student loans that have to be repaid after graduation;
- reduced importance of grants to help students meet the costs of study; and
- students and families are expected to make a larger contribution to the costs of study.²⁹

²⁹ Vossensteyn, Hans (2000) *op cit*, p 1.

Data from the OECD, as well as data from individual countries, provide evidence of this shift:

- seven out of 17 OECD countries saw the private share of spending on tertiary education increase by more than 20 percent between 1995 and 1998;³⁰
- Hungary and Italy saw the largest increases among OECD countries, with private sector contributions increasing from 2 to 23 percent of spending in the former and from 17 to 25 percent in the latter; ³¹
- average undergraduate tuition fees in Canada increased by 135 percent between 1990/91 and 2000/01;³²
- Austria introduced a tuition fee of US\$750 per year in 2001 the first German-speaking country to do so in recent years;³³
- the United Kingdom introduced a tuition fee of up to £1,000 for higher education students in 1998;
- developing countries such as China, Ghana and the Philippines have introduced fees at state institutions, while the former Soviet republic of Moldova charges tuition to one-third of the students at its 15 public post-secondary institutions; and
- the private share of tuition costs in the United States increased from around 35 percent in the early 1980s to nearly 50 percent by 1997.³⁴

In 2002/03, university tuition fees in Canada averaged CDN\$3,733 (NZ\$5,091) at undergraduate level and CDN\$4,948 (NZ\$6,749) at the graduate level, with significant differentials across province and discipline (see Table 3).³⁵ During that same year, HECS charges in Australia ranged from AUD\$3,598 to AUD\$5,999 (NZ\$4,199 to NZ\$7,002) depending on the type of course. Tuition fees at US four-year colleges in 2001/02 averaged US\$3,754 (NZ\$8,020) for public institutions and US\$17,123 (NZ\$36,580) for private institutions, while

³⁰ Organisation for Economic Cooperation and Development (2001) *Education at a Glance, OECD Indicators, 2001 Edition,* Centre for Educational Research and Innovation, Paris, p 91.

³¹ Ibid.

³² Statistics Canada (2002) 'University Tuition Fees: 2002/03', *The Daily*, 21 August, www.statcan.ca.

³³ See www.gse.buffalo.edu/org/IntHigherEdFinance/region_europe_Austria.html.

³⁴ Zumeta, William (2001) 'Higher Education Finance in the Nineties: Lessons for the New Millennium', *The NEA 2001 Almanac of Higher Education*, National Education Association, Washington, DC, p 81.

³⁵ Statistics Canada (2002), *op cit*.

those at two-year colleges averaged US\$1,738 (NZ\$3,713) for public institutions and US\$7,953 (NZ\$16,990) for private ones.³⁶

There are clearly exceptions to the trend of increasing tuition fees, and some countries have moved in the opposite direction. Examples include Ireland, which abolished tuition fees for full-time undergraduates in the mid 1990s (a move that has been criticised by the OECD and others). According to the OECD, private responsibility for tertiary education declined by about half in Mexico, the Czech Republic and Austria between 1995 and 1998 (although Austria has since reversed course and introduced tuition fees).

The trend toward increased private responsibility for the costs of tertiary education has generally been in line with the recommendations of several groups that have examined this issue, including the West Committee in Australia, the Dearing Committee in the United Kingdom and the Ministerial Consultative Group in New Zealand.

	Average	tuition fees	HECS fees in	
	in Canada (2002/03)		Australia (2002)	
	\$CDN	\$NZ	\$AUD	\$NZ
Arts	3,474	4,738	3,598	4,199
Science	3,547	4,838	5,125	5,982
Engineering	3,776	5,150	5,125	5,982
Commerce	3,536	4,823	5,125	5,982
Law	4,366	5,955	5,999	7,002
Medicine	7,458	10,172	5,999	7,002
Dentistry	9,105	12,418	5,999	7,002

Table 3: Australian and Canadian tertiary tuition fees

Note: Australia/New Zealand exchange rate of .8568 from the Reserve Bank of New Zealand as at 19 August 2002. Canadian/New Zealand exchange rate of .7332 from Bank of Canada, 19 August 2002.

Source: Compiled from *HECS – Your Questions Answered 2002*, Department of Education, Training and Youth Affairs and *University Tuition Fees: 2002/03*, Statistics Canada.

3.3 THE BENEFITS OF TUITION FEES

The establishment of appropriate levels of public and private contribution to tertiary education can have a number of beneficial impacts on the operation of the tertiary education market. In particular, tuition fees:

³⁶ College Board (2001) *Trends in College Pricing 2001*, http://www.collegeboard.com. Exchange rate for 19 August 2002: .4681 (from www.rbnz.govt.nz).

- provide for increased neutrality between on-the-job and institution-based education and training. There are many avenues to skill acquisition formal tertiary education in a tertiary institution, 'informal' on-the-job training and 'formal' on-the-job training such as apprenticeships. Funding arrangements should not favour one over another;
- provide an independent and 'distributed' source of revenues for tertiary education institutions, thus reducing potential threats to academic freedom from significant funders whether public or private;
- introduce increased neutrality between public and private institutions and between different types of formal tertiary education (for example, between universities and polytechnics); and
- impose disciplines on institutions by increasing student expectations in terms of teaching performance, course structures, better course and class scheduling and better use of facilities. These disciplines are particularly important in a system where many of the mechanisms for monitoring and assessing performance are weak.

In addition, tuition fees provide a means of rationing supply and demand. Where tuition fees are not used for this purpose, other rationing devices such as the escalation of entry qualifications or closed enrolments must be found.

3.4 ACADEMIC PROFITS: THE PRIVATE BENEFITS OF TERTIARY EDUCATION

The trend in both developed and developing countries has clearly been toward increasing private responsibility for the financing of tertiary education. As noted above, tuition fees can improve efficiency. Increased private responsibility in the form of tuition fees is also justified on equity grounds given the significant private benefits that accrue to individuals with tertiary training. These private benefits are well documented – both in New Zealand and elsewhere. Individuals with a tertiary education tend to have higher post-tax earnings, improved employment probability and stronger attachment to the labour market through increased labour force participation than those without a qualification. Various data and a number of sophisticated studies have demonstrated that individuals with tertiary training receive a good return on their investment.

3.4.1 New Zealand evidence

The evidence on the private benefits of tertiary education ranges from relatively crude measures to more sophisticated econometric studies.

At a very broad level, data from the year 2000 for New Zealand show that people with tertiary qualifications have much higher incomes and lower unemployment than those without. As shown in Figure 3, degree holders aged 25–34 had an income in March 2000 that was nearly \$16,000 higher than those without a qualification (\$41,183 versus \$25,281). Figure 3 also shows that the unemployment rate in 2000 among degree holders was less than a third of that among those without a qualification (3.3 percent versus 11.1 percent).³⁷

More sophisticated studies confirm these findings. For example, Sholeh Maani of Auckland University has used Census data for 1981, 1986, 1991 and 1996 to estimate the private and social returns to education in New Zealand. Maani's most recent study provides estimates of the private returns to an individual from investing in tertiary education using 1996 Census data. The study found that rates of return and the present value of additional income associated with various qualifications varied by gender and by level of education (see selected results in Table 4). For example:

- the private rate of return to a diploma compared with School Certificate was 6.9 percent for employed males and 3.6 percent for employed females. The present value of returns was low for employed males and negative for employed females;
- the private rate of return to a Bachelor's degree compared with University Entrance (UE) or Sixth Form Certificate (SFC) was 9.2 percent for employed males and 7.1 percent for employed females. The present value of returns was \$70,433 for employed males and \$27,564 for employed females; and
- the private rate of return to a postgraduate qualification compared with a Bachelor's degree was 5.1 percent for employed males and 8.0 percent for employed females. The present value of returns was \$576 for employed males and \$22,662 for employed females.

Overall, Maani's study showed that the private rate of return to a Bachelor's degree compared with no qualification was 11.6 percent for employed males and 9.2 percent for employed females. In 1998, an employed male with a Bachelor's degree could have expected his lifetime earnings (in present value terms) to be over \$140,000 higher than a male with no qualification, nearly \$100,000 greater than someone with School Certificate and around \$70,000

³⁷ Ministry of Education (2001) New Zealand's Tertiary Education Sector Report: Profile and Trends 2000, Wellington, p 110.



Figure 3: Average income and unemployment rate by level of highest qualification, 2000

more than someone with University Entrance or Sixth Form Certificate. The equivalent figures for females were \$69,000, \$38,000 and \$28,000. These amounts were higher if one looked at figures for males and females employed full-time.³⁸

On the basis of her 1999 report, Maani concluded that the results based on the 1996 Census were consistent with her earlier work in confirming that the returns to both secondary and tertiary education are significant and had increased between 1981 and 1996. For example, Maani found that, between 1981 and 1996, the returns to a:

- Bachelor's degree had increased by 22.3 percent for full-time employed males and 8.6 percent for full-time employed females; and
- Postgraduate degree had increased by 22.1 percent for full-time employed males and 8.3 percent for full-time employed females.

Source: Ministry of Education (2001) *New Zealand's Tertiary Education Sector Profile and Trends 2000*, p 110.

³⁸ Maani, Sholeh (1999) Private and Public Returns to Investments in Secondary and Higher Education in New Zealand Over Time: 1981–1996, Treasury Working Paper 99/2, The Treasury, Wellington, p 60. This study uses data from the 1996 Census, which are updated to 1998 dollars.

	Ма	les	Females	
Qualification	All	Employed	All	Employed
	employed	full-time	employed	full-time
Guanneation	(/0)	(/0)	(/0)	(/0)
No qualification to	16.8	14.7	36.9	27.0
School Certificate	\$46,443	\$43,096	\$46,859	\$49,184
School Certificate to diploma	6.9	7.4	3.6	4.3
	\$8,206	\$9,637	(\$9,337)	(\$4,945)
School Certificate to	10.4	10.9	7.6	8.1
Bachelor's degree	\$99,377	\$110,237	\$37,676	\$44,984
School Certificate to	9.4	9.8	7.5	7.7
postgraduate qualification	\$101,542	\$112,146	\$52,302	\$57,795
UE or SFC to	9.2	9.8	7.1	7.3
Bachelor's degree	\$70,433	\$81,480	\$27,564	\$31,772
UE or SFC to	8.5	8.9	7.3	7.2
postgraduate qualification	\$73,767	\$84,862	\$44,407	\$46,465
Bachelor's degree to	5.1	5.6	8.0	7.4
postgraduate qualification	\$576	\$3,588	\$22,662	\$19,709

Table 4: Private rates of return and present value of returns to education in New Zealand, after tax, 1998

Note: UE = University Entrance / SFC = Sixth Form Certificate

Source: Drawn from Maani, Sholeh (1999) Private and Public Returns to Investments in Secondary and Higher Education in New Zealand Over Time: 1981–1996, p 60.

However, Maani also found that the returns to a Bachelor's degree declined between 1991 and 1996 for females and stabilised for males, results that may have resulted from increasing numbers of graduates in areas where once shortages existed.³⁹

3.4.2 International evidence

Studies in other countries have similarly documented the private benefits of tertiary education. For example, in the United Kingdom:

• a study by Greenaway and Haynes estimated that, over a working life, a university graduate would earn over £400,000 more than a non-graduate with two A-levels;⁴⁰

³⁹ *Ibid*, pp 31–33.

⁴⁰ See Greenaway, David and Michelle Haynes (2000) *Funding Universities to Meet National and International Challenges*, School of Economics Policy Report, University of Nottingham, p 38.
- research based on the experience of identical twins found that education had a direct link to improving earning power and that each extra year of education added £50,000 to average income over a working lifetime;⁴¹
- a report prepared for the UK Higher Education Funding Council by Bynner and Egerton found that university graduates were more likely to have professional or managerial jobs, had a lower chance of being out of work, and were likely to be happier and healthier than non-graduates;⁴²
- a study by Chevalier and Walker found that the rate of return to higher education was stable at around 6–9 percent for men and 8–12 percent for women, with some suggestion that returns had risen over time;⁴³ and
- the UK Graduate Market Trends survey showed that a university degree can boost earning power by up to £15,000 per year and that, before the age of 30, graduates were already earning £6,000 per year more than their peers who had not attended university.⁴⁴

Similar evidence has been found in other jurisdictions. In Canada, a report prepared for the Council of Ontario Universities estimated that, over a lifetime, the holder of a Bachelor's degree would earn an average of CDN\$488,500 before tax (CDN\$356,200 after tax) more than a high school graduate.⁴⁵

A 1998 report showed that, across the OECD, university graduates earned substantially more, had higher labour force participation rates and lower unemployment rates than secondary school graduates. The evidence for males is outlined in Table 5.

A more recent OECD study by Blondal, Field and Girouard found that human capital investment from upper secondary and tertiary education in a range of OECD countries was associated with significant labour-market gains and that internal rates of return were estimated at between 7 and 19 percent.⁴⁶

⁴¹ BBC News Online (2000) 'Education's earnings pay-off', BBC News Online, 12 July, www.bbc.co.uk.

⁴² South China Morning Post (2001) 'Degrees are passports to health, happiness: study', 8 September, www.scmp.com.

⁴³ Chevalier, Arnaud and Ian Walker (1999) *Further Results on the Returns to Education in the UK*, Working Paper, Keele University, p 35.

⁴⁴ Smithers, Rebecca (2002) 'Degrees 'boost earning power", *Guardian Unlimited*, 27 June.

⁴⁵ Council of Ontario Universities (2001) Highlights From The Economic Impact Study: The Economic Impact of Ontario's Universities, Study prepared by Enterprise Research Canada, Toronto, May, p 3, www.cou.on.ca.

⁴⁶ Blondal, *et al*, *op cit*, p 6.

	Labour force participation (%)		Unemployment rates (%)		Earnings differential (%)	Income differential (%)
	Secondary	University	Secondary	University	University	University
Australia	90	93	6	4	61	70
Canada	89	92	9	5	52	65
Czech Republic	89	96	2	1	55	69
Denmark	89	94	6	4	38	50
Finland	87	93	15	6	87	126
France	90	92	8	6	85	94
Germany	85	93	8	5	52	73
Ireland	92	94	6	3	71	80
Italy	80	92	6	5	73	103
Netherlands	87	90	3	3	35	40
New Zealand	93	93	3	2	71	73
Norway	90	95	4	3	43	53
Spain	91	91	12	9	45	50
Sweden	90	94	10	4	58	78
Switzerland	94	95	3	5	46	44
United Kingdom	89	94	8	4	61	78
United States	88	93	6	2	83	103
OECD	89	93	7	4	62	75

Table 5: Benefits of university education for males, selected OECD countries

Source: OECD (1998) Education at a Glance, cited in Greenaway and Haynes (2000), p 41.

3.5 DO TUITION FEES UNDULY HARM ACCESS TO TERTIARY EDUCATION?

Tertiary education is only one avenue to skill acquisition. It would be wrong to think that more tertiary education is always better. As Wolf argues, "it is always dangerous to conclude that, because some of a thing is good, more of it must be even better".⁴⁷ It is important that participation in formal tertiary education be increased only if there is a marginal net benefit to society from such an investment. Spending a dollar on tertiary education means there is a dollar less to spend on something else. If spending a dollar on tertiary education, early childhood education, health, roads, or tax cuts, then society is worse off by spending it on tertiary education.

At the same time, it is important that policy is not designed in such a way that there is less participation in tertiary education than is 'efficient' from society's point of view (for example, because of the existence of externalities

⁴⁷ Wolf, Alison (2002) *op cit*.

or capital market failures). One of the common arguments against tuition fees is that they can unduly deter participation either generally or for particular groups such as people on low incomes, Maori or Pacific Peoples. There are several reasons why this is unlikely to be the case in New Zealand:

- the significant private benefits associated with tertiary education provide a strong incentive to undertake such training;
- students in New Zealand are not required to meet the 'up-front' costs (for example, fees, living costs) of tertiary education because of the existence of the student loan scheme;
- the income-contingent nature of the student loan scheme provides students with an element of insurance against repayments if their income is low post-graduation; and
- the demand for tertiary education is relatively unresponsive to changes in tuition fees, at least in the presence of a student loan scheme (as discussed below).

Indeed, a strong case can be made that increased tuition fees, if accompanied by targeted measures aimed at lifting participation among under-represented groups, could lead to higher participation overall and broader participation among such groups than the current set of tertiary funding policies. As Barr (2001) argues, "an important part of the argument for fees is that they free resources for targeted action on access".⁴⁸

3.5.1 The impact of tuition fees on participation: the evidence

There is a variety of evidence – some suggestive and some more definitive – that the demand for tertiary education is relatively insensitive to increases in price and that financial resources are not the only factor influencing the demand for tertiary education. Thus, the claim that fees deter students from undertaking tertiary education is far from clear.

First, cross-country evidence suggests that the relationship between low private responsibility for tertiary education and high tertiary participation is not as close as many believe. If fees were such a strong deterrent to participation then countries with low fees would have higher participation and vice versa, other things being equal. This is clearly not the case. For example, countries such as Korea, Japan, the United States, Canada and Australia have high tertiary

⁴⁸ Barr, Nicholas (2001) The Welfare State as Piggy Bank: Information, Risk, Uncertainty, and the Role of the State, Oxford University Press, Oxford, p 219.

education participation rates and relatively high private responsibility for the costs of tertiary education. Conversely, private sources of funding account for only 3 to 15 percent of total spending on tertiary institutions in the six countries with the lowest entry rates to university-level education.⁴⁹

Second, the 'deterrence' argument is not consistent with New Zealand's experience. Quite the opposite. Tertiary participation in New Zealand was low despite the absence of fees prior to 1990, yet continued to increase despite successive increases in tuition fees for much of the period, with the number of EFTS places increasing by nearly 96,000 between 1989 and 2000 (an increase of 95 percent).⁵⁰ In addition:

- the number of students in tertiary education increased from 141,456 to 264,553 between 1990 and 2000 (2000 figure includes PTEs);⁵¹ and
- the number of postgraduate EFTS grew from 7,916 in 1992 to 14,453 in 1999 – an increase of nearly 83 percent.⁵²

Clearly, this does not 'prove' that fees have not unduly deterred students from undertaking a tertiary education because participation might have grown even more in the absence of fees. Indeed, Economics 101 suggests that, other things being equal, raising the price of a good or service will reduce the quantity demanded of that good or service.

That being said, there are a number of reasons why we would not expect an increase in tuition fees from present levels to pose an undue barrier to tertiary education participation:

• the biggest cost of undertaking tertiary education is the earnings that students forgo while studying (called the indirect cost). As the example in Table 6 shows, the direct costs of tertiary education are somewhere around one-seventh the size of the indirect costs. Hence, a 10 percent increase in tuition fees would only increase overall costs by around 1 percent; and

⁴⁹ Organisation for Economic Cooperation and Development (2001) *Education at a Glance: OECD Indicators,* Centre for Educational Research and Innovation, Paris, pp 91–92.

⁵⁰ Data from Ministry of Education. Some of this increase is as a result of the inclusion of PTE EFTS in the data series from 1999. Even without this, however, growth was significant – more than 73,000 between 1989 and 1998.

⁵¹ Figures as at July of each year. Data from Ministry of Education (2001) *op cit*, p 100 and p 102.

⁵² Ministry of Education (2000) *op cit*, p 105.

Direct costs		Indirect costs		
Tuition fees (\$3,500 average fee in 2000 <i>times</i> 3 years)	\$3,500 <u>×3</u> \$10,500	⁴ Lost' salary as a result of pursuit of tertiary studies (equal to average income in March 2000 for individual with School Certificate <i>times</i> 3 years)	\$30,381 <u>×3</u> \$91,143	
Cost of books (\$1,000 <i>times</i> 3 years)	\$3,000			
Total direct cost (3 years)	\$13,500	Total indirect cost (3 years)	\$91,143	
Ratio o A 10 percent increase in tu	Total cost of s of indirect cost ition fees = 1 p	tudy: \$104,643 s to direct costs: 6.8:1 percent increase in annual cost of	studying	

 the significant return to tertiary training – in the form of reduced unemployment and increased lifetime incomes – provides students with a big incentive to undertake tertiary education. While most students pay fees for three or four years, they will realise the benefits from that investment over a much longer period.

Most research on this question has shown that the demand for tertiary education is relatively insensitive to fees. For example:

- a study by Bruce Chapman of Australian National University concluded that the introduction of the initial HECS in Australia did not appear to have a significant impact on tertiary education enrolments;⁵³
- a more recent study by Chapman and Ryan concluded that "the introduction of HECS was associated with aggregate increases in higher education participation",⁵⁴
- a study by the Department of Employment, Education, Training and Youth Affairs (now the Department of Education, Science and Training) in Australia concluded that the increased charges introduced to the HECS

⁵³ Chapman, Bruce (1997) 'Conceptual Issues and the Australian Experience with Income Contingent Charges for Higher Education', *Economic Journal*, Vol 107, No 442, pp 738–751.

⁵⁴ Chapman and Ryan (2002), *loc cit*, p 13.

scheme in 1996 did not appear to have significantly reduced the number of Year 12 applicants in 1997,⁵⁵

- a second study by the Department of Education, Training and Youth Affairs (now the Department of Education, Science and Training) in Australia concluded that "HECS did not appear to have substantially affected the level of applications or enrolments of students in general, although little can be said concerning students from low SES backgrounds";⁵⁶
- a report by the Higher Education Council in Australia found that only 10 percent of students who had dropped out of university regarded HECS as being important in their decision;⁵⁷
- an Industry Commission study in Australia supported reduced tertiary education subsidies given "evidence that the overall demand for higher education is relatively insensitive to its cost and that, as a result, any subsidy will have a relatively small impact on participation rates";⁵⁸
- a study of barriers to participation in post-compulsory education and training (PCET) carried out by ACNielsen-MRL for the New Zealand Ministry of Education found that low motivation and attitudes were the most difficult barriers to participation in PCET;⁵⁹ and
- Leslie and Brinkman surveyed 25 studies on the responsiveness of demand to changes in price. They found that, while tuition fees did affect demand, the response was inelastic.⁶⁰ Furthermore, this was in an environment where there was no income contingent student loan scheme in place.⁶¹

- ⁵⁸ Industry Commission (1997) *op cit*, p 16.
- ⁵⁹ ACNielsen-MRL (1997) *Post-Compulsory Education and Training Barriers to Participation*, Report prepared for the Ministry of Education, Wellington.
- ⁶⁰ Inelastic means that a 1 percent increase in tuition fees reduces the quantity of tertiary education demanded by less than 1 percent.
- ⁶¹ Leslie, LL and Brinkman PT (1987) 'Student Price Response in Higher Education The Student Demand Studies', *Journal of Higher Education*, Vol 58, No 2.

⁵⁵ Andrews, Les (1997) The Effect of HECS on Interest in Undertaking Higher Education, Department of Employment, Education, Training and Youth Affairs, Commonwealth of Australia, Canberra, p 18.

⁵⁶ Andrews, Les (1999) Does HECS Deter? Factors Affecting University Participation by Low SES Groups, Department of Employment, Education, Training and Youth Affairs, Commonwealth of Australia, Canberra, p 25.

⁵⁷ Higher Education Council (1993) *Seventh Report to the National Board of Employment*, Education and Training, Commonwealth of Australia, Canberra, p 9.

Maani provides a comprehensive survey of (primarily American) literature on the participation impact of tuition fees. She notes that the demand for postsecondary education is affected by price, income, socio-economic background and academic achievement. The results "... strongly indicate that the price elasticity is greatest for the lower income groups, while for middle income groups the results are mixed and for higher income groups the demand appears to be inelastic but downward sloping".⁶² Maani further concludes that socioeconomic factors affect participation in tertiary education mainly through their effect on school performance and the completion of secondary school.⁶³

As Maani notes, some caution is required in translating these results to New Zealand for a variety of reasons (for example, fees have been around longer in the United States, quality differences among US tertiary institutions). However, an equally important point to note is that students in the United States did not have the protection afforded by an income contingent student loan scheme.

There is little hard evidence that New Zealand's tuition fee policies have unduly deterred participation in tertiary education. Maani concludes that her results are consistent with the observation that fees have not significantly affected participation in tertiary education.⁶⁴

In addition, the social rates of return to tertiary education that Maani calculates do not suggest that New Zealand has under-invested in tertiary education. These rates are not particularly high. For example, in 1996 (after fees were introduced) the measured social return to a Bachelor's degree compared with UE or SFC was around 8 percent for employed men and 5 percent for employed women. The measured returns to doing a diploma or postgraduate work were lower than this. These figures would understate the social returns to some degree because they do not include the value of externalities produced by graduates. On the other hand, ability bias and the fact that the figures do not account for lower returns to graduates who are not employed, mean they are likely to overstate the return to extra participation in tertiary education.

In summary, existing studies on the demand for tertiary education seem to support one of the key policy directions underlying this report – that targeted

⁶² Maani, Sholeh (1997) *Investing in Minds: The Economics of Higher Education in New Zealand*, Institute of Policy Studies, Wellington, p 171.

⁶³ Maani, Sholeh (1997) *ibid*.

⁶⁴ Maani, Sholeh (1997) *op cit*, p 189.

assistance should be favoured over general subsidies as a means of broadening tertiary participation among those from groups that are disadvantaged.

3.5.2 Do tuition fees widen the opportunity gap?

The claim is often made that, while tuition fees might not have an undue adverse impact on tertiary education participation overall, they might unduly affect participation among particular groups – whether 'traditionally disadvantaged' such as Maori or groups such as women. While there is no hard evidence in New Zealand on this, enrolment trends among both groups suggest this has not been the case:

- the number of female students enrolled in tertiary education rose from 107,020 to 127,974 between 1994 and 2000 – an increase of 19.6 percent (compared with 4.8 percent for males);⁶⁵ and
- the number of Maori tertiary students grew from 20,201 in 1994 to 29,513 in 2000 an increase of 46.1 percent. At the same time, the share of Maori among all tertiary students increased from 10.7 percent to 13.9 percent.⁶⁶

A New Zealand University Students' Association (NZUSA) report found that participation in any kind of tertiary education by school leavers rose significantly in all but three of the socio-economic decile groupings (deciles six, seven and eight) between 1997 and 2000. It also found that the biggest increases in participation occurred among students in decile one and two schools. The NZUSA study showed that, despite increasing fee levels, between 1997 and 2000:

- the proportion of school leavers in decile one and two schools who went on to some form of tertiary education rose from 18 percent to 26 percent; and
- the proportion of students from decile one schools who went on to university rose from 6 percent to 9 percent.⁶⁷

While students from low decile schools remain highly under-represented among university graduates (and the proportion of school leavers from high decile schools going on to university also increased), the NZUSA research

⁶⁵ Ministry of Education (2001) *op cit*, p 102.

⁶⁶ Ministry of Education (2002) *Nga Haeata Matauranga: Annual Report on Maori Education* 2000/ 2001 and Directions for 2002, Table O, www.minedu.govt.nz.

⁶⁷ McCarthy, Claire (2001) 'More low decilers at university', *New Zealand Education Review*, 30 November.

suggests that the cause of this under-representation is more complex than simply financial resources and tuition fees.

Studies from other countries support the view that tuition fees do not necessarily have an adverse impact on groups that have been traditionally disadvantaged.

Chapman and Ryan conclude that the introduction of HECS "did not result in decreases in the participation of prospective students from relatively poor families, although the absolute increases were higher for relatively advantaged students". They also conclude that the reforms to HECS introduced in 1997 "were associated with increases in the participation of individuals irrespective of their family wealth".⁶⁸

Norton notes that low-income students in Australia were twice as likely to attend university in 1999 as they had been in 1980.⁶⁹

An Australian study by Anderson and Vervoorn found that the socioeconomic imbalance among tertiary students was already pronounced by the end of secondary school and that family background tends to affect tertiary participation through its impact on secondary school completion.⁷⁰

Similarly, a study prepared in 2001 for the Council of Ontario Universities in Canada found that, despite significant increases in tuition fees, there was a broadening of the income distribution of university applicants. In particular, it found that:

- the number of applicants from lower-income groups increased between 1994 and 1998; and
- the proportion of applicants reporting family income under CDN\$30,000 increased from approximately 22 percent to 28 percent between 1998 and 2001.⁷¹

A commonly proposed remedy for the under-representation of the poor in tertiary education is to abolish student tuition fees across the board. The mid-1990s abolition of fees in Ireland, however, suggests that the answer to

⁶⁸ Chapman and Ryan (2002), *loc cit*, p 13.

⁶⁹ Norton, Andrew (2002) 'Students gain in change', The Courier Mail, 29 August.

⁷⁰ Anderson, DS and AE Vervoorn (1983) Access to Privilege: Patterns of Participation in Australian Post-secondary Education, Australian National University Press, Canberra. Cited in Maani (1997) p 164.

⁷¹ Acumen Research Group (2001) University Applicant Income Study: Summary Report, Council of Ontario Universities, Toronto, July, p ii.

increasing tertiary education participation is far more complex. A recent report prepared for the Irish Higher Education Authority showed that the abolition of tuition fees "doesn't seem to have made much difference [to higher education access for the poor]".⁷² That report, prepared by professor Patrick Clancy of University College Dublin, found that huge class disparities remained despite the abolition of tuition fees and that higher education participation levels had actually fallen in some poorer Dublin areas. According to the report, well over 90 percent of school leavers from a professional background enter higher education in Ireland, versus only 20 percent from the unskilled manual and semi-skilled manual groups. The main deterrent to poor students attending tertiary education was found to be family attitudes and aspirations, rather than financial worries.⁷³

The release of the Clancy report is believed to have led politicians in Ireland on both the left and the right to be "privately concerned that the abolition of fees simply subsidised the middle classes without improving the participation of poorer students".⁷⁴ The Clancy report itself argued that efforts to lift access among disadvantaged groups needed to focus on interventions that lie "outside the higher education system".⁷⁵ In its 1998/99 Survey of Ireland, the OECD recommended the reinstatement of tuition fees, stating that "the restoration of fees combined with a programme of income-contingent student loans should be seriously considered".⁷⁶ One of the reasons for recommending the restoration of fees was its possible favourable effects on equity. Ireland looks set to reverse its decision to abolish fees. The Minister for Education recently acknowledged that fees may be reintroduced for those who can afford them.⁷⁷

In the United States, Leslie and Brinkman found that "when broad studies have considered more than economic effects on enrolment rates, sociological variables have invariably turned out to be most potent; economic variables generally rank third. In other words, college attendance is associated more

⁷² Ryan, Conor (2002) 'Class Divide Still Rules in Ireland', *The Guardian*, April 16, http://education.guardian.co.uk.

⁷³ Clancy, Patrick (2001) College Entry Focus: A Fourth National Survey of Access to Higher Education, Higher Education Authority, Dublin.

⁷⁴ Ryan, op cit.

⁷⁵ Clancy, *op cit*, p 176.

⁷⁶ Organisation for Economic Cooperation and Development (1999) OECD Economic Surveys: Ireland, Paris, p 20.

⁷⁷ Flynn, Sean (2002) 'Third level fees may return "for those who can afford it" ', *Irish Times*, 23 November.

with such student traits as social class and parents' education than with college price".⁷⁸

This view is further supported by a recent report from the centre-left Institute for Public Policy Research (IPPR) in the United Kingdom. The IPPR report, entitled *Opportunity for whom*? argued that the Blair government's approach to post-16 education benefits middle-class students at the expense of people from working-class families. As a result, the IPPR report recommended a range of reforms aimed at reducing the degree of subsidy to higher education, including:

- removal of the student loan interest rate subsidy for students from affluent backgrounds;
- abolition of the child benefit for the over-16s; and
- reduction of the state subsidy for higher education students' fees at tertiary levels.⁷⁹

Additional spending on tertiary education will do little to improve either equity or education outcomes for disadvantaged students from Maori and Pacific communities or those from low socio-economic backgrounds.⁸⁰ This view is bolstered by a report from Pamela Robinson and Paul White of the Centre for Education and Employment at Brunel University, who argued, in a United Kingdom context:

[T]his suggests that any attempts to significantly increase the proportion of all students in higher education coming from manual backgrounds will only be successful if they are able to fully address the problems of social class inequality throughout the whole education system, and are not restricted merely to changes within the post-compulsory education sector.⁸¹

Robinson and White go on to argue that the social class effect of introducing tuition fees at the undergraduate level in the United Kingdom would be minimal because "a high proportion of the differentiation between social classes

⁷⁸ Leslie and Brinkman (1987) *op cit*, p 195. Cited in Maani (1997).

⁷⁹ Piatt, Wendy and Peter Robinson (2001) *Opportunity for whom? Options for funding and structure of post-16 education*, Institute of Public Policy Research, London, p v.

⁸⁰ See for example Chapman, Bruce (1992) Austudy: *Towards a more flexible approach, an options paper*, AGPS, Canberra; Clare, R and K Johnston (1993) *Education and Training in the 1990s*, Economic Planning Advisory Council Background Paper, No 31, July, pp 58–62.

⁸¹ Robinson, Pamela and Paul White (1997) Participation in Post-Compulsory Education, Draft Report, Centre for Education and Employment Research, Brunel University, Middlesex, p 10.

has already taken place by the time the individuals begin their courses in higher education".⁸²

In its 2002 report on post-16 education, the British House of Commons Education Select Committee put forward a similar argument:

Increasing fees would not disadvantage those students from the poorest backgrounds and could raise significant funds for institutional investment and student support.⁸³

Of further concern is that the additional spending on middle-class families – through reduced fees for example – may actually widen the gap between the poor and the middle classes. A recent study by Susan Dynarski of Harvard University found that increasing aid to middle- and higher-income youth through the Georgia HOPE Scholarship programme had actually "widened the gap in college attendance between blacks and whites and between those from low and high income families".⁸⁴

Similarly, a study by Thomas R Wolanin of the Institute for Higher Education Policy in Washington DC found that the Federal HOPE Scholarship – a tax credit aimed at middle-income Americans – did not increase the enrolments of those who are qualified but would otherwise not attend. In his view:

The HOPE Scholarship does not contribute to making the USA a more fair and equitable society ... instead, it provides a windfall to students from middle-income families who would have enrolled in higher education without the HOPE Scholarship. It neither expands access to, nor the opportunity for, higher education.⁸⁵

McLaughlin (2002) has noted the significant opportunity gap that exists in tertiary education in New Zealand. Despite impressive gains in overall tertiary participation since the mid 1980s, significant differences exist in overall tertiary participation:

⁸² *Ibid*, p 11.

⁸³ Curtis, Polly (2002) 'MPs call for rise in interest rates on student loans', *Guardian Unlimited*, 11 July, http://education.guardian.co.uk.

⁸⁴ Dynarski, Susan (2000) Hope for Whom? Financial Aid for the Middle Class and its Impact on College Attendance, NBER Working Paper 7756, National Bureau of Economic Research, Cambridge, MA, p ii.

⁸⁵ Wolanin, Thomas R (2001) Rhetoric and Reality: Effects and Consequences of the HOPE Scholarship, Working Paper, Institute for Higher Education Policy, Washington DC, p 28.

- Maori and Pacific students are under-represented in tertiary education, especially at 'higher' levels of tertiary education; and
- students from low and middle decile schools are also under-represented in tertiary education relative to students at high decile schools, especially at 'higher' levels of education.⁸⁶

McLaughlin also notes that a key variable in closing this opportunity gap is academic preparation. She cites evidence that:

- academic preparation, especially mathematics, is an important factor in increasing the chance of going on to college and succeeding once there. Algebra and geometry are especially important;
- decisions made in middle school years (ages 12 to 14) about courses and academic performance affect the likelihood of tertiary success;
- the strongest influence on tertiary entrance scores in Year 12 was literacy, and numeracy in Year 9, with numeracy having a stronger relationship; and
- mathematics, followed by comprehension and literacy, were found to be most strongly associated with later social and academic competencies.⁸⁷

McLaughlin argues that "well-coordinated strategies across educational levels and across policy instruments and a focus on lower-decile schools could make a big difference". A strategy for closing the opportunity gap could include a number of elements: making 'improving opportunity' a key part of the government's recently announced Tertiary Education Strategy, creating early intervention school/tertiary partnerships, providing more information earlier to students and families, improving financing for students with low incomes and paying institutions for enrolling targeted groups of students; and developing a strong research agenda.⁸⁸

In the same vein, Maani (1997) notes that there is compelling empirical evidence that the demand for tertiary education is closely related to socioeconomic background and that this effect operates significantly through students' academic performance and achievement. She argues that this finding can explain why studies over time indicate that:

⁸⁶ McLaughlin, Maureen (2002) *Improving Access and Opportunity to Tertiary Education in New Zealand*, Fulbright Lecture, Wellington, 23 July. Available on the Education Forum website www.educationforum.org.nz, under presentations.

⁸⁷ Ibid.

⁸⁸ Ibid.

... the introduction of student assistance packages at the tertiary level is not a sufficient condition to increase the participation by the economically disadvantaged at the tertiary level ... [T]hese results indicate that for a goal of increased access to tertiary education a comprehensive package is required, including financial assistance at the tertiary level and increased incentives to complete secondary studies.⁸⁹

A recent report from the Universities and Colleges Admissions Service (UCAS) in the United Kingdom supports this general conclusion. It found that "the key decision whether to stay on in education had been made by most students by the time they were 14 years old".⁹⁰

Clearly, policymakers should be concerned about educational underperformance among groups that are disadvantaged in society. The key message from this section is that general (that is, untargeted) tertiary education subsidies will do little to improve the educational prospects of the poor or improve equity. The mix of factors influencing participation by students from disadvantaged backgrounds is far more complex than simply tuition fees. Indeed, by further subsidising those from higher-income backgrounds, additional untargeted tertiary education spending might open 'gaps' further.

In addition, to achieve the aim of increasing the proportion of students from low socio-economic backgrounds in tertiary education, efforts should be targeted where they have the highest return. The evidence suggests that this is almost certainly at pre-tertiary education levels and involves more than just money. The factors that influence tertiary participation among the poor are far more complex than is suggested by proponents of simply throwing more money at the problem. Policies geared to students in the 18–21 age group are simply too late and are likely to be ineffective at promoting tertiary education attendance among under-represented groups. Many students who are disadvantaged do not go on to tertiary education due to lack of academic preparation and aspirations. Those receiving secondary schooling of poor quality are simply unable to benefit from subsidies at the tertiary level. In addition, it is important to recognise that other activities – including formal and informal on-the-job training – may offer a better means of skill acquisition for many. Unfortunately, as is discussed below, much of the current

⁸⁹ Maani, Sholeh (1997) *op cit*, p 186.

⁹⁰ Eason, Gary (2002) "Elitist' system deters students', BBC News Online, 28 June, www.news.bbc.co.uk.

government's policy actions aimed at broadening participation in tertiary education have been focused on the very policies that research and evidence suggest do not work.

3.6 THE TUITION FEE FREEZE: MAKING TERTIARY EDUCATION AFFORDABLE?

In an effort to increase the affordability of tertiary education and to limit growth in the stock of student loan debt outstanding, the government in New Zealand has moved to limit increases in tuition fees. Initially this was done via the 'voluntary' fee-stabilisation programme, under which institutions received increased funding in return for freezing tuition fees. This scheme, which took effect in 2001, will remain in place until 2003. However, the government recently passed legislation that will introduce fee maxima from 2004, a move that was vigorously opposed by the New Zealand Vice-Chancellors' Committee.

The discussion above regarding the deterrent effect of tuition fees suggests that controls on fees will do little to promote increased tertiary participation – either generally or among those on low incomes. And it seems certain that such a policy will do less than alternative policies – such as targeted assistance and increased academic preparation at earlier levels of education – to promote participation among disadvantaged groups.

While doing little for participation, fee limits, in whatever form, will come at great cost – to taxpayers in terms of increased taxes, to institutions in terms of risks to institutional self-management and to students and institutions in terms of threats to quality of tuition and research. Fee limits will mean that the prices that institutions charge will be capped, but the prices they pay for staff and other inputs will continue to be driven by wider economic factors, including local and international competition for staff. The current fee freeze and the fee maxima policy could adversely affect institutions' ability to attract and retain high-performing staff. Over time, these policies could threaten the quality of provision and lead to a running down of both human and physical capital in the tertiary sector. This is not in the interest of students, staff, institutions or indeed the country as a whole. It is certainly not a recipe for innovation and world-leading teaching and research.

In its Fourth Report, the government-appointed Tertiary Education Advisory Commission (TEAC) argued that the fee stabilisation policy instituted in 2000 was not sustainable in the long term. Therefore, TEAC recommended the retention of the current legislation that gives Tertiary Education Institution (TEI) councils the power to prescribe fees payable by students. TEAC made a number of points in support of its recommendation:

- the continuation of fee stabilisation policies under the current model would unduly restrict the capacity of providers to manage and plan strategically, and may therefore negatively affect quality; and
- providers are in the best position to determine the appropriate balance between keeping fees low and delivering high-quality programmes.⁹¹

While people may not agree with the progressive reductions in per-student subsidies that took place over the 1990s, the freedom to set fees has at least given institutions the flexibility to offset the impact of these reduced subsidies and increased incentives to examine the costs of course delivery. And, as shown in Figure 4, the freedom to set fees has largely been successful in maintaining





Note: PTEs are included in the measure of average subsidy for 1999. *Source:* Ministry of Education (2000) *New Zealand's Tertiary Education Sector: Profile and Trends 1999,* p 104 and p 105.

⁹¹ Tertiary Education Advisory Commission (2001) *Shaping the Funding Framework, Fourth Report* of the Tertiary Education Advisory Commission, Wellington, pp 72–75.

institutional revenues (measured in current dollars) at or above the levels that existed in the early 1990s.

Fee caps assume that it is possible for the government to determine the 'right' amount of resourcing required for each institution. If the government gets it wrong, the institution and students pay the price. Blanket increases or limits are not precise enough to target resourcing to where it is needed. It may be that particular institutions (or groups of institutions) need bigger increases in revenues than others in order to deliver the quality of tuition and research required. For example, if particular institutions have greater exposure than others to the increasingly competitive international labour market, then they may very well need more funding than the institutions that do not face this pressure. Nicholas Barr has noted this point. He argues that governments are no longer able to determine appropriate funding levels given the increased size and diversity of the tertiary sector:

... [f]lexible fees are necessary both for economic efficiency and to redress underfunding – and the consequent threat to quality – of the best universities. Flexible fees benefit all tertiary institutions, by letting each find its place in the spectrum of institutions.⁹²

In the United States, the National Commission on the Cost of Higher Education, examined a range of issues relating to tuition fees and concluded against tuition fee controls, arguing that:

Tuition price controls will not work and would be destructive of academic quality in higher education.⁹³

Internationally, the trend is toward less regulation – not re-regulation – of fees. During the 1990s, most Canadian provinces deregulated tuition fees for professional programmes, allowing institutions to charge market rates. Australia has already deregulated fees to some degree. Universities there can charge full fees to undergraduate students who do not qualify for a HECS subsidy as long as their numbers do not exceed 25 percent of the number of HECS students in that course. They can also charge full fees to postgraduate students. The current higher education review looks set to deregulate fees

⁹² Barr, Nicholas (2000) A Strategy for Financing Tertiary Education, Submission to the Education and Science Select Committee Inquiry into the Resourcing of Tertiary Education, London School of Economics, London, p 2.

⁹³ National Commission on the Cost of Higher Education (1998) *Straight Talk About College Costs and Prices*, Washington, DC, http://www.eriche.org/government/talk.html.

further. In Canada, the Province of Ontario has deregulated tuition fees in all areas except the arts, science and education. William Leggett, Principal of Queen's University in Kingston, Ontario, has spoken out in support of fee deregulation, arguing that it:

... was the right thing to do. It created the opportunity for individual institutions to establish the level of quality they wanted to aim for ... and to convince students that the quality that was going to be offered with the new funding was a good deal ... Our real problems now are in arts, science and education, where tuition remains regulated ...⁹⁴

The Province of British Columbia has recently gone further and deregulated all tuition fees – the situation that existed in New Zealand prior to 2001.

The Blair government in the United Kingdom introduced a flat tuition fee in 1998 and is currently examining the possible introduction of differentiated fees. Many believe that differential fees are inevitable in the United Kingdom. The UK-based IPPR, which is described as "the most influential new Labour think-tank", has come out in support of differential top-up fees. This is said to signal a possible change in the government's future higher education funding policy.⁹⁵ In supporting top-up fees, Wendy Piatt of the IPPR, argued that:

Differential fees are the fairest and most feasible method of funding and should remain central to the long-term vision for higher education.⁹⁶

In its recent report on post-16 education, the House of Commons Education Select Committee recommended that the notion of 'top-up' fees be seriously debated and did not rule out their introduction.⁹⁷ Downing Street is said to favour allowing elite universities to charge 'top-up' fees for their more prestigious courses.⁹⁸

Fee limits, combined with increased tuition subsidy spending, will reduce the degree of diversification of tertiary institutions' revenue bases. This is of concern. Increased revenue diversification would avoid 'boom and bust' cycles

⁹⁴ Watson, William (2000) 'The Freedom to Innovate: An Interview with William Leggett', Policy Options, September, p 15.

⁹⁵ Thomson, Alan, (2001) 'Top-ups back to spook Labour', *The Times Higher Education Supplement*, www.thes.co.uk, 25 May.

⁹⁶ Piatt, Wendy (2001) 'Financing is the crucial issue', *The Times Higher Education Supplement*, www.thes.co.uk, 25 May.

⁹⁷ Curtis, Polly (2002) op cit.

⁹⁸ Hinsliff, Gabby (2002) 'Student payouts to balance 'top-up' fees by universities', *Guardian Unlimited*, www.education.guardian.co.uk.

in government spending. The experience of the United States is relevant, with the current economic downturn causing state governments to reduce budgets for public colleges at the very time that demand for tertiary education is increasing.⁹⁹

A greater reliance on government funding would also leave the tertiary sector more vulnerable to the effects of long-term spending pressures from an ageing society – for example, increased healthcare and pension spending. These pressures will place an increasing premium on ensuring the quality of education spending. The revenue diversification argument becomes even more important if controls on fees are re-introduced, as is proposed.

The New Zealand government's 'affordable education' strategy is also targeted only at students enrolled at state tertiary institutions. Indeed, recent government policy changes have reduced per-student subsidies to PTEs. Any serious strategy aimed at addressing under-representation in tertiary education participation should be focused on overcoming financial barriers for students irrespective of whether they study at public or private institutions. The New Zealand government's current policy of cutting subsidies to PTE students while increasing subsidies to students at state tertiary institutions amounts to a 'Reverse Robin Hood' policy - cutting subsidies to the relatively less well-off, while increasing subsidies to the relatively well-off. This will do little to 'make tertiary education affordable' given that PTE students tend to come from lower socio-economic backgrounds than students at universities or polytechnics.¹⁰⁰ Ministry of Education data show that 45 percent of first-year students at PTEs in July 2000 had previously been on welfare.¹⁰¹ If tuition subsidy cuts to lowincome students at PTEs can be justified, then the justification for cutting subsidies to students from higher-income families at state institutions is that much stronger.

Whatever words are used to describe the 'fee maxima' policy, it needs to be seen for what it is – a throwback to Muldoon's 1982 policy of price controls.

⁹⁹ See Hebel, Sarah *et al* (2002) 'States Face Year of Famine After a Decade of Plenty', *The Chronicle of Higher Education*, 11 January; Carnevale, Dan (2002) 'Report on State Budgets Shows a Continuing Battle to Close Shortfalls', *The Chronicle of Higher Education*, 29 July, www.chronicle.com; and Selingo, Jeffrey (2002) 'States with Biggest Deficits Take Aim at Higher Education', *The Chronicle of Higher Education*, 19 April, www.chronicle.com.

¹⁰⁰ Education Directions (1997) *The Role of Private Providers of Tertiary Education*, Report prepared for The Treasury, Wellington, p 39.

¹⁰¹ Organisation for Economic Cooperation and Development (2002) OECD Economic Surveys: New Zealand, Volume 2002/8, Paris, p 121. Based on New Zealand Ministry of Education data for July 2000.

The effects of the fee maxima will be similar to those of any policy of price controls, including:

- institutional incentives to respond to market signals will be blunted, thus worsening the 'fit' between market needs and institutional delivery;
- a drop in quality as institutions 'cut' course quality to fit their smaller budgets; and
- price blowouts once controls are removed as institutions try to 'catch up' to cost increases that prevailed during the period of controls.

The fee freeze in place since 2000 has prevented students from adding their own resources to what the government spends, thus reducing the amount of funding available for tertiary education. Institutions that allowed students to make an additional contribution were penalised given that additional perstudent subsidies were tied to participation in the fee freeze. As a result, the fee freeze represented an implicit tax on private spending on tertiary education – students are penalised with a reduced subsidy if they want to spend more than the level of tuition fees that existed in 2000.

There is little economic rationale for an investment policy that, in effect, favours public investment over private. It also contradicts the stated rationale for more government spending on tertiary education. For example, it is hard to argue that extra government tertiary education subsidies are justified because of externalities, while at the same time arguing that private spending on tertiary education should be discouraged. In fact, the net benefits from government spending are likely to be less than from private spending because the former is financed by increases in distorting taxes.

THE WIDER CONTEXT OF TERTIARY EDUCATION ASSISTANCE

The issue of tuition fees in New Zealand is often discussed without reference to overall levels of assistance provided to tertiary education. The argument is often made, for example, that the existence of tuition fees shows that there is a lack of commitment from government (that is, taxpayers) to funding tertiary education. An examination of government spending on tertiary education shows this is clearly not the case. The issue of tuition fees needs to be examined within the broader context of tertiary education assistance.

This section presents a range of measures of government spending to provide some indication of the degree to which taxpayers subsidise tertiary education through the education budget, how tertiary subsidies in New Zealand compare with those in other countries and with other levels of education within New Zealand. Sections 4.1 and 4.2 examine total spending on tertiary education, while Sections 4.3, 4.4 and 4.5 examine per-student tuition subsidies over time, by type of institution and by academic programme. Section 4.6 provides a rough estimate of per-student spending at different levels of education. Section 4.7 presents some comparative international data on public spending on tertiary education. Key points are summarised in Table 7 below.

4.1 PUBLIC SPENDING ON TERTIARY EDUCATION: 2002/03

In 2002/03, public spending on tertiary education in New Zealand is expected to be \$2.59 billion. This represents about 2.1 percent of GDP, 6.3 percent of central government spending and 34.6 percent of education spending. As shown below and in Figure 5, public spending on tertiary education is made up of:

• tuition subsidies paid to tertiary education institutions on the basis of student numbers, course 'costs' and other factors. In 2002/03, some

Table 7: Summary statistics on tertiary education spending

- Public subsidies to tertiary education come in a variety of ways through the education budget – tuition subsidies, student loan subsidies, student allowances and industry training and other expenses.
- In 2002/03, public spending on tertiary education is expected to total \$2.59 billion. This excludes capital spending and student loan advances.
- In 2002/03, public spending on tertiary education is expected to represent 2.1 percent of GDP, 6.3 percent of central government spending and 34.6 percent of the education budget.
- In 2002/03, per-student public spending on tertiary education is expected to be \$11,623, while per-student public spending on tuition subsidies, student allowances and student loan subsidies (that is, excluding other tertiary education expenses) is expected to be \$10,637.
- Universities receive the highest annual per-student subsidies, followed by colleges of education, polytechnics, PTEs and Wananga.
- In 2002, annual undergraduate tuition subsidies ranged from \$5,215 to \$18,888 per EFTS, while annual research postgraduate subsidies ranged from \$12,345 to \$32,849 per EFTS.
- In 1998, New Zealand public spending on tertiary education as a proportion of GDP was well above the mean for OECD countries (1.8 percent versus 1.3 percent). New Zealand was well ahead of countries such as Australia, Ireland, the United States and the United Kingdom.
- In 2002/03, per-student public spending on tertiary education is expected to be some five times that on early childhood education and 2.3 times that on schools.

\$1.67 billion (around two-thirds of tertiary spending) is expected to be spent on tuition subsidies;

- student allowances paid to students to cover living costs. About 35 percent of tertiary students receive some student allowance. In 2002/03, spending on student allowances is expected to be \$441 million (17 percent of tertiary education spending);
- student loan provisions and write-offs. These consist of the costs of writing
 off student loan interest, student loan defaults, and so on. In 2002/03, this
 is expected to cost some \$259 million (10 percent of tertiary education
 spending). An additional, though unmeasured, cost to the government is
 the subsidy from charging below-market interest on what are, in effect,
 unsecured loans; and
- industry training subsidies and other expenses. In 2002/03, some \$220 million is expected to be spent on these programmes (around 8 percent of tertiary education spending).

Public spending on tuition subsidies, student allowances and student loan provisions and write-offs (that is, excluding other tertiary education spending) amounted to \$2.37 billion in 2002/03. This represented over 91 percent of all spending on tertiary education within the education budget.



Figure 5: Nature of public spending on tertiary education, 2002/03

Source: Government of New Zealand (2002) *Budget Economic and Fiscal Update 2002*, The Treasury, Wellington.

4.2 GROWTH IN PUBLIC SPENDING ON TERTIARY EDUCATION: 1999/00-2005/06

Public spending on tertiary education is growing in both nominal and real (inflation-adjusted) terms. Between 1999/00 and 2002/03:

- nominal spending on tertiary education grew by \$679 million. By 2005/06, it is expected to grow by a further \$299 million. This will take total spending on tertiary education to \$2.89 billion \$978 million above the 1999/2000 level; and
- nominal spending on tuition subsidies, student allowances and student loan provisions and write-offs grew by \$620 million. By 2005/06, it is expected to grow by a further \$285 million, which would take nominal spending on these programmes to \$2.66 billion.

As Figure 6 shows, even after accounting for inflation (that is, measured in real terms), combined spending on tuition subsidies, student allowances and student loan provisions increased between 1999/00 and 2002/03 and is expected to continue to grow out to 2005/06.

In 2002/03, public spending on tertiary education is expected to make up 34.6 percent of total education spending – up from 30.3 percent in 1999/00. By 2005/06, it is expected to reach 36.8 percent.



Figure 6: Inflation-adjusted public spending on tuition subsidies, student allowances and student loan provisions and write-offs, 1999/00–2005/06

Source: Government of New Zealand (2001) Budget and Economic Fiscal Update 2001 and Budget and Economic Fiscal Update 2002, The Treasury, Wellington.

Nominal per-student public spending on tertiary education is also rising, although when measured in real terms, per-student spending is expected to decline between 1999/00 and 2005/06. For example:

- nominal per-student public spending on tertiary education grew from \$10,879 in 1999/00 to \$11,623 in 2002/03 and is expected to increase further to \$11,946 by 2005/06 – an increase of over \$1,100 per student in nominal terms between 1999/00 and 2005/06. In real terms, per-student spending on tertiary education is expected to decrease by around 3.8 percent over the full period; and
- total per-student public spending on tuition subsidies, student loans and student allowances (that is, excluding industry training and other expenses) increased from \$9,964 in 1999/00 to \$10,637 in 2002/03 and is projected to increase to \$10,979 by 2005/06. In real terms, per-student spending on tuition subsidies, student loans and student allowances is expected to decrease by around 3.5 percent over the full period.



Figure 7: Average nominal per-student tuition subsidies, 1991-2000

Source: Ministry of Education (2000) *New Zealand's Tertiary Education Sector: Profile and Trends 1999,* p 104 and Ministry of Education (2001) *New Zealand's Tertiary Education Sector: Profile and Trends 2000,* p 113.

4.3 PER-STUDENT TUITION SUBSIDIES

Average nominal per-student tuition subsidies declined during the 1990s as a result of the successive reductions in subsidy rates that were introduced over that period as a means of financing additional EFTS places. As shown in Figure 7, the average per-student tuition subsidy dropped from over \$8,700 in 1991 to \$6,965 in 1999. In 2000, it increased by 2.9 percent – to \$7,166.

4.4 PER-EFTS TUITION SUBSIDIES BY TYPE OF INSTITUTION

As shown in Figure 8, universities received the highest per-student tuition subsidies in 2000 (\$7,750). Colleges of education were next at just over \$7,000, followed by polytechnics at \$6,624, PTEs at \$5,813 and Wananga at \$5,681. These differences arise largely from the differing programme types offered by the various institutions.



Figure 8: Annual per-EFTS tuition subsidy by type of institution, 2000

Source: Ministry of Education (2001) *New Zealand's Tertiary Education Sector: Profile and Trends 2000*, p 113.

4.5 PER-STUDENT TUITION SUBSIDIES BY ACADEMIC PROGRAMME

The New Zealand tertiary education funding system differentiates subsidies by programme type and by whether the programme is undergraduate or postgraduate. As a result, there is considerable differentiation in tuition subsidy levels across programmes. Annual tuition subsidy levels are shown in Table 8. In 2002, annual undergraduate tuition subsidies ranged from \$5,215 for arts and business courses to \$18,188 for dentistry and medicine courses, while research postgraduate subsidies ranged from \$12,345 to \$32,849.

4.6 PER-STUDENT PUBLIC SPENDING BY LEVEL OF EDUCATION

Per-student public spending on tertiary education is higher than at other levels of education. In 2002/03, per-student public spending on tertiary education was \$11,623 (see Figure 9). This is more than five times per-student spending on early childhood education and 2.3 times per-student spending on schools (including school transport, special needs and other spending).¹⁰² Yet

¹⁰² Calculated using information from Government of New Zealand (2002) *Budget Economic and Fiscal Update 2002*, The Treasury, pp 198–199. Data on early childhood enrolments from www.minedu.govt.nz. All student number data are for 2003 except early childhood enrolments, which are for 2001.

		Undergraduate	Taught postgraduate	Research postgraduate	Foreign postgraduate
EFTS subsidy category		(NZ\$)	(NZ\$)	(NZ\$)	(NZ\$)
Arts, social science, business, accounting, law	A	5,215	6,745	12,345	2,259
Science, computing, engineering (non-degree), agriculture (non-degree), nursing, trades, architecture (non-degree), fine arts, music	В	8,091	11,421	22,621	4,141
Engineering (degree), agriculture (degree), architecture (degree), audiology	С	9,752	13,682	27,382	4,947
Dentistry, veterinary science, medicine	G	18,188	18,188	18,188	4,499
Specialist large animal science	н	15,219	19,149	32,849	3,478
Teaching	L	7,360	8,890	14,490	2,259

Table 8: Annual EFTS tuition subsidy rates, 2002

Source: Maani, Sholeh (2002) Student Charges: The New Zealand Experience.





Source: Government of New Zealand (2002) Budget Economic and Fiscal Update 2002.



Figure 10: Total public expenditure on tertiary education as a proportion of GDP, OECD countries, 1998

Source: Organisation for Economic Cooperation and Development (2001) Education at a Glance: OECD Indicators, 2001 Edition, p 100.

international evidence suggests that public investments at earlier levels of education generate greater social returns than investments at the tertiary education level. For example, Psacharopoulos found that the social rate of return from investing in secondary education was 13.5 percent compared with the social rate of return of 10.7 percent for higher education.¹⁰³ Maani's findings are consistent with those of Psacharopoulos, with social returns to secondary education significantly higher than for tertiary education.¹⁰⁴

4.7 INTERNATIONAL COMPARISONS

Data from the OECD show that, in 1998, New Zealand's public spending on tertiary education as a proportion of GDP was higher than all but a handful of OECD countries (see Figure 10). In 1998, New Zealand public spending on tertiary education was 1.8 percent of GDP – well above the 1.3 percent mean (unweighted) for OECD countries. New Zealand's public spending relative to

¹⁰³ Psacharopoulos, George (1994) 'Returns to Investment in Education: A Global Update', World Development, Vol 22, No 9, pp 1325–1343.

¹⁰⁴ Maani, Sholeh (1999) *op cit*, p 63.





GDP was higher than countries such as Australia, Ireland, the United Kingdom and the United States.¹⁰⁵

A recent report by the Productivity Commission in Australia provides some additional comparative information on total spending (public and private) on tertiary education institutions relative to GDP in a number of OECD countries.¹⁰⁶ According to that report:

- New Zealand was second only to the United States in terms of its total spending (public and private) on tertiary education institutions relative to GDP (see Figure 11); and
- total spending (public and private) on tertiary education institutions relative to GDP rose significantly between 1993 and 2000 – from less than 1.4 percent in 1993 to its current level of 2.5 percent in 2000.¹⁰⁷

Source: Productivity Commission (2002) *University Resourcing: Australia in an International Context*, p 28.

¹⁰⁵ Organisation for Economic Cooperation and Development (2001) *Education at a Glance: OECD Indicators, 2001 Edition,* Centre for Educational Research and Innovation, Paris, p 100.

¹⁰⁶ Note Figure 11 measures both *public* and *private spending*, whereas Figure 10 measures only *public* spending. Figure 11 also measures only subsidies to *tertiary education institutions*, whereas Figure 10 measures total spending on *tertiary education*.

¹⁰⁷ Productivity Commission (2002) University Resourcing: Australia in an International Context, Draft research report, Canberra, pp 28–29, www.pc.gov.au.

4.8 CONCLUSION

This section has outlined various measures and comparisons of tertiary education sector funding.

These figures are not meant to imply that New Zealand tertiary education is lavishly funded. However, the data do show that:

- the requirement that students pay fees of (on average) \$3,500 per year needs to be seen in the light of the \$10,000 plus annual subsidy that students receive on average;
- the sector is relatively well-funded compared with other levels of education (measured on a per-student basis); and
- relative to New Zealand's 'ability to pay' (as measured by GDP per capita), tertiary education is funded relatively generously.

A WAY FORWARD

On the basis of the analysis and evidence outlined in previous sections, this report recommends two key tertiary education financing reforms:

- increasing the share of the costs of tertiary education that is borne by students/parents; and
- lifting the current tuition fee freeze and abandoning the fee maxima policy introduced in December 2002.

Both of these would enhance efficiency and equity. These reforms should be accompanied by measures aimed at broadening participation and increasing the equity of public spending on education. This could be done by redirecting some existing spending to a range of targeted measures aimed at lifting participation among traditionally disadvantaged groups. These measures could include providing targeted grants to students on low incomes and introducing policy initiatives aimed at students at earlier levels of education. A comprehensive strategy of this sort would be much more likely to lift access to tertiary education, both generally and for disadvantaged groups, than the current policy of limiting tuition fee increases and providing general (untargeted) subsidies to tertiary education.

Such a strategy would help to address the twin challenges of ensuring that New Zealand's tertiary education sector is well resourced and broadening tertiary education participation among groups that are traditionally disadvantaged. The increase in private responsibility for the costs of tertiary education would free up funding for more highly valued uses – whether within tertiary education, earlier levels of education, other spending priority areas or tax cuts. Removing fee limits would allow tertiary institutions to offset the adverse impact of a reduction in taxpayer subsidies.

However, these three reforms should not be undertaken in isolation. Rather, they could be put forward as part of a comprehensive plan aimed at making much more effective use of current tertiary education funding. These reforms could include:

- splitting tuition and research funding. This would ensure that all funding for research was targeted only at those institutions that were conducting research. The Centres for Research Excellence provide a useful basis upon which to build;
- funding all research through a competitive system. This would ensure that performance incentives were sharpened. It would also ensure that funding was targeted at the best institutions and researchers and that institutional research priorities were in line with national development goals. The Centres for Research Excellence and the Performance Based Research Fund provide a useful basis upon which to build;
- improving quality assurance in the tertiary education sector. Current quality assurance processes do not appear to be sufficient, with too little attention paid to serious benchmarking of performance. While concerns have been raised about quality assurance at the lower end of the tertiary market, the problems appear to be more widespread. A rationalisation of the sector based on quality criteria, rather than whether an institution is public or private would free up funding for more highly valued uses;
- abolishing the policy of writing off student loan interest while students are studying, as proposed by TEAC in its Fourth Report, and examining the possibility of targeting student loan living costs entitlements. The interest rate holiday alone is expected to cost in the range of \$150 million per year once the policy is 'mature', yet achieves no policy goals and has increased the amount of student loan debt outstanding;
- reforming tertiary institution governance to provide institutions with an improved framework for decision making. Governance at a number of institutions is woeful. This factor alone has been responsible for financial problems at a number of institutions, both polytechnics and universities. And this is only the extreme end. Of equal concern is the ongoing underperformance and slow decision making inherent in the current 'onesize-fits-all' governance model. The government has recently set up a review of governance, which provides some scope for change;
- examining moves away from government ownership and control of tertiary education institutions in New Zealand; and
- improving information available to students on the labour market and on the performance of tertiary education institutions. Well-informed consumers would ensure a better basis for competition and that the benefits of competition were more sharply felt by underperforming institutions. The government has already taken some useful steps in this direction.

The proposed reforms need not be introduced in one hit. They could be phased in. But that would also delay the benefits. While some would argue that the reforms of the 1990s were introduced too quickly, others would disagree. Indeed, as can be seen from Figure 2, tuition fees rose gradually during the 1990s and students had access to one of the most generous student loan schemes in the world to cover these costs. The biggest annual increase in fees occurred in 1990, when they were introduced without the protection of a loan scheme. Certainly, the pace of introduction was far slower than with other reforms (for example, the removal of agricultural subsidies, and so on).

A critical aspect of any strategy to improve resourcing to the tertiary education sector is to lift the growth rate of the New Zealand economy. Data from the OECD show that, relative to 'ability to pay' (as measured by GDP), New Zealand's spending on tertiary education is higher than most other OECD countries. In that sense, New Zealand 'punches above its weight' in terms of tertiary funding. Economic growth therefore offers the most sustainable avenue for increasing funding to the sector – both public and private. A common argument is that taxes should be raised to finance additional spending on tertiary education. There are a number of flaws in this argument, even if one accepts that further spending on tertiary education is justified, including:

- the marginal cost of taxation is high, and each extra dollar of spending must yield well in excess of one dollar in order to generate net benefits to the community;
- New Zealand is not a low-tax country public spending on central and local government already measures around 40 percent of GDP. Whether or not people accept the view that lower taxes will increase growth, it seems clear that few would accept the view that higher taxes will improve growth. In addition, higher taxes could contribute to a further 'brain drain'; and
- even if tax rises could be justified, it is highly unlikely that spending the proceeds on tertiary education would yield the greatest benefits.

The above strategy would provide a much better environment than exists at present and allow the tertiary education sector to contribute more to the development of the knowledge economy and to New Zealand's national development goals. It would do this by providing increased resourcing to the tertiary education sector and by ensuring improved use of resources. It would also improve the operating environment for tertiary institutions by giving them more autonomy and allowing them to develop suitable governance and ownership arrangements.

The strategy would also provide an improved set of policies and increased funding to address the significant educational underperformance among atrisk groups. The current policy mix, which has favoured general funding increases to the tertiary education sector, will have done little to promote participation generally or for at-risk groups. Indeed, the government needs to recognise the significant opportunity cost of every dollar it is putting into lowvalue investments such as general funding increases to tertiary education, when better alternatives exist. There would appear to be little question that spending that money on more targeted initiatives would yield bigger gains in terms of improved educational outcomes.

Implementation of such a strategy would not be easy. For example, student union leaders would likely oppose a move to increase fees. In one respect, their concern is understandable. They have witnessed successive increases in fees over the 1990s, yet it is unclear that students have gotten much in return in terms of improved quality or more innovative delivery. Instead, lecture theatres have gotten bigger and class sizes have mushroomed. Yet, as end users of tertiary education services, future cohorts of students will be the ones to pay the ultimate price of a tertiary sector run down by a fee freeze-induced squeeze on tertiary institution funding. Any strategy to increase tuition fees, therefore, needs to be able to convince students that they will see gains in terms of improved quality.

This has been recognised in other jurisdictions. For example, during its 2000/01 budget deliberations, Queen's University in Canada worked closely with its student leaders to link tuition fee increases to improvements in quality. In the words of Queen's University principal William Leggett:

In each of the faculties that has been allowed to deregulate we have gone to our students and said: "We believe the quality should be higher. We want you to talk with us, sit down with us, form a committee, and let's decide where the quality improvements are most needed. We'll make a commitment with you that we will invest in those areas if you'll support us in the tuition increases." And we have carried through on those commitments.¹⁰⁸

This strategy was successful in getting support from students because student leaders overwhelmingly endorsed a 10 percent increase in fees in those

¹⁰⁸ Watson (2000) *op cit*, p 15.

programme areas that were still regulated by the government. While the strategy was successful in getting student support, it fell over because the provincial government limited tuition fee increases to 2 percent. The university did not only focus on quality, it also proposed a number of initiatives aimed at maintaining access. For example, 30 percent of increased tuition fee revenue was set aside for scholarships.¹⁰⁹

A key point is that any proposed changes need to be clearly explained and strongly defended. The reforms of the 1990s, despite their strong policy basis, were never strongly defended by the governments of the day.

¹⁰⁹ Ibid.
CONCLUSION

This report has examined the issue of tertiary education financing in New Zealand. It has looked at the rationale for government intervention in tertiary education – the appropriate starting point for any assessment of the issue of tertiary education financing. It has also reviewed the literature and evidence on the benefits of tertiary education and the impact of tuition fees on tertiary education participation.

The report has argued that students and families should assume a greater share of the costs of tertiary education in New Zealand and that tertiary institutions should be allowed to set fees. Both reforms would require a reversal of post-1999 policy directions in New Zealand – with the recent fee freeze and higher per-student government subsidies eroding the private share and the ability of institutions to set fees. The basis for these recommendations is as follows:

- a tertiary education is not free. It requires a significant investment in human, financial and physical resources. Someone has to pay for it;
- b that 'someone' can be taxpayers through public subsidies, students/ families through tuition fees or both through a combination of fees and subsidies;
- c there is some justification for public subsidy of tertiary education to the extent that it generates external benefits that exceed the cost of raising taxes. However, the size and nature of these externalities is unclear;
- d students and their families should bear some of the cost of financing tertiary education. This would recognise the significant private benefits that accrue to those with a tertiary qualification and the fact that spending on tertiary education tends to benefit disproportionately those from high-income families; and
- e there is a range of views on what represents the 'optimal' public/private split in the costs of tertiary education. However, there is good reason to believe that the current private sector contribution, estimated at less than 30 percent of the total cost of delivery excluding student allowances and loan subsidies, is too low.

The report recommends that these reforms could be introduced as part of a broader package of reforms aimed at:

- lifting access among at-risk groups;
- increasing the amount of private money going into tertiary education; and
- improving the effectiveness of spending on tertiary education.

Recent policies have emphasised untargeted spending (or, more accurately, spending targeted at relatively well-off families) on initiatives that will do little or nothing to lift participation generally or for disadvantaged groups. The opportunity cost of this spending is high. This money could have been spent on a number of investments – in tertiary education, lower levels of education or tax cuts – and delivered a much greater return in terms of meeting policy objectives. Tertiary education can play an important role in providing New Zealanders, from all backgrounds, with the skills to succeed. However, the current level and design of subsidy arrangements does little to allow education to play a role in improving equity.

Students and staff have much to gain from a less regulated, more marketdriven tertiary education system. While regulated fees may seem attractive to students in the short term, they are not likely to be so in the longer term given likely impacts on quality and the overall responsiveness of the system. Students have much to lose under a system that is 'genetically engineered' from the centre, rather than directed spontaneously through the interplay of labour markets, student choice and institutional decision making.

A market system is much more likely to provide an environment conducive to effective teaching, to promote the conduct of scholarly research and to deliver a sector that meets the varying needs of students. If there is a demand for traditional liberal arts education, the market will satisfy it. Unlike markets, central control can lead to a focus on narrow objectives such as enrolment growth rather than quality because the former can be more easily measured from above. The increased focus on tertiary institutions as engines of economic growth can only exacerbate this.

Education can be an instrument for increasing opportunity for disadvantaged groups. But policy needs to be designed in a way that allows education to play that role. High general subsidies to tertiary education favour those from relatively well-off families at the expense of those from disadvantaged backgrounds and taxpayers generally. Such policies are under the direct control of government. Better policy design could overcome current weaknesses to ensure that tertiary education promotes opportunity and greater equity in public spending.

Clearly, the short-run politics of increasing tuition fees are not good in New Zealand. This is not a uniquely New Zealand problem. Student unions in the United Kingdom have called for the abolition of fees and the return of student living grants. Hungarian students have successfully fought the introduction of tuition fees in recent years. Students at the National Autonomous University of Mexico shut down the campus for over nine months and forced a backdown on a proposal to bring in tuition fees. There have been similar protests in recent years – with varying degrees of success – in the United Kingdom, Canada, Israel and Ghana.¹¹⁰ In New Zealand, some groups continue to push for more generous assistance to tertiary education, despite recent substantial increases in spending.

Despite these short-term setbacks, there is good reason to believe that an increase in the private responsibility for tertiary education is inevitable. Many governments have been able to bring in higher tuition fees in recent years – as highlighted in Section 7.2. And governments of widely differing stripes have made these gains. Indeed, we should not forget that it was a Labour government that introduced fees in 1990 in New Zealand and did it without the protection of a student loan scheme. The trend toward higher fees and more targeted spending that both developed and developing countries have witnessed over the past 20 years is a rational response to the wider forces that all countries are facing – increased demand for tertiary education, labour market changes, demographic trends and fiscal pressures. These will not go away. They are likely to become more acute.

Wealthier countries such as the United States, Canada, the United Kingdom and Australia also face these trade-offs. In many respects, their policies are inferior to those here (and some aspects are far inferior to those that existed here pre-2000). However, because New Zealand is less wealthy, it has a much smaller margin for error.

Over the longer term, broader forces will drive tertiary education policy. Governments can decide not to respond to these forces, but must recognise the trade-off inherent in this decision. D Bruce Johnstone, a professor of higher

¹¹⁰ Woodard, Colin (2000) 'Worldwide Tuition Increases Send Students Into the Streets', *The Chronicle of Higher Education*, 5 May, www.chronicle.com.

and comparative education at the State University of New York at Buffalo, puts the trade-off starkly:

You have this dramatically increased demand for higher education coupled with decreased capacity for governments to fund the sector ... [I]f you don't introduce some kind of cost-sharing, then you're left with two bad choices: You can resist demand and let your public higher education become increasingly elite and inaccessible, or you let the system decline for lack of funding.¹¹¹

The message is clear – someone's going to pay. One way or another.

¹¹¹ *Ibid.*

APPENDIX A

EDUCATION FORUM

The Education Forum has been formed to contribute to education policy through research and debate on the current issues, structures, and expectations at all levels of New Zealand education.

The Forum believes that New Zealand education requires an approach to learning and achieving which encourages all individuals to reach their full potential, and which will take New Zealand to the leading edge of international performance and achievement.

The Forum is an association of individuals who have a common concern for the future direction of New Zealand education. The membership is drawn from all education sectors, together with leaders of industry and commerce.

The principles incorporated in the above statements include the following:

- A commitment to excellence and high expectation in all human endeavour, based on a lifelong desire for learning.
- The belief that the community/government should ensure that all young New Zealanders have access to quality education.
- The teaching of values and life skills which will preserve the dignity of the individual and the integrity of the family.
- The acceptance of healthy competition for both individuals and the education sector.
- The encouragement of cooperation, creativity, adaptability and enterprise.
- The encouragement and recognition of personal responsibility, goal setting and achievement in all endeavours, through self-discipline and hard work.
- The acceptance of a compulsory core curriculum in primary and secondary schools.
- The necessity for high standards of assessment of student performance and of accountability of teachers and institutions.
- The promotion of a New Zealand cultural identity.
- The key involvement and responsibility of parents in their children's education.
- The emphasis on the value of parental choice and the self-management of education institutions.
- The development of closer links between education institutions and industry.

APPENDIX B

Members of the education forum

Mr Byron Bentley Principal Macleans College Mr Simon Carlaw Chief Executive **Business New Zealand** Mr John Fleming Principal Point Chevalier School Mrs Alison Gernhoefer Principal Westlake Girls' High School Dr John Hinchcliff Vice-Chancellor Auckland University of Technology Mr Roger Kerr **Executive Director** New Zealand Business Roundtable Mr John Morris (chairman) Headmaster Auckland Grammar School Mr Roger Moses Headmaster Wellington College Ms Joy Quigley **Executive Director** Independent Schools of New Zealand Mr John Taylor Headmaster King's College Mrs Susan Thorne Chief Executive Officer

Early Childhood Council

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